African Bird Club

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African Bird Club

The African Bird Club aims to:

- provide a worldwide focus for African ornithology
- encourage an interest in the conservation of the birds of the region
- liaise with and promote the work of existing regional societies
- publish a twice-yearly colour bulletin
- encourage observers to visit lesser known areas of the region
- encourage observers to actively search for globally threatened and near-threatened species
- run the ABC Conservation Programme

Registered Charity No 1053920

ABC Membership

Membership is open to all. Annual subscription rates are:

Individual	Europe & Africa: UK£18	Rest of the World: UK£20
Family	Europe & Africa: UK£21	Rest of the World: UK£23
Student	Europe & Africa: UK£10	Rest of the World: UK£12
Supporting	UK£30 minimum	
Life	UK£350	

To join or for further details please visit the ABC web site (where there are secure online payment facilities) or write to the Membership Secretary—see contact information below.

ABC Website

http://www.africanbirdclub.org

Photographers and artists

ABC is always looking for drawings and photos to publish in the Bulletin. If you are interested in contributing, please contact the Graphics Editor, Pete Leonard, pleonard@care4free.net

Contact ABC

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The Bulletin of the African Bird Club

The Bulletin of the ABC provides a forum for news, letters, notices, recent publications, expedition results, reviews and interim publication of studies on African birds by contributors from throughout the world. Publication of results in the Bulletin of the ABC does not preclude publication of final results as journal papers either by the ABC or elsewhere. No material should, however, be submitted simultaneously to the *Bulletin of the ABC* and to any other publication.

Brief notes for contributors appear elsewhere in this Bulletin and further details are available from the Editor (editor@africanbirdclub.org).

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Claudia Donati, Pete Leonard

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Front cover plate
Jackal Buzzard / Buse rounoir
Buteo rufofuscus
by Warwick Tarboton

Features

Club News

ABC Thetford Meeting and AGM

Around 60 members and guests attended the 2008 meeting at the BTO headquarters in Thetford. Once again we enjoyed the excellent facilities and beautiful surroundings of The Nunnery. The only drawbacks are its location for easy travel from much of the UK and its limited capacity. Council will be looking at alternative venues for next year.

In his opening address, Martin Woodcock informed the meeting that this would be his last as ABC President, his term having run its course. He referred to the meetings that were held to establish the Club commencing in 1992 until the formal process of inaugurating the Club was completed in 1994. The fact that it has gone from strength to strength until the present day is due to the hard work of Council, its members and supporters. The Bulletin is a document to be proud of and the money raised for the Conservation Fund has been used for many projects throughout Africa. The website is a credit to those Council Members who have put in so much effort to establish and maintain it. He expressed disappointment that the Country Representative scheme had not been as successful as he had anticipated, and he would have liked to have witnessed some meetings held in Africa. Martin expressed his pleasure at handing over to Tasso Leventis as the incoming President and he was sure that the Club would be in good hands.

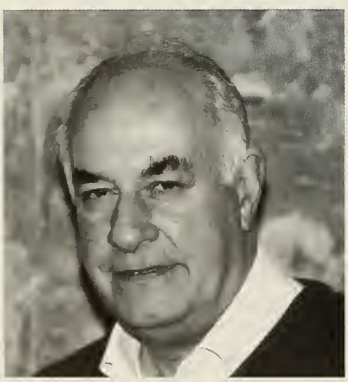


Figure 1. Martin Woodcock, outgoing President of the African Bird Club (Geoff Randall)

Martin Woodcock, Président sortant du African Bird Club (Geoff Randall)

Ernest Garcia then gave a fascinating talk on raptor migration monitoring at Gibraltar over the past 45 years. Some species migrate in large numbers, with the totals of 60,000 Black Kites *Milvus migrans* and 50,000 European Honey Buzzards *Pernis apivorus* making them the most numerous. Totals of birds of all species passing Gibraltar are 122,900 in spring and 160,000 in autumn. The data collected include passage rates in birds per hour. Black-shouldered Kite *Elanus caeruleus*, Lanner Falcon *Falco biarmicus* and Long-legged Buzzard *Buteo rufinus* are now seen more frequently in Spain and Rüppell's Vulture *Gyps ruppellii* is new to the avifauna of Europe, but has not yet bred. The talk showed the value of simple species counts when taken consistently over a long period.

Next, Martim Melo spoke about the volcanic islands of São Tomé and Príncipe, together with Annobón and Bioko, which straddle the equator in the Gulf of Guinea. He gave a detailed account of the 26 endemic species in seven genera, more than on the Galápagos Islands. Some of these rare and fascinating species include the São Tomé White-eye *Zosterops ficedulinus*, São Tomé Grosbeak *Neospiza concolor*, Giant Sunbird *Dreptes thomensis*, Giant Weaver *Ploceus grandis*, Príncipe Golden Weaver *P. princeps* and Dwarf Olive Ibis *Bostrychia* (*olivacea*) *bocagei*. This was a brilliant talk with detailed information about a little-known part of the African avifauna.

Figure 2. Duncan Macdonald (on right) of WildSounds presenting a cheque for UK£1,200 for the Conservation Fund to ABC Chairman Keith Betton (Geoff Randall)

Duncan Macdonald (à droite) de WildSounds présentant un chèque de UK£1,200 destiné au Fond pour la Conservation au Président du ABC Keith Betton (Geoff Randall)

The pleasures and problems of birding in Zambia were discussed by Pete Leonard, who gave a sometimes hilarious account of his birding adventures over a ten-year period whilst working in the country as a teacher. He described the illnesses he contracted, the brushes with officialdom, and the successes he achieved. The talk was illustrated with excellent images of the birds he sought.

Ilya McLean presented an in-depth account of the Papyrus swamps *Cyperus papyrus* in East Africa and the conflict between their use as a harvestable resource by local people and the fate of the inadequately protected species that rely on them. His research examined the effect drainage and harvesting of papyrus had on species such as Papyrus Gonolek *Laniarius mufumbiri*, Papyrus Yellow Warbler *Chloropeta gracilirostris*, White-winged Swamp Warbler *Bradypterus carpalis* and Carruther's Cisticola *Cisticola carruthersi*. The study included a satellite-mapping survey of the swamps and a review of the economic effects on the popula-

tion reliant on the swamps for their livelihood. It was the poorest people who relied most on harvesting the swamps, but a win-win situation could be developed as long as poverty reduction measures are instigated as well as the conservation action necessary to protect the birds.

AGM 2009

The BTO Thetford venue has been kindly made available twice to the Club for its AGM, but Council has now decided to move the location nearer to London. Therefore the 2009 AGM will be held at Clarendon Hall, York House, Twickenham, on Saturday, 4 April 2009. This announcement constitutes official notification of the AGM as required by the Club's constitution. Full details of the agenda and programme for the day will be posted to all UK-resident members in early 2009. To save postage, the programme will not be automatically distributed outside the UK. Any overseas members requiring a copy should contact the Club Secretary. Details will also appear on the website.

ABC website

We continue to invest considerable time and effort into developing the ABC website, in order to maintain it as a global resource for many aspects of African ornithology. There have been a significant number of new developments already in 2008. Whether as a result of these or a general increase in the level of interest in African birds, we are pleased to report that the number of unique visitors to the site has increased by 50% in the last three months.

The Gambia pages underwent a major revision by incorporating information from the Gambia Birding Group, a not-for-profit organisation that provided information about practical aspects of visiting The Gambia for wildlife trips and birding; supported conservation for wildlife; and provided contact points for birders and naturalists visiting The Gambia. Due to declining membership, the Gambia Birding Group was 'wound up' and its assets transferred to the African Bird Club. You can still visit its website at www.gambiabirding.org/ for the foreseeable future. The Gambia pages now represent a significant information resource in their own right for anyone planning a trip to this popular destination.

A new version of the country checklist database was loaded providing 78 checklists. The country checklists have proved extremely popular and there have been over 5,000 downloads since the system became operational about one year ago. New country checklists have been added for Ascension, the Comoros, Lesotho, Madagascar, Mauritius, Prince Edward Island, Rodrigues, Swaziland, and the Tristan da Cunha archipelago. There is now a checklist for all countries within the ABC region. The database supporting the checklists has *c.*100,000 entries, and the ABC species list and taxonomy are consistent with the January 2008 ABC African checklist. We will continue to update the records from published and peer-reviewed information and add new functions to the operational system from time to time.

A major new website for bird sounds of the African region was launched in March. This website is a derivative of xeno-canto, the leading website for the storage and retrieval of vocalisations of birds from the Neotropics. The development is a joint initiative between the xeno-canto designers and ABC and is supported long term by Naturalis, the National Museum of Natural History in the Netherlands. You will find the new website at www.xeno-canto.org/africa or by following the links from the ABC home page.

Xeno-canto/Africa has comprehensive features including powerful search and mapping capabilities, the ability to identify mystery songs and community search (which species sing at the same time?). Visitors will find it worthwhile to spend some time exploring the available functions. Users of xeno-canto/Africa are expected to be birders, ornithologists, researchers, tourists and anyone with a general interest in the birds of the region. Its ultimate success, however, is dependent on the expertise and goodwill of those prepared to share recordings, knowledge and enthusiasm for African bird sounds. We hope that many of you will register as members and begin to upload your recordings, help others with identification issues and solve mystery bird sounds. The full capabilities of xeno-canto/Africa will become apparent as the number of members and recordings grow.

We have plenty of ideas and an ongoing plan of work to continue developing the ABC website, but welcome your feedback on how we can improve it and your ideas for future developments.

Contributed by John Caddick

WildSounds

Readers will notice that WildSounds' two-page spread of titles has been reduced to a single page. This permits more space for articles and colour photographs. We remind members that the ABC Conservation Fund receives commission on all orders placed via www.wildsounds.com/abc or through the link to WildSounds on the ABC website.

ABC appoints a new President

After ten years as our President, Martin Woodcock has stood down in line with the Club's Constitution. We warmly thank him for his guidance and support during that time, which we know will continue for many years to come. Indeed, Council has invited Martin to become our first Vice President, an offer which he has graciously accepted.

We are delighted to announce that Tasso Leventis has kindly agreed to become our new President. Tasso is a Vice President and former Treasurer of BirdLife International, and has served on BirdLife's World Council. Born in Ghana and educated in the UK and France, after completing his education he joined the Leventis Group in Nigeria and is currently a director of Leventis Group

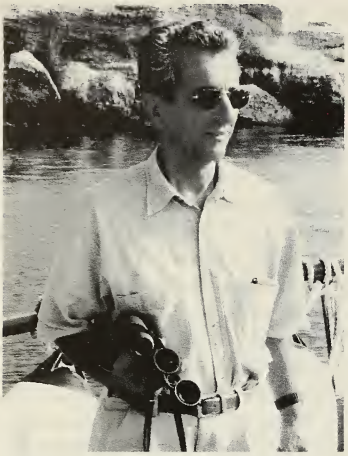


Figure 3. Tasso Leventis, ABC's incoming President
Tasso Leventis, le nouveau Président de l'ABC

Companies, which have investments worldwide.

In addition to his business interests, Tasso is involved in international activities to encourage sustainable models of development, and is a founder trustee of the Nigerian Conservation Foundation, a Fellow of the Royal Geographical Society, and until recently was a member of the Board of Trustees of the International Institute of Tropical Agriculture, and a trustee of the Brazilian Atlantic Rainforest Trust. As Chairman of the A. G. Leventis Foundation, he has been closely involved in establishing agricultural training schools in Nigeria, and supporting Nigeria's cultural and natural heritage. In a personal capacity, he has supported biodiversity conservation in Africa and South America and encouraged research and education in this field. He is married with three children.

Contributed by Keith Betton

New ABC Chairman

Richard Webb has stood down after three years as Chairman. We thank Richard for all that he has done for the Club—not just in recent years, but even before it was founded. We are pleased that Keith Betton has taken on the chairmanship. Having joined ABC's Council in 1997, Keith was our Vice-Chairman in 2000–06 when he stood down to focus on the Ornithological Society of the Middle East, of which he was Chairman until July. Africa is his particular interest and he has visited almost 20 countries in our region. A public relations professional since the 1980s, he is now a freelance media consultant having spent two decades as the UK's main public spokesman on travel and tourism issues. He is particularly interested in international conservation issues, and has served on the Council of the RSPB since 2004.

Mark Jonathan Catterall 1967–2008

It was with great sadness that ABC Council members heard of the sudden and untimely death of Mark Catterall. Mark was a founder member of the Club and a Council member in 1999–2004. Born in Zimbabwe, he developed an interest in birds in his parents' large garden. He moved to the UK in 1984 and, after a gap year as a Game Guide in the Zambezi Valley, he took his first degree at Birmingham University. Following another spell as a Game Guide in Zimbabwe he completed his Masters degree at the University of London and, thereafter, two years of voluntary work for BirdLife International, before joining TerraQuest Land Services Ltd in 1994. Mark travelled widely and was involved in Project Wallacea in 1997 where he was in charge of the ground operation. People who shared birding trips with him described him as an excellent birder, free and helpful with his considerable knowledge and enthusiasm. We will all miss his quiet humour, his birding skills and his good company.

African Bird Club Conservation Fund Draw winners

The winning tickets drawn at the Club's UK Meeting & AGM on 8 March 2008 were as follows:

- First prize (a Zeiss 65mm Diascope with 30× w/a eyepiece): A. L. Archer of Nairobi, Kenya
- Second prize (seven nights all-inclusive accommodation for two people in a Super Club Room at Turtle Bay Beach Club, Kenya): Matthew Boyer of Devon, UK
- Third prize (framed study of a Martial Eagle by Martin Woodcock): J. Boffey of Wakefield, UK
- Fourth prize (UK£200 voucher for use against a Naturetrek trip): J. Barnes of Saxmundham, UK
- Fifth prize (ABC polo shirt): N. Hewitt of Devon, UK
- Sixth prize (ABC T-shirt): N. Wilson of Newfoundland, Canada
- Seventh prize (ABC T-shirt): C. Cox of Canterbury, UK

ABC is grateful for the donation of the four main prizes by Carl Zeiss Sports Optics, Turtle Bay Beach Club, Martin Woodcock and Naturetrek.

Minutes of the 14th AGM of the African Bird Club

held at the British Trust for Ornithology,
The Nunnery, Thetford, at 13.50 hrs on Saturday 8 March 2008

Present

The following members registered their attendance at the meeting: Phil Atkinson, John Bartley, Pat Bartley, Keith Betton, Michael Bird, Mike Blair, Douglas Buchanan, Denis Buisson, John Caddick, Mark Catterall, Kathie Claydon, Mick Claydon, Martin Dallimer, Clive & Janet Dickson, Guy Eldridge, Ian Ellis, John & Fiona Farnsworth, Richard Gabb, Paul Gaffan, Ernest Garcia, Martin Gauntlett, Chris Hendley, John Hughes, Ann Lawson, Russell Leavett, Pete Leonard, Duncan McDonald, Ilya Mclean, Bob Medland, Martim Melo, David Murdoch, Geoff Orton, Kingsley & Sharon Parker, Ben Phalan, Bill & Rowena Quantrill, Geoffrey & Beverley Randall, Nigel Redman, Keith J. Seaton, Neville Skinner, Jan Van Steenis, David Tomlinson, Trevor Warren, Robert Whitwell, Alan Williams, Barbara Woodcock, Martin Woodcock.

1. Apologies for absence

Apologies were received from David R. Calder, Field Marshal Sir John Chapple, Julie Childs, Mark Cocker, Chris Collins, Elaine Cook, Gordon & Jan Gale, Laurie Garner, Adrian Hopkins, Guy Kirwan, Nittaya Lawrence, Tasso Leventis, Ann Nason, Ralph Parks, Derek Pomeroy, David Porter, Neil Thomas, Steph Tyler, Richard Webb, David & Kay White.

2. Minutes of the last meeting

The Minutes of the last meeting had been published in the Bulletin and copies were distributed at the meeting. No comments were received. Keith Betton proposed that the Minutes be accepted, Pat Bartley seconded and the proposal was approved unanimously.

3. Matters arising

There were no matters arising.

4. Report of the Council

The report was presented by John Caddick as follows.

Membership. During the year 93 new members were recruited but 107 failed to renew; at the year-end the Club had 1,224 members. The current membership comes from 67 countries including 35 in Africa, where to facilitate membership the Club operates local currency payment schemes in Kenya, Madagascar, South Africa, Uganda and Zimbabwe. A significant number of members make an additional donation to the Club when renewing their membership. Such donations are important as they enhance our ability to support conservation projects in Africa. Initiatives to increase membership this year have included an article in *Birdwatch* magazine about the Club by Mark Cocker and another by Martin Woodcock to be published in *Africa—Birds & Birding*. Crowes of Norwich printed, free of charge, a large number of membership leaflets for the Club and some of these were distributed with *Promerops* (magazine of the Cape Bird Club).

Conservation Fund. The conservation of African birds and their habitats remains a key priority of the Club. Fifteen conservation projects in ten countries (Botswana, Ethiopia, Kenya, Libya, Madagascar, Mali, Mauritius, Nigeria, Tanzania and Uganda) received funding totalling UK£10,258 in 2007. Further details are available on the Club's website. In addition UK£1,000 has been set aside this year in a designated fund to support PAOC 2008. The total of that fund is now UK£3,000 and it is proposed that a further UK£1,000 be added in 2008.

Bulletin. The 2007 volume, no. 14, contained 240 pages and included the following articles: Birds to find (1), Identification & taxonomy (2), Site guides (2), Country-based papers / Country bird reports (5), First country records (10), Single species studies (5), Breeding range and ecology including hybrids (8), General ecology (1) and Little-known African birds / Photospots (2). Council has agreed to increase the amount of colour in the Bulletin to the extent necessary to enable all suitable photographs and graphics to be in colour. Production and postage costs in 2007 amounted to more than 90% of the income from personal membership subscriptions.

Website. The maintenance and further development of the website continues to absorb a great deal of effort. That effort is however well rewarded, as in 2007 UK£10,900 was received via the website from credit card payments for subscriptions, sponsorship, donations and sales. The AFBID (African Bird Image Database) continues to grow; 429 photographers have posted 8,803 images of 1,707 species on the site by the end of 2007. A revised version of the Africa checklist was posted this year and Country Checklists were launched in March; there are now 78 checklists on the system with at least one for each country, and there were 4,700 visitor downloads by the year-end. A web-based forum has been established to run alongside the African Birding e-mail group. ABC, together with BirdLife International, the RSPB and other regional bird clubs, are considering how an online record submission scheme can be set up.

Corporate Sponsorship. The year saw a further increase in the number of Corporate Members and Sponsors, with 29 at the end of 2007. In addition to a standard fee, many Corporate Members provide additional support of the Club's Conservation work: this year Sarus Bird Tours and Kelsey Park sponsored the Grey Parrot project in Kenya, Wildwings sponsored the Northern Bald Ibis project in Ethiopia and Rockjumper Birding Tours sponsored the Nahan's

Francolin project in Uganda. Prizes for the first major draw in support of the Conservation Fund were donated by Zeiss, Turtle Bay Beach Club and Naturetrek. WildSounds provides ongoing income through commission on book sales via the ABC website and through the ad-hoc donation of books for ABC to sell directly. A full list of Corporate Members is shown in the bulletin.

Sales. The Club launched a new range of ABC T-shirts and mugs featuring Martin Woodcock's Ross's Turaco design. Rockjumper Birding Tours sponsored the T-shirt with a contribution of 50% of the production cost. Total merchandise sales amounted to UK£2,453 and sale of Bulletin back issues brought in a further UK£1,331.

Country Representatives. ABC currently has representatives in 34 countries, but still requires volunteers for 33 African countries. Although we have a representative in the USA there is an opportunity for another two. A full list of countries for which we still require representatives is shown in the bulletin.

Gambia Birding Group. Declining membership has caused GBG to wind up and in accordance with their Constitution the balance of their funds was transferred to ABC early in 2008. Those funds have been earmarked for conservation projects in The Gambia. The GBG website content was incorporated within the ABC website in December 2007.

Council. Richard Webb, Elaine Cook and Julie Childs are retiring from Council at this AGM. Richard was one of the Club's founders and in the early years was Secretary and has been Chairman since 2005. Richard has made a major contribution to the Club, particularly in his recent role as Chairman. Elaine, who is retiring under the 'four-year rule', has massively developed the contribution that Corporate Members make to the Club. She will continue to hold the Corporate Membership portfolio in an ex-officio status. Council is seeking people to fulfill the roles of Meetings Officer, Publicity Officer and Advertising Officer, either as Members of Council (Trustees) or simply as task holders.

President. The tenure of the ABC President is limited to ten years by the Constitution and having held the post since 1998 Martin Woodcock is retiring at this AGM.

5. Presentation of the Accounts for 2007 and the Treasurer's Report

Copies of the Summarised Accounts as included in this Bulletin were distributed at the meeting. In presenting the accounts John Caddick drew particular attention to the summary of the overseas accounts that the Club maintains. In past years the monies in these accounts have not been included in the UK accounts. Following discussions with the Independent Examiner, Council has agreed to include the funds in the South African account in the 2007 UK account and in future years to include the funds in all overseas accounts within the UK accounts. In response to members' questions, John advised (a) that the 'Investment Income' shown was solely bank interest and that the Club maintained two UK accounts, one for day to day use, which provides a very low rate of interest, and another for monies in reserve that provides a much greater rate of interest; and (b) that although there was no regulatory requirement for the Club to employ an Independent Examiner, the firm employed provided advice to Council on a range of matters and Council considered the fee of UK£309 to be good value.

Acceptance of the accounts was proposed by Martin Woodcock, seconded by Alan Williams and approved unanimously.

Amendment of the Constitution

Copies of the Existing Constitution, the proposed Amended Constitution (included with this Bulletin as a separate leaflet) and an explanatory note were distributed prior to the meeting. Geoff Randall presented the proposed changes to the meeting through reference to those documents and invited questions from members.

Bill Quantrill drew attention to:

(a) New Sub clause 8.3 which reduces the period during which a person remains a member after failing to pay the required subscription, from the current 12 months to six months. He wondered what the impact of this would be, as the benefits of membership were not fully defined in the proposed new constitution and it was unclear what benefits members with subscriptions in arrears might enjoy. After discussion, the meeting agreed to accept proposed Sub clause 8.3 and the Trustees will create rules under proposed Clause 31 to define the benefits of fully paid-up membership, and the terms and conditions on which those in arrears remain members for six months (in particular that no Bulletin should be sent to any member whose subscription is in arrears).

(b) New Sub clauses 11.1 and 30.3, which change the terms and conditions of notice for general meetings. The Secretary advised that these represent minimum or backstop terms and conditions as recommended by the Charity Commission, but that current practice will not change. Notice of the AGM will usually be given to all members in Vol. 2 of the preceding year's Bulletin and by post to all members with UK addresses usually one month in advance of the meeting.

Acceptance of the new constitution was proposed by Bill Quantrill, seconded by Neville Skinner and unanimously agreed by the members present.

7. Election of Trustees

The following were proposed by John Farnsworth, seconded by John Bartley and unanimously elected as Trustees of the Club: Phil Atkinson, Keith Betton, John Caddick, Geoffrey Randall, Nigel Redman, Neil Thomas, Steph Tyler and Alan Williams.

8. Election of Executive Officers
The following were proposed by Russell Leavett, seconded by Martin Woodcock and unanimously elected as Executive Officers of the Club:

Chairman: Keith Betton
Vice Chairman: Phil Atkinson
Treasurer: John Caddick
Secretary: Geoff Randall

9. Appointment of Independent Examiner
Alan Williams proposed, Keith Betton seconded and the meeting unanimously confirmed Messrs Burton Sweet of Bristol as Independent Examiners for 2008.

10. Any Other Business
Duncan McDonald of WildSounds presented a cheque for UK£1,200 to the Club, which included a donation of UK£800 to support the continuation of the Coordinated Avifaunal Roadcounts (CAR) Project in South Africa, and UK£400 covering commission on sales by WildSounds emanating from the ABC Website and the ABC AGM. Keith Betton, on behalf of ABC, thanked Duncan for WildSounds' continuing generous support of the Club and African ornithology.

Keith Betton reminded the meeting that after ten years as President of the Club Martin Woodcock was retiring. Martin has been one of the driving forces of the Club since its inception. He joined a small band of like-minded people in 1993 to form the launch committee of which he became Chairman. He was elected as the first Chairman of Council at the inaugural AGM in 1995, and continued in that position until 1998 when he retired and became the Club's first President. Keith warmly thanked Martin for his many years' work for the Club and expressed Council's wish that he continues to make his knowledge and experience available. Martin will be succeeded as President by Tasso Leventis.

11. Close of Meeting
There being no other business the meeting closed at 14.00 hrs.

Statement of financial activities—year ended 31 December 2007

	Unrestricted Funds £	Restricted Funds £	Total funds 2007 £	Total funds 2006 £
Incoming resources				
Incoming resources from generated funds				
Voluntary income	10,340	1,215	11,555	8,825
Activities for generating funds	6,170	-	6,170	6,639
Investment income	1,673	-	1,673	1,152
Incoming resources from charitable activities				
Subscriptions	18,762	-	18,762	19,062
Total incoming resources	36,945	1,215	38,160	35,678
Resources expended				
Cost of generating funds				
Fundraising trading: cost of goods sold and other costs	1,286	350	1,636	2,332
Charitable activities				
Grants payable	9,245	713	9,958	8,170
Cost of activities in furtherance of charity's objects	20,950	-	20,950	20,270
Governance costs	1,243	-	1,243	1,126
Total resources expended	32,724	1,063	33,787	31,898
Net incoming/(outgoing) resources	4,221	152	4,373	3,780
Total funds at 1 January 2007	18,993	(152)	18,841	15,061
Total funds at 31 December 2007	23,214	-	23,214	18,841

The Charity has no recognised gains or losses other than the results for the year as set out above. All of the activities of the charity are classed as continuing.

Balance sheet—year ended 31 December 2007

	2007 £	2006 £
Current assets		
Stock	2,647	1,246
Cash at bank	40,245	35,617
	42,892	36,863
Creditors: amounts falling due within one year	(7,962)	(6,020)
Net current assets	34,930	30,843
Creditors: amounts falling due after one year	(11,716)	(12,002)
Net assets	23,214	18,841
Unrestricted funds		
Designated Fund	3,000	2,000
Club Fund	15,681	10,954
Conservation Fund	4,533	6,039
	23,214	18,993
Restricted funds	-	(152)
	23,214	18,841

A full copy of the annual report of the Trustees and financial statements can be found on the ABC website at www.africanbirdclub.org/club/aboutABC.html or obtained from the Club Treasurer.

Melvin A. Traylor 1915–2008

Mel (Melvin) Traylor, Curator Emeritus at the Field Museum of Natural History, Chicago, died in March 2008 at the age of 92. Mel may be best known for his collaboration with the late Raymond Paynter on the series of gazetteers for South American countries, but Mel published extensively over his career on birds of Africa (including a major monograph on the birds of Angola), as well as many other parts of the world. He hated to see a worthwhile project that was left incomplete, and he was not afraid of tough challenges. Mel described a number of bird taxa, including at least one species (*Cisticola restricta*, of Africa); and at least one species, *Tolmomyias traylori*, was named in his honour. Mel was a careful worker in the museum, with a keen eye for detail, but also was cautious in interpreting his results. The collections at the Field Museum contain several specimens that Mel recognised 'didn't fit', but in the absence of additional material, he refrained from describing them; his instincts were borne out when the specimens that Mel 'flagged' later were described by others as new species, including at least two specimens of 'his' *Tolmomyias* (!).

As a Marine Corp officer, Mel was severely injured during the battle of Tarawa during World War II, where he lost one eye and suffered arm and upper body wounds during the famous beach assault. He returned to Chicago and resumed his volunteer participation in the affairs of the Field Museum's bird division, where he later became employed as a curator along with Austin Rand and Emmet Blake. During the last few years of his employment he served as Chairman of the Zoology Department, and was as gracious and helpful an administrator as he always was a colleague and friend.

Mel continued to visit the Field Museum for many years after he retired, until this was no longer practical. He always was interested in the work of his younger colleagues, and did his best to keep up with advances in the field. His deep curiosity about the world around him, his good humour, and his gentle spirit were a source of pleasure and inspiration to all who knew him.

Tom Schulenberg, John Fitzpatrick, Dave Willard, Shannon Hackett and John Bates

Derek Goodwin 1920–2008

Born Richard Patrick Goodwin, in February 1920 in Woking, for reasons never clearly understood his parents (and thereafter everyone else) always called him Derek. Following service in North Africa during the Second World War, Derek was demobbed in August 1946 to embark on a career in ornithology, having developed an interest in cagebirds through *The Avicultural Magazine* during the war. Derek became widely known through his employment in the Bird Room at the British Museum (Natural History), despite his lack of formal educational qualifications, and he eventually rose to Principal Scientific Officer. As part of his duties he wrote three works of wide interest to ornithologists, including to African birders, namely *Crows of the World* (1976), *Pigeons and Doves of the World* (1977) and *Estrildid Finches of the World* (1984), all of which are still definitive texts. He also was an avid letter writer with correspondents worldwide. Any reference to birds in literature became embedded in his memory and he was able to quote at length from Shakespeare, the Bible and even French poetry, provided there was a reference to birds. His encyclopedic knowledge was recently highlighted by Dr David Snow, in Brian Garfield's *The Meinertzhagen Mystery: The Life and Legend of a Colossal Fraud* (2007). Snow recalls that Derek was the usual winner of Meinertzhagen's ornithological quizzes held at the latter's famous Derby Day parties: 'Derek...was the most generally knowledgeable ornithologist, I think, in the world, with an extraordinary memory for detail.' Derek died at the age of 88 on 14 May 2008.

Gordon Maclean 1937–2008

Gordon Maclean, Prof. Emeritus of Zoology of the University of KwaZulu-Natal, internationally famed ornithologist and most widely known for his 1985 and 1993 editions of *Roberts Birds of Southern Africa*, died on 30 March 2008, after a long illness.

Born in Durban in 1937, Maclean grew up in what was then Basutoland, and in his mid-teens became a farmer in the Free State. It was here that he first developed an interest in birds. Once he had finished school by private study, he went to Namibia to work at the De Beers diamond mines and extended his interest to birds of arid regions. A B.Sc. (Hons.) degree in Zoology from Rhodes University followed in 1963. He then spent 19 months living in the Kalahari Gemsbok National Park researching the Sociable Weaver *Philetairus socius;* work which he presented for his Ph.D. in 1968. In 1975, he was awarded a D.Sc. by the University of Natal for his research on arid-zone ornithology, water biology and systematics, and the convergent evolution of birds in southern Africa, North and South America and Australia. He spent a year at Cornell University and joined the University of Natal in 1968 as a lecturer in Zoology, becoming an associate professor in 1975 and full professor in 1986. Maclean was awarded a Fellowship by the University of Natal in 1992, served as President of the Southern African Ornithological Society and was awarded its Gill Memorial Medal in recognition of his services to ornithology. His publications include *Aids to Bird Identification in Southern Africa* (1981), *Ducks of Sub-Saharan Africa* (1986) and *Ornithology for Africa* (1990).

To date more than UK£67,000 has been given by the ABC in Conservation Awards throughout Africa. During January and February the ABC received more than ten applications for funding. After much deliberation by the Conservation Committee (Steph Tyler, Lincoln Fishpool, Paul Buckley and Hazell Thompson) and discussion by Council the following four awards were given. Depending on the state of the Conservation Fund, further awards may be made.

UK£1,000 to Claudien Nsabagasani for a biodiversity survey of Akanyuru wetland, Rwanda. This project has been funded by Corporate Sponsor Hyde-Lascelles Ltd (see below). The wetland is an unprotected Important Bird Area (IBA) in Rwanda and it suffers from human encroachment. A survey is now being undertaken to assess the IBA's biodiversity and the threats it is facing. Special focus will be placed on birds (and mammals). The bird inventory will be made using standard methods including a combination of point counts, opportunistic sampling, and total counts for waterbirds. An assessment and quantification of habitat types, land use and threats will follow the guidelines set out in the IBA monitoring framework developed by BirdLife International. The results of the survey will be used to establish the status of biodiversity in the IBA, especially of threatened and migrant species, and will be presented to decision-makers and stakeholders to reinforce the management of important wetlands in Rwanda.

UK£1,000 to Dawit Semere for a survey of Socotra Cormorants in the Red Sea, Eritrea. Socotra Cormorant *Phalacrocorax nigrogularis* is endemic to the continental shelf from the Arabian Gulf to the Gulf of Aden. The species was thought to be only a rare visitor to the Red Sea, but recent surveys of the central and southern Eritrean Red Sea by Eritrea's Coastal Marine and Island Biodiversity Project (ECMIB) and by Italian researchers have confirmed the presence of large numbers of cormorants (see pp. 228–237). Further investigations were required to fill the gap in our knowledge of the species' current range and status. The project aims to ascertain the breeding status of Socotra Cormorant, the size of the population in the Eritrean Red Sea and the habitat used. Current threats to the species and its habitats in the central and southern Eritrean Red Sea will also be investigated in collaboration with the ECMIB and Ministry of Fisheries. All required equipment is available to the ECMIB and will be provided to the project. Moreover, staff members with good experience of field work will participate in the project.

Socotra Cormorant / Cormoran de Socotra *Phalacrocorax nigrogularis* (Peter Ryan)

UK£500 for a survey of the Critically Endangered Djibouti Francolin in the Mabla Mountains of Djibouti in November 2008. The specific objectives of this project are as follows. (1) To obtain up-to-date data on the numbers and range of Djibouti Francolin *Francolinus ochropectus* in the Mabla Mountains; the species was recorded in the area in 1985 but its current status is unknown and the population size has never been assessed, though it is probably small. (2) To survey all areas of suitable habitat in the mountains between the Forêt du Day and the Mabla Mountains, and the Dahla plateau north-west of the Mabla Mountains, for the Djibouti Francolin, and to obtain data on numbers and distribution. These areas have never been systematically surveyed and are very poorly known ornithologically. Francolin numbers will be assessed using point count methodology compatible with the surveys of the Forêt du Day in 2004 and 2006. (3) To collect detailed habitat information from all areas where francolins are located. The habitat where francolins were observed in the Mabla Mountains is different from that in the Forêt du Day in that there is a complete absence of *Juniperus procera*. Given that junipers are dying

Djibouti Francolin / Francolin somali *Francolinus ochropectus* (Houssein Rayaleh)

in the Forêt du Day, an understanding of the other habitats that the francolin can use may prove important. (4) To collect information on current land use and actual/potential threats to the francolin, using either standard questionnaires or anecdotal conversations with local people, depending on opportunities and amount of time available. (5) To collect information on all other birds encountered, especially the yellow-tailed pytilia and 'mystery' sunbird (both first seen in 1985 by Geoff & Hilary Welch), to increase overall knowledge of Djibouti's avifauna. Following the sighting of a juvenile Northern Bald Ibis *Geronticus eremita* at Tadjoura in December 2007 (the first record for Djibouti), the team will also look for this species in the near vicinity. The project team will be Geoff & Hilary Welch and Mahamoud Houssein Warsama.

UK£1,000 to James Bray, Ilya Maclean, Maneno G. Mbilinyi and Dave Andrews for the Mpingo conservation project to assess the impacts of harvesting of East African Blackwood on forest birds. Coastal forests in Tanzania represent a globally important hotspot for avian biodiversity but are potentially threatened by harvesting of the East African Blackwood *Dalbergia melanoxylon* (Mpingo in Swahili), which is used for manufacturing musical instruments, amongst other things. Despite the habitat's importance, little is known about the status of birds that use it and virtually nothing is known about their response to harvesting of Mpingo trees. This project aims to gain an insight into the effects of Mpingo harvesting on birds, conduct baseline surveys to establish the distribution and abundance of species present, develop new techniques for rapidly mapping the distribution and abundance of birds, and develop a baseline methodology for monitoring. At numerous random locations throughout the forest, data on bird abundance will be collected using snapshot point counts, and harvesting quantified using a series of proxy measures based on habitat structure. The data will be combined to assess the impacts by constructing habitat association models. A novel technique, whereby remotely derived and in-situ collected habitat structure data and spatially smoothed point count data are combined, will then used to create distribution and abundance maps.

Sponsorship

We are delighted that a new Corporate Sponsor—Hyde-Lascelles Ltd—will sponsor Claudien's project in Rwanda. Paul Lascelles of this UK registered company, is a founding member of ABC and formerly served on the ABC Council.

Donations

ABC is most grateful to all members who routinely add a few pounds to their subscriptions to support the Conservation Fund. In particular, the ABC thanks M. H. Broadbridge, Paul J. W. Chadwick, Mike D. Dawson, Matthias Kestenholz, Russell Leavett, Linda Manning, Bill & Rowena Quantrill, Andrew Sharpe and Chris D. Spooner. We also thank WildSounds for their generous sponsorship of the CAR project.

Sadly, founder member and former Council member Mark Caterall died in April 2008. ABC is most grateful to Chris & Mavis Hendley who sent UK£500 in memory of Mark to be used for a Conservation Award in Mark's name.

The former Gambia Bird Group kindly transferred its funds to the ABC and these are earmarked for conservation projects in The Gambia.

Reports

Coordinated Avifaunal Road counts

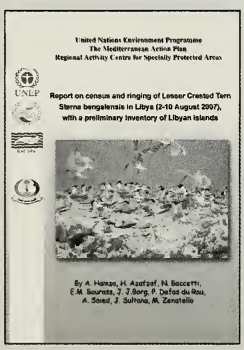
For the period 2006–07 CAR continued to grow with the development of a new precinct in the savanna biome and the addition of new routes to existing precincts. Expansion of routes continued in Gauteng province, forming six precincts. Funding from the Critical Ecosystem Partnership Fund has facilitated increased collaboration with farmers, nature conservationists and the Department of Agriculture. Through a workshop at the Animal (formerly Avian) Demography Unit (ADU) and interviews at the Agri Megaweek, further insights were gathered, resulting in the further development of guidelines for best land management practices that promote the conservation of biodiversity.

The CAR counts involve more people (750+) on a single day than any other birding activity in Africa. Precinct organisers continue to play an important role in the project. Population data are being gathered on a wide range of large terrestrial birds over an extensive area and valuable new information on population trends, movements and habitat use is emerging. The eight-year report, *Big birds on farms: the Mazda CAR report 1993–2001*, summarised the results and gave advice to landowners on how to conserve these threatened species. Updated trends of species in some precincts have been posted on the website. Software has been developed to query a summarised database, so that it will soon be possible to obtain regularly updated results online. The CAR database now contains the results of more than 7,000 road counts.

ABC has also received news of the summer 2008 counts of large birds along roads in South Africa from Donella Young, the Project Coordinator at the ADU. If any member would like an electronic copy of the 2006–07 report or news of the summer 2008 counts please contact the Conservation Officer.

Lesser Crested Terns in Libya

Hichem Azafzaf has sent a comprehensive report, and many photographs, by himself, A. Hamza, N. Baccetti *et al.* on the mission in August 2007 to count Lesser Crested Terns *Sterna benghalensis* on Garah Island, in Benghazi Lake, on Sebkhat Jeliana and on Alba Island. In all the team found *c.*1,500 breeding pairs on Garah Island, *c.*110 pairs on an islet in Benghazi Lake, and 23–33 pairs on Alba Island. They also gathered many other useful data on these terns and other species using the islands. It is hoped a paper with the full results will be published in a future bulletin.


United Nations Environment Programme
The Mediterranean Action Plan
Regional Activity Centre for Specially Protected Areas

Report on census and ringing of Lesser Crested Tern *Sterna bengalensis* in Libya (2-10 August 2007), with a preliminary inventory of Libyan islands

By A. Hamza, H. Azafzaf, N. Baccetti, E.M. Bouriès, J. J.Borg, P. Defos du Rau, A. Saad, J. Sultana, M. Zenatello

Assessment of the effects of trade and habitat destruction on Grey Parrots in Kakamega Forest, Kenya

Ireene Madindou and Ronald Mulwa (Ornithology Department, National Museums of Kenya) report that the main focus of the second part of the study was to assess involvement, attitudes and awareness levels of the local community of the trade in Grey Parrots *Psittacus erithacus*. They also sought to develop a monitoring protocol for the species' population trends and habitat quality. Communities in Busia and its environs were visited and field guides were used to describe the species to interviewees. Government officials on the Kenya/Uganda border were also interviewed, as were bicycle and taxi operators and brokers. Extensive surveys for parrots were undertaken in their preferred habitat and their surroundings were also visited to document any disturbance resulting from human activities. For a copy of the report contact Steph Tyler.


Grey Parrot / Perroquet Jaco *Psittacus erithacus* (Robert van Zalinge)

Short-clawed Larks

Chris Brewster and Keddy Mooketsa spent 21 days in December 2007 surveying Short-clawed Larks *Certhilauda chuana* in south-east Botswana. They used pre-recorded calls to elicit a response from any larks on defined transects, along which they stopped every 200 m in suitable habitat. It is estimated that there are 15,000–20,000 pairs in south-east Botswana, and more than ten pairs can be found in 100 ha. Numbers have increased by *c.*9% since Marc Herremans' survey in 1993. This is welcome news after the reported decline in South Africa. Whilst suitable habitat has decreased, due to declining interest in farming, there is the possibility of a change in attitude because of high grain prices and Botswana producing very little of its own food, providing an incentive to grow crops. Certainly, in early 2008 there must have been a large increase in the area ploughed due to the good rains.

Steph Tyler

Africa Round-up

General

Latest news from BirdLife on the state of the world's birds

Climate change has become firmly established as an accelerant to many of the factors that have put one in eight of the world's birds at risk of extinction, with long-term drought and sudden extreme weather placing additional stress on the pockets of habitat that many threatened species depend on. This, coupled with extensive and expanding habitat destruction, has lead to an increase in the rate of extinction on continents and away from islands, where most historical extinction has occurred.

The 2008 IUCN Red List makes grim reading with 1,226 species of bird now threatened, and eight species newly uplisted to Critically Endangered, the highest threat category. Of the 26 species that changed category owing to new information on their population size, rate of decline or range size, 24 were uplisted to a higher level of threat. These include widespread continental species like Eurasian Curlew *Numenius arquata* and Dartford Warbler *Sylvia undata*, both previously ranked as Least Concern, and now regarded as Near Threatened globally. Dr Stuart Butchart, BirdLife's Global Research and Indicators Coordinator stated that "Species are being hit by the double whammy of habitat loss and climate change. As populations become fragmented the effect of climate change can have an even greater impact, leading to an increased risk of local extinctions."

To combat the ever-increasing threat of extinction to so many species, BirdLife has launched the Preventing Extinctions Programme, the largest and most wide-ranging bird conservation programme the world has ever seen. The programme targets all 190 Critically Endangered birds on the 2008 IUCN Red List, by finding 'Species Champions' who will fund the work of nominated 'Species Guardians' for each bird—organisations and people best placed to carry out the conservation work necessary to prevent the loss of these species.

Source: www.cms.iucn.org/about/work/programmes/species/news_events/index.cfm?uNewsID=947

Action Plan for White-winged Flufftail

A workshop to develop an Action Plan for the globally threatened (Endangered) White-winged Flufftail *Sarothrura ayresi* has been held in Addis Ababa, Ethiopia. The workshop was convened by the Africa Partnership Secretariat of BirdLife International, and hosted by the Ethiopian Wildlife and Natural History Society (EWNHS, BirdLife in Ethiopia). Although the species has been recorded at nine wetlands in South Africa between November and March, the only evidence of breeding comes from three wetlands in the central highlands of Ethiopia between July and September.

Source: www.birdlife.org/news/news/2008/06/flufftail_workshop.html

Taxonomy of the wattle-eyes under the genetic spotlight

The wattle-eyes (genera *Platysteira* and *Dyaphorophyia*) comprise ten species endemic to Africa. The results of a study using both mitochondrial and nuclear DNA data to test the monophyly of this group and its two genera, and to provide a preliminary assessment of species limits, have been published recently. Analyses based on the mitochondrial sequences failed to recover wattle-eye monophyly, but the alternatives were not well-supported. In contrast, analyses of two nuclear genes recovered monophyly, as did combined analyses of mitochondrial and nuclear data, and suggest that *Platysteira* is nestled within a paraphyletic *Dyaphorophyia*. Concerning species limits (a topic recently addressed in these pages by Michel Louette: *Bull. ABC* 14: 18–23), the authors of the new study found that several subspecies with disjunct distributions are characterised by deep genetic divergences, suggesting that many could be recognised as phylogenetic species. In Chestnut Wattle-eye *Dyaphorophyia castanea* and Red-cheeked Wattle-eye *D. blissetti* chalybea, for example, divergent haplotypes from geographically disjunct populations were paraphyletic with respect to those of White-spotted Wattle-eye *D. tonsa* and Jameson's Wattle-eye *D. b. jamesoni*, respectively. Similarly, Banded Wattle-eye *Platysteira* (*peltata*) *laticincta* is highly divergent from its sister taxon Black-throated Wattle-eye *P. peltata*, consistent with species-level recognition of this rare species. In contrast, more broadly distributed taxa inhabiting a greater diversity of habitats (e.g., *P. peltata* and Brown-throated Wattle-eye *P. cyanea*) show evidence of gene flow and connectivity among regions, suggesting that previously isolated populations expanded and fused.

Source: Mol. Phyl. & Evol. *48, pp. 136–149*

Red Data List for raptors in Africa

The BirdLife Partnership in Africa has embarked on an assessment of the status of raptors and owls in the continent, with the stated aim of developing a 'Red Data List for raptors in Africa', with support from the Raptor Research Foundation and the Leslie Brown Memorial Fund. The draft list will be discussed at a raptor symposium during the 12th Pan-African Ornithological Congress in

September 2008. Given the paucity of data on the status of many resident raptors, the partnership is seeking information at national, sub-regional or the Africa-wide level so that assessments are based on the most up-to-date knowledge. If you are able to contribute information on population trends and numbers, as well as threats to African raptors please contact Paul Kariuki Ndang'ang'a via e-mail: paul.ndanganga@birdlife.or.ke

Source: BirdLife International Africa Partnership e-bulletin 15, p 2

Latest on avian flu in Africa

To date outbreaks of H5N1 have been reported in 11 African countries as follows: Nigeria, Niger and Egypt (February 2006), Cameroon (March 2006), Sudan, Burkina Faso and Côte d'Ivoire (April 2006), Djibouti (May 2006), Ghana (May 2007), Togo (June 2007) and, most recently, Benin (December 2007). In addition, outbreaks of H5N2 have been reported in Zimbabwe (February 2006) and South Africa (October 2006). The highest number of outbreaks in Africa has been reported in Egypt, with new outbreaks continuing to be reported there. Côte d'Ivoire and Ghana submitted reports in September and March 2007, respectively, indicating that they had resolved outbreaks of H5N1 avian influenza in domestic poultry. In addition, in November 2007 Sudan declared itself free of H5N1. All the H5N1 outbreaks in Africa have been reported from poultry production units, especially commercial ones. They therefore mostly affect chickens, domestic guineafowl, ducks, geese, turkey and pigeons. A few individuals of wild species have also been affected, possibly due to their direct contact with affected poultry. BirdLife provides regular updates on the global situation at www.birdlife.org/action/science/species/avian_flu.html

Source: BirdLife International Africa Partnership e-bulletin 15, p 2

New partnership to improve African biodiversity and livelihoods

The Spanish Agency for International Cooperation and Development (AECID) is funding a BirdLife International in Africa project for the first time. The project aims to support Africa's poor through sustainable use of biodiversity, to be achieved through improving the livelihoods of local communities by promoting sustainable use of renewable natural resources. The BirdLife Africa Secretariat will work alongside Partners to build capacity for policy dialogue at local, national, regional and global levels. The project will be implemented by Site Support Groups (SSGs) based at Important Bird Areas. The SSGs will illustrate linkages between poverty reduction and sustainable biodiversity use. Successful examples of local communities and national NGOs working in partnership will also be promoted.

Source: www.birdlife.org/news/news/2008/05/AECID_BL_Africa.html

North Africa

Spur-winged Goose, yes, but Cape Gannet, no

Detective work by Pierre-André Crochet and Marcel Haas has established that Cape Gannet *Morus capensis* should be deleted from the list of birds known to have occurred in the Western Palearctic. It previously rested on a ringed juvenile apparently caught at sea on a Russian trawler off Western Sahara in 1966. However, a reinvestigation has revealed that the coordinates attached to the record lay well inland in northern Chad, and the authors suggest that a mistake was made in labelling north and south, which if so would place the record just off the coast of Namibia. On the plus side, Crochet and Bernard Spaans report only the second definite Western Palearctic record of Spur-winged Goose *Plectropterus gambensis*, a group of birds photographed at the Banc d'Arguin, in Mauritania, in December 2004.

Source: Dutch Birding *30, pp 101–104*

Spur-winged Goose / Oie-armée de Gambie *Plectropterus gambensis* (Warwick Tarboton)

West & Central Africa

French version of West African field guide

Good news for Francophone birders: Nik Borrow & Ron Demey's *Field Guide to the Birds of Western Africa* is now also available in French. The *Guide des Oiseaux de l'Afrique de l'Ouest* has been published recently by Paris-based publisher Delachaux et Niestlé (www.delachaux-niestle.com). Further good news is that the reproduction of the colour plates in the book, as well as those in the second print run of the English edition, which has been published at the same time, is noticeably better than in the first English printing.

Source: Ron Demey in litt. *May 2008*

Diana Monkey / Cercopithèque diane *Cercopithecus diana* (Jon Hornbuckle)

Gola Forest receives long-lasting protection . . .

President Ernest Bai Koroma of Sierra Leone has backed plans to make the 75,000-ha Gola Forest the country's second national park, protecting more than 50 mammal species, 2,000 different plants and 274 bird species of which 14 are in danger of extinction. The area, close to the Liberian border, will become the flagship site in a new national park network, with local communities paid annually to replace royalties linked to logging and diamond mining in the forest. The project is being funded by the European Commission, the French government, the RSPB and US-based Conservation International. It is implemented on the ground in collaboration with the Conservation Society of Sierra Leone (BirdLife in Sierra Leone). For more about Gola Forest see pp. 215–227 of this bulletin.

Source: www.birdlife.org/news/news/2007/12/sierraleone.html

. . . but Unilever threatens Côte d'Ivoire's primary rain forests

One of Côte d'Ivoire's most important primary rain forests is apparently to be cleared by the global consumer product company, Unilever, and others, despite the company's recent promise to purchase only 'sustainable' palm oil from lands not cleared of rainforests for their production. Tanoé Swamp Forest in Côte d'Ivoire is one of the last remaining old-growth forests in the country and a refuge for three highly threatened primates—Western Red Colobus *Piliocolobus badius*, Geoffroy's Pied Colobus *Colobus vellerosus* and Diana Monkey *Cercopithecus diana*—as well as home to many endangered plant species. Despite international protests, the company PALM-CI has begun destroying this 6,000-ha forest to convert it to oil palm plantations. Unilever is one of the main companies behind PALM-CI and the destruction of the Tanoé Swamps Forest.

Sources: www.climateark.org/; www.rainforestportal.org/alerts/send.asp?id=ivory_coast_oil_palm

West African bird migration network launched

Nineteen researchers from 11 European countries met in Germany in early May 2008 to establish a network to facilitate research on European and intra-African migrants within Africa. Given declining populations of many such birds, there is an urgent need for research within Africa to identify how changing conditions are affecting bird populations. The reasons for the current lack of research are logistical difficulties, and the lack of capacity and infrastructure within many African countries. The network's primary aim will be to act as a repository for information about research into migrant birds in Africa. This will be achieved through a website (to come) and a discussion forum that is already in operation at http://groups.yahoo.com/group/african_migrants). You need to register to join the group, following which any messages you send to african_migrants@yahoogroups.com will be sent to all members. You can also upload photographs, files and databases to be shared amongst the network members. For any queries contact Phil Atkinson via e-mail: phil.atkinson@bto.org. Annual or biannual meetings of the network, when possible in connection with established conferences such as the Pan-African Ornithological Conference (every four years) or the Conference of the European Ornithologists Union (biannual), will be used for further network discussions. The next meeting of the network will take place during the Pan-African Ornithological Congress in September 2008 in South Africa, in the form of a roundtable discussion.

Source: Volker Salewski in litt. *20 June 2008*

Birds of Adrar des Iforhas, Mali

Following their first surveys, in 2001–03, in the mountainous region of the Adrar des Iforhas, in the extreme north-east of Mali, Michel Clouet and Jean-Louis Goar returned six more times to the area during 2004–07. They recorded 112 species, among them the first Bonelli's Eagle *Hieraaetus fasciatus* for the country (this species was previously known in West Africa only from coastal Mauritania to north Senegal). Kordofan Rufous Sparrow *Passer cordofanicus* was an Afrotropical vagrant in the dry season. Minor range extensions were noted for several other species. The most abundant breeding species during and just after the rains were Namaqua Dove *Oena capensis*, Black-crowned Sparrow Lark *Eremopterix nigriceps* and Sudan Golden Sparrow *Passer luteus*. Compared to the Aïr Mountains in northern Niger, Adrar des Iforhas held more species (although this may be due to more intensive survey work), but a smaller Afrotropical component. The area constitutes the limit of several species' ranges: the southern limit of breeding birds of Palearctic origin (e.g. Golden Eagle *Aquila chrysaetos*) or from the Sahara (Desert Sparrow *Passer simplex*, Trumpeter Finch *Bucanetes githagineus*); and the northern limit

Black-crowned Sparrow Lark / Moinelette à front blanc *Eremopterix nigriceps* (Jon Hornbuckle)

Namaqua Dove / Tourtelette masquée *Oena capensis* (Mark Anderson)

for Sahelian and Afrotropical species, for which this massif constitutes a Sahelian refuge in the Sahara. The researchers found that vultures had disappeared and bustards were extremely rare—this confirms the worrying trend also observed elsewhere in the region.

Source: Alauda *76, pp 65–69*

Migrating juvenile Purple Herons satellite-tracked

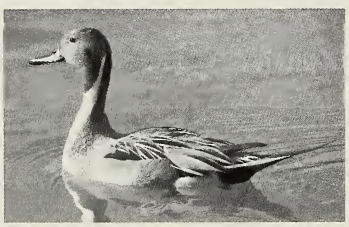
Six juvenile Purple Herons *Ardea purpurea* from the Camargue of south-east France were equipped with transmitters in July 2004 to study their migration by satellite-tracking. Of these six, four were followed until the third week of September, when the transmitters ceased sending signals, permitting researchers to follow a substantial part of the migration route through southern Europe and north-west Africa. The tracked birds left between 12 and 14 September and headed south-southwest, towards Spain and the Balearic Islands, then headed for Algeria. Two birds subsequently flew south-west to the Moroccan coast, whilst a third flew straight over the Sahara and was last known to be in northern Mauritania. Its flight speed on this part of the journey was estimated at 40 km/hour. The fourth transmitter stopped functioning when the bird was still in northern Algeria. The results of the study are consistent with previous ring recoveries and provide additional information on the departure dates and flight speed of juvenile Purple Herons on autumn migration.

Source: Ardea *96, pp 120–124*

Northern Pintails in the Senegal Delta seem to prefer wild seeds

Analysis of 18 gizzards of Northern Pintails *Anas acuta* killed by hunters in the Senegal Delta during the 2004–05 hunting season revealed that they contained exclusively wild seeds, especially of water lilies *Nymphaea alba* (400 seeds per gizzard). Surprisingly, no rice seeds were found, despite the fact that this is a locally abundant food source, with *c.*20,000 ha of rice fields in the delta. Although these first results are based on too few samples to permit definitive conclusions, they nonetheless suggest that the Pintails prefer to forage in natural freshwater wetlands. The Senegal Delta is an important wintering area for the species: in January 2005, *c.*188,000 Pintails were counted; in Djoudj National Park, an average of 92,230 Pintails was recorded during 1989–2007.

Source: Alauda *76, pp 69–71*



Northern Pintail / Canard pilet *Anas acuta* (Warwick Tarboton)

Communities unite to protect White-necked Picathartes

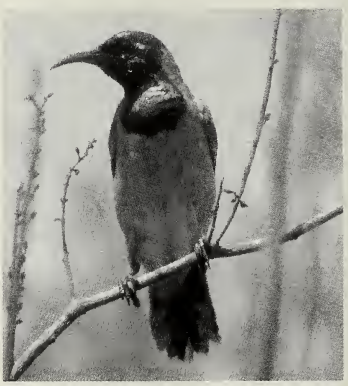
A survey of the Western Area Peninsula Forest in Sierra Leone has discovered two new breeding colonies of the globally Vulnerable White-necked Picathartes *Picathartes gymnocephalus*, in addition to the 16 sites already known. The survey was part of a one-year project by volunteers from the Conservation Society of Sierra Leone (the BirdLife Partner in Sierra Leone), the University of Sierra Leone, and the government's Forestry Division, with help from local communities. The project, funded by the Disney World Conservation Fund, also established a network of trained wardens in villages surrounding the WAPF reserve.

Source: www.birdlife.org/news/news/2008/04/Picathartes_survey.html

Reichenbach's Sunbird found in Benin

Reichenbach's Sunbird *Anabathmis reichenbachii*, which is known to occur on western African coasts from Liberia to Ghana and presumably Togo, and from Nigeria south to Congo-Kinshasa, has now also been found in Benin: one was seen on the outskirts of Ouidah in September 2006.

Source: Malimbus *30, pp 71–73*



Reichenbach's Sunbird / Souimanga de Reichenbach *Anabathmis reichenbachii* (Ron Hoff)

Congo designates wetlands

The Democratic Republic of Congo marked this year's 'World Wetlands Day', which is celebrated annually around the world on 2 February, by designating four new wetlands of international importance, including one that is the second largest in the world. The four new designations were jointly supported by the Swiss Federal Office for Environment through the Convention's Swiss Grant for Africa and by WWF International's Freshwater Programme. The newly protected wetlands are intended to be part of a series of new Ramsar designations

throughout the Congo Basin leading up to the creation of the CongoWet regional initiative.

Source: BirdLife International Africa Partnership e-bulletin 15, p 5

Atlantic Islands

Confirmation of specific status for north-east Atlantic petrels

Francis Zino *et al.* of the Freira Conservation Project in Portugal have subjected the *Pterodroma* petrels of the Madeira archipelago and Cape Verde Islands to molecular investigation and have confirmed that there are two species on Madeira: Zino's *P. madeira* and Fea's *P. feae*. From biometrics, bill size is by far the easiest way to distinguish them.

Source: Ibis *150, pp 326–334*

Manx Shearwaters on Tenerife, Canary Islands

The Canaries being at the southernmost extent of the Manx Shearwater's *Puffinus puffinus* breeding range support only small numbers and a few colonies of the species. Indeed, breeding has only been confirmed on La Palma and Tenerife, but is suspected also on La Gomera and El Hierro. The authors of a recent study, which attempted to establish the current status of *P. puffinus* on Tenerife, found four potential breeding sites, all in the extreme north-west of the island, but suggest that the numbers involved are still very small and possibly decreasing.

Source: Alauda *76, pp 72–74*

More on genetics of Macaronesian birds

Molecular work on the birds of the north-east Atlantic Islands has thrown up a number of taxonomic surprises in recent years. Those interested in the avifauna of this region will find Christian Dietzen's recently produced Ph.D. thesis interesting reading, along with the several papers produced by Dietzen and his colleagues in the technical literature (see below). Dietzen studied the following species: European Robin *Erithacus rubecula*, Island Canary *Serinus canaria*, Goldcrest *Regulus regulus*, Blue Tit *Parus caeruleus teneriffae*-group, Sardinian Warbler *Sylvia melanocephala*, Blackcap *S. atricapilla* and Spectacled Warbler *S. conspicillata*. Very strong genetic differentiation was found in Robin, Goldcrest and Blue Tit, suggesting the presence of several undescribed taxa, but genetic differentiation was weak in the canary and the *Sylvia* warblers. For most species the genetic data provide evidence for multiple independent colonisations. The molecular data are, at least partially, supported by morphological and bioacoustic findings. Dietzen proposes to treat Robins from the Canaries as a superspecies containing *E.* [*r.*] *rubecula* (on the western Canaries and in Europe), *E.* [*r.*] *superbus* (on Tenerife) and a new taxon on Gran Canaria. Azorean *Regulus regulus* populations are closely related to European nominate *R. r. regulus*, but the Canarian populations divide into a north-eastern group, on Tenerife and La Gomera, and a south-western group, on El Hierro and La Palma. The populations on El Hierro and La Palma have been described as a new subspecies, *ellenthalerae*. Taxonomic recommendations for the Blue Tit include the distinction of *P. caeruleus* from northern Europe and *P. teneriffae*, including North Africa and the Canary Islands, the treatment of *degener* and *ultramarinus* as synonymous (*P. teneriffae ultramarinus*) and a new taxon on Gran Canaria (*P. t. hedwigii*); see pp. 255– 259. The subspecific distinctiveness of Sardinian Warblers *Sylvia melanocephala* and Blackcaps *S. atricapilla* on the Atlantic Islands was rejected. Differences in morphometrics in both species are deemed to be the result of migratory behaviour and ecological traits, rather than phylogeny. The small sample of Spectacled Warblers *S. conspicillata* also suggested a low degree of differentiation.

Sources: Avian Sci. *3, pp 115–131;* J. Ornithol. *147, pp 485–494; 149: 1–12;* J. Avian Biol. *37, pp 364–380*

East Africa

Kenyan government puts Tana Delta under threat

Further to our report in the last Bulletin (*Bull. ABC* 15: 18), via its National Environment Management Authority (NEMA), the Kenyan government has approved a proposal to turn 20,000 ha of the Tana Delta into irrigated sugarcane plantations. Conservationists and villagers living in the delta, which provides refuge for 350 species of bird, as well as many other animals, believe the decision is illegal and are determined to block the development. The groups are considering what action they might take.

Source: www.birdlife.org/news/news/2008/06/tana_proposal_granted.html

Exotic and indigenous plantations enhance overall diversity in Kakamega

The avifauna of various forest types, in particular those with different levels of disturbance, was studied in the Kakamega between December 2004 and May 2005 by Fred Munyekenye *et al.* from the National Museums in Nairobi. A total of 129 species was recorded and the researchers found that disturbed areas and plantations supported lower bird diversity and abundance than primary, mixed indigenous and regeneration forests. Exotic and indigenous plantations do, however, enhance the overall diversity and abundance at sites where natural forest succession is slow or where it is threatened.

Source: Ostrich *79, pp 37–42*

Kenyan farmland holds many birds but not forest species

Irina Laube and colleagues from the University of Mainz performed point counts at 56 locations in farmland up to 2.1 km from the edge of Kakamega Forest in western Kenya. Twenty-two forest species were noted in the farmland, as well as 74 others, but only 16 were open-country species. High vertical vegetation heterogeneity and many woody plant species were the most important fac-

tors in promoting high bird species numbers, although open-country birds shunned these areas. Distance from the forest edge was also important for the forest species, of which only a fraction could persist in the farmland.

Source: J. Ornithol. *149, pp 181–191*

Socotran endemics

Two further papers have been published as part of the ongoing review of taxa endemic or near-endemic to the ancient archipelago of Socotra, which is politically part of Yemen but geographically much closer to the African mainland. On the 'debit' side, the papers' author suggests that six taxa originally described as endemic subspecies are better treated as synonyms of wide-ranging Afrotropical forms, which tactic had already been employed in some other recent literature for two of these. However, two forms endemic to the island of Abd Al-Kuri, one a *Onychognathus* starling that has generally been forgotten in the literature since the 1930s, and the other a *Passer* sparrow, merit further investigation. Only a single specimen of the starling exists and whilst the characters used to delimit it appear valid, further material and field observations will be necessary to deny or confirm its validity. In contrast, analysis of the type and other more recent specimens of the sparrow (*hemileucus*) confirms it to be extremely well differentiated in both plumage and size from the taxon found on the main island of Socotra (*insularis*, also a Socotran endemic), even to the point of suggesting separate colonisation events. It certainly appears as meritorious of recognition at species level as most other taxa in the Rufous Sparrow *Passer motitensis* group that were so ranked in *The Birds of Africa*. The work also upheld other studies that have conferred specific status on *P. insularis*.

Sources: Bull. Br. Ornithol. Cl. *128, pp 83–93;* Sandgrouse *29, pp 135–148*

Madagascar Pond Heron / Crabier blanc *Ardeola idea* (Dave Richards)

Madagascar Pond Heron thrown a lifeline

The Madagascar Pond Heron *Ardeola idae*, which is currently categorised as Endangered on the IUCN / BirdLife International list of globally threatened birds, has received much-needed attention from all its range states. Delegates from nine African countries recently came together in Nairobi (Kenya) to develop a Species Action Plan to reverse the species' alarming decline. Just 50 years ago this species was considered to be common. It breeds in Madagascar and on Aldabra, Europa and Mayotte in the western Indian Ocean, but migrates to mainland Africa during the non-breeding season, where it frequents small, tree-lined freshwater pools.

Source: www.birdlife.org/news/news/2008/05/madagascar_pond_heron.html

Southern Africa

An important seasonal food and water source

Craig Symes *et al.* of the University of Pretoria studied birds feeding at the flowers of *Aloe marlothii* in Suikerbosrand Nature Reserve, *c.*60 km from Johannesburg. The flower offers copious amounts of dilute nectar during the dry winter season. Overall bird abundance increased two- to threefold during the flowering period and 38 species (of the 83 recorded during transects) of 19 families were seen feeding on the nectar, but interestingly only two species were sunbirds (Nectariniidae) and neither was common. Insectivores and nectarivores fed mainly on cold mornings, while frugivores and omnivores fed on the nectar during the middle of the day. Clearly this aloe is an important seasonal food and water source for many birds.

Source: J. Ornithol. *149, pp 13–22*

A helping hand for White-winged Apalis

Only two nests of the globally threatened White-winged Apalis *Apalis chariessa* have ever been found, but John Wilson has had a resident pair of the species in his garden in southern Malaŵi for some years. After observing one failed breeding attempt, John decided to 'import' some of the fibre-lichen *Usnea barbata* from higher on Zomba Mountain to his garden; this lichen had been used as the foundation material for both of the previously documented nests, but does not naturally occur at the same elevation as John's garden. The results have been spectacular, as the species has built seven nests, at least four attempts being successful.

Source: Africa—Birds & Birding *13(3), pp 32–34*

Protea farms help Gurney's Sugarbird

Gurney's Sugarbird *Promerops gurneyi* traditionally makes seasonal movements in eastern parts of South Africa and is dependent on areas of *Protea* woodland. However, commercial *Protea* farms are now starting up in KwaZulu-Natal Midlands and may provide a year-round food resource. David Potgieter *et al.* of the University of KwaZulu-Natal at Scottsville have been studying this association and found the species to be a year-round resident breeder on some of these farms, with the result

Gurney's Sugarbird / Promérops de Gurney *Promerops gurneyi* (Mark Anderson)

that the overall range of the species has increased. The study also highlights the dependence of the birds on *Protea* flowers.

Source: Ostrich *79, pp 61–66*

Hand-reared penguins survive well

Some 2,000 'orphaned' African Penguin *Spheniscus demersus* chicks were hand-reared and then released onto Robben and Dassen islands (Cape Province, South Africa) in June 2000 following oil spills in the region. Subsequent survival to breeding age and breeding success has been monitored carefully and compared to those of naturally reared birds, and both were found to be no different. So, unlike the case with some similar studies in the Northern Hemisphere, where survival of such hand-reared birds has been much lower, this initiative proved to be well worth the effort involved.

Source: Bird Conserv. Intern. *18, pp 144–152*

Mountains in northern Mozambique

The avifaunas of Mt. Chiperone and Mt. Mabu in northern Mozambique have been studied, almost for the first time, by Claire Spottiswoode *et al.* from Cambridge University in the UK. Two globally threatened species, Cholo Alethe *Alethe choloensis* and White-winged Apalis *Apalis chariessa* were found on Mt. Chiperone, where *c.*1,600 ha of mid-level and montane forest still exists. Mt. Mabu has *c.*5,000 ha of extant forest and supports both the alethe and East Coast Akalat *Sheppardia gunningi*. Several other range extensions are reported by the authors of the study, and to date there appears to have been rather little human encroachment on these mountains.

Source: Ostrich *79, pp 1–7*

Cholo Alethe / Alèthe du Cholo *Alethe choloensis* (Claire Spottiswoode)

Ian Sinclair honoured

Earlier this year famous birdwatcher and field guide author of Irish descent, but long-time resident of South Africa, Ian Sinclair was awarded the Gill Memorial Medal at the BirdLife South Africa AGM. The award is made but rarely, and previous recipients have included the indefatigable Phillip Clancey and Ken Newman, so Ian is in very good company.

Source: Africa—Birds & Birding *13(3), pp 75*

Internet resources

Birds of the Canary Islands

Two different websites on Canarian birds have recently been created by resident ornithologists. Both are in Spanish. The first, sited at http://www.avescanarias.blogspot.com/, is principally concerned with migrants and rarities, and includes photographs of recent highlights. The second, which is located at http://birdingcanarias.blogspot.com/, also contains news of recent sightings, but is equally concerned with conservation news and local surveys. There are also links to other sites likely to be interest, for countries such as Morocco, as well as other island groups in the region such as the Azores and Madeira.

Source: R. Barone in litt. *1 April 2008*

Annotated checklist of the birds of Mauritania

Given renewed interest in the birds of this country in recent years, it is pertinent to note that Bruno Lamarche's (1988) annotated checklist of the birds of Mauritania (in French) can be downloaded in two parts at: http://cid-eba18c5a974ca72e.skydrive.live.com/browse.aspx/Lamarche?uc=2

Source: P.-A. Crochet in litt. *5 March 2008*

Tanzania Bird Atlas squares on Google Earth

A grid for the Tanzania Bird Atlas, an ongoing project that has been mentioned several times in Africa Round-up over the years, produced for Google Earth can be downloaded from http://tanzaniabirdatlas.com-/find-the-atlas-square-on-google-earth. When the Important Bird Area file in Google Earth is opened, one gets an overview of all the IBAs in Tanzania as one 'flies' over the atlas squares.

Source: Stein Nilsen in litt. *10 March 2008*

Requests

Lesser Kestrel feathers

Airam Rodríguez Martín is looking for feathers of Lesser Kestrels *Falco naumanni*. He is mainly interested in feathers collected near breeding colonies, but is also interested in such samples from their African winter areas. The feathers will be used in studies of population genetics and migration, which will in turn inform the conservation of this globally threatened species. It is important to record location and date the feather was found, as well as the sex and age of the bird (if known) and any other relevant information (e.g. from a dead, predated or live Lesser Kestrel). Feathers can be mailed to: Airam Rodríguez Martín, Estación Biológica de Doñana (CSIC), Pabellón del Perú, Avda. María Luisa S/N, 41013 Seville, Spain. For more information contact airamrguez@ebd.csic.es.

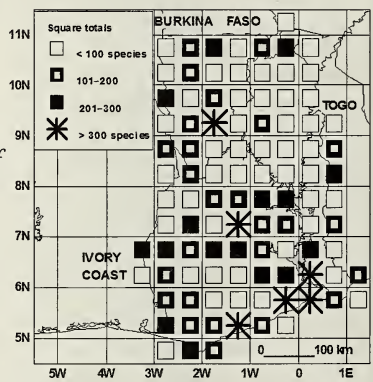
The Birds of Ghana Atlas Project

The book that documents the distribution and status of the birds of Ghana (by Llewellyn Grimes) dates from 1987, and recent field work has shown the need to provide an up-to-date version, for the benefit of conservationists and tourists. An article published in this issue details more than 20 species of bird that have been found in the country since then (but more than 20 claimed to occur in various publications must be considered unproven). Each bird's range needs to be mapped, and its ecology described in detail. This is not possible from the data published so far, based as they are on old collections of museum specimens and uneven observations from just a few localities.

Robert Dowsett and Françoise Dowsett-Lemaire have, in recent years, visited Ghana three times, for a total of eight months field work for the Ghana Wildlife Division (GWD). They have produced detailed catalogues of the birds of all wildlife reserves and a few of the key forest areas (available in 19 reports to GWD, totalling more than 500 pages). In addition to their own results and those of a few birdwatchers, they have examined all publications, and now plan to investigate those areas of Ghana from which there are few or only unsatisfactory records.

Field work will be organised as for the authors' recent books *The Birds of Zambia* and *The Birds of Malawi*. The country is divided into squares (for Ghana the most practical are 30 minutes square, in total 100, each full square being some 56 × 56 km). The figure here shows how many species are presently known from each square—an average of 110 species per square, of the 750 or so species recorded from Ghana as a whole. The best square lists are of 470 species, and our aim should be to record 150–200 species from each square, for maps to reflect the true distribution of most birds. It can be seen that much of the country is poorly explored, and the project will remedy this.

The organisers will be working in collaboration with staff of the GWD and Nature Conservation Research Centre. It is hoped that anyone living in or visiting Ghana will submit their observations, especially lists of species from little-visited areas. Any breeding records and migrant dates are also welcomed. Further details can be obtained from Dowsett@aol.com.



Ecomorphology: key to the identity of the White-bearded Greenbul *Criniger ndussumensis*

Lincoln D. C. Fishpool

L'écomorphologie : la clé pour identifier le Bulbul de Reichenow *Criniger ndussumensis*. Le Bulbul de Reichenow *Criniger ndussumensis* des forêts de Basse Guinée et du bassin du Congo ressemble tellement au Bulbul à barbe blanche *C. calurus* sympatrique qu'il est difficile de distinguer les deux espèces, aussi bien sur le terrain qu'en main. *C. ndussumensis* est toutefois plus proche du Bulbul à barbe jaune *C. olivaceus* de Haute Guinée, qui possède un chant et une morphométrie très similaires, y compris un bec plus étroit, bien qu'il présente aussi quelques différences de plumage. *C. olivaceus* a une façon distinctive de chercher sa nourriture, glanant des invertébrés de l'écorce des troncs et des branches, ce qui est jamais observé chez des populations sympatriques de *C. calurus*. Les pattes de *C. olivaceus* possèdent une conformation anatomique particulière, avec des ongles longs et fortement arqués, ce qui constitue apparemment une adaptation à son habitude de s'agripper à l'écorce. Les mensurations confirment que *C. ndussumensis* et *C. olivaceus* sont très similaires en ce qui concerne la morphologie des pattes et la forme du bec, et que les deux espèces diffèrent de façon significative de *C. calurus* par ces deux caractéristiques. Ainsi, la combinaison des ongles longs avec un bec étroit caractérise *C. ndussumensis*, tandis que des ongles courts et un bec large sont diagnostiques pour *C. calurus* ; ces caractéristiques permettent une identification sûre en main. Les différences dans la morphologie des pattes impliquent que la seule espèce en Basse Guinée et le bassin du Congo capable de s'agripper à l'écorce est *C. ndussumensis* et que *C. calurus* en est incapable, *contra* d'innombrables rapports dans la littérature. D'autres caractères, de nature morphologique, comportemental et écologique, par lesquels les deux espèces diffèrent l'une de l'autre sont passés en revue et examinés, et l'attention est attirée sur un cri distinctif, apparemment unique à *C. ndussumensis*. Sur le terrain, ces espèces se distinguent le plus facilement par le comportement, le chant, le cri et la couleur des sous-caudales, cannelle pâle chez *C. ndussumensis*, jaune chez *C. calurus*, bien que ce dernier caractère ne soit pas entièrement fiable. L'auteur n'a pas trouvé de différences dans la couleur des lores, malgré les affirmations du contraire qui ont été publiées. Cette étude refute également les mentions dans la littérature concernant des individus intermédiaires ou des hybrides entre *C. ndussumensis* et *C. calurus* dans certaines parties du Congo-Kinshasa oriental.

Summary. The White-bearded Greenbul *Criniger ndussumensis* of the Lower Guinea and Congo Basin forests is so similar in appearance to the sympatric Red-tailed Greenbul *C. calurus* that separating them in the field or hand is difficult. *C. ndussumensis* is, however, more closely related to the Yellow-bearded Greenbul *C. olivaceus* of Upper Guinea, from which it differs in aspects of plumage, but resembles closely in song and in morphometrics, including sharing a narrower bill. *C. olivaceus* shows distinctive scansorial foraging behaviour, gleaning food from the bark of trunks and branches, something which is unrecorded in sympatric populations of *C. calurus*. *C. olivaceus* is shown here to have modifications to the structure of its feet, including long, strongly curved claws, inferred to be related to its scansorial behaviour. Measurements also show that *C. ndussumensis* exactly resembles *C. olivaceus* in foot morphology and in bill shape, and that they differ significantly in both characters from *C. calurus*. Thus, a combination of long claws and narrow bills characterise *C. ndussumensis* whilst short claws and wide bills are diagnostic of *C. calurus*, features which enable unambiguous determination in the hand. The differences in foot morphology imply that the only species capable of bark-clinging behaviour in Lower Guinea and the Congo Basin is *C. ndussumensis* and that *C. calurus* cannot do so, *contra* numerous literature reports. Other characters, morphological, behavioural and ecological, by which the two species differ are reviewed and assessed, and attention is drawn to a distinctive call, apparently unique to *C. ndus-*

sumensis. In the field the most reliable means of separation are behaviour, song, call and the colour of the undertail-coverts, pale cinnamon in *C. ndussumensis*, yellow in *C. calurus*, although this latter character is not wholly reliable. No differences in the colour of the lores were found despite statements to the contrary. This study also refutes reports in the literature of intergrades or hybrids between *C. ndussumensis* and *C. calurus* in parts of eastern Congo-Kinshasa.

The bearded greenbuls are a natural and distinctive group, readily separated from other African bulbuls (Pycnonotidae) by their eponymous beards—their white or yellow throat feathering is long, lax and frequently puffed out in conspicuous display. For long they were thought to be most closely related to a number of similar-looking Asian species, with which indeed they were united in the genus *Criniger*. Molecular studies (Pasquet *et al.* 2001, Moyle & Marks 2006) have, however, recently confirmed what Hall & Moreau (1970) had suggested, that these similarities are superficial only and the two groups are in fact quite distinct. As a result, the Asian species have been transferred to *Alophoixus* whilst the remaining taxa are retained in *Criniger*, now an exclusively African genus, largely confined to the lowland forests of Upper and Lower Guinea and the Congo Basin (Hall & Moreau 1970, Inskipp *et al.* 1996, Sibley & Monroe 1990, Pasquet *et al.* 2001, Fishpool & Tobias 2005). If, however, the genus is well defined, there has been less agreement on the number of species within it.

The recent prevailing trend has been to recognise five: Western Bearded Greenbul *Criniger barbatus*, Eastern Bearded Greenbul *C. chloronotus*, Red-tailed Greenbul *C. calurus*, White-bearded Greenbul *C. ndussumensis* and Yellow-bearded Greenbul *C. olivaceus* (Sibley & Monroe 1990, Keith 1992, Dickinson 2003, Sinclair & Ryan 2003, Fishpool & Tobias 2005, Clements 2007). Of these, *C. calurus* is the most widely distributed, extending from Sierra Leone to Uganda. Three subspecies are conventionally recognised: *verreauxi* in the west, from south-west Senegal to south-west Nigeria, nominate (with which *verreauxi* perhaps intergrades) from south Nigeria to south-west Congo-Kinshasa, and *emini* from west Congo-Kinshasa to Uganda and north-west Tanzania. The other members of the genus are now treated as forming two species-pairs whose distributions largely coincide. Thus, *C. barbatus* of the Upper Guinea forests (with *ansorgeanus* of the Niger Delta region of Nigeria as a subspecies—a treatment, it should be noted, which merits review) is replaced by the monotypic *chloronotus* in the Cross River area of south-east Nigeria, from where it extends east across the Congo Basin to western Uganda. Although *chloronotus* has, in the past, often been treated as a subspecies of *barbatus*, they were shown by Chappuis (1975) to differ sufficiently in voice as to warrant separation at the species level. These two are not considered further here. Of the remaining monotypic pair, *C. olivaceus* is patchily distributed from eastern Sierra Leone to south-west Ghana whilst *C. ndussumensis* is found across the Congo Basin and Lower Guinea forests, extending west to south-east Nigeria, although its western limit is not well known. Greater uncertainty has, however, attached to its taxonomic position and status.

This study, confirming and developing some ideas first suggested in a neglected paper by Field (1979), seeks to shed light on the relationships between *C. ndussumensis* and *C. olivaceus* and, especially, between *C. ndussumensis* and *C. calurus*, which continue to be confused owing to similarities in their appearance. In particular, it is here shown conclusively that there are consistent differences in bill morphology between *C. calurus* and *C. ndussumensis*, a disputed issue, as well as in foot structure, pointed out long ago but since forgotten, and which I believe to be related to differences in their foraging behaviours. By contrast, *C. ndussumensis* is shown exactly to resemble *C. olivaceus* in foot and bill shape whilst, tellingly, *C. olivaceus* is known to be a specialist at gleaning from the bark of tree trunks and branches. This implies that *C. ndussumensis* should also exhibit similar scansorial foraging behaviour, whereas one might expect that *C. calurus* would not.

Other characters by which *C. ndussumensis* is reported to be separable from *C. calurus* are reviewed and reconsidered, based upon both museum studies of specimen material by the author and on personal observations of birds in the field and in the hand while participating in avifaunal survey work in and around Cross River National Park, Oban Division, south-east Nigeria

in December 2004. As a result, *C. ndussumensis* is confirmed to have a call, hitherto largely overlooked, which is apparently unique to it, recorded from neither *C. calurus* nor *C. olivaceus*. The differences in bill and foot structure, allied with a number of plumage characters, mostly relatively minor or subtle and some not wholly reliable, will enable the accurate identification of *C. calurus* and *C. ndussumensis* in the hand and, combined with differences in voice and behaviour, should do so, in most cases, in the field.

A brief description of the principal features of the appearance of the three species is called for. Thus, nominate *calurus* has a dark grey-brown head and neck, whilst the rest of the upperparts are olive-green, except for the rufous uppertail-coverts and tail. The throat is white, the flanks and breast-sides, together with a narrow band across the upper breast, are dark olive whilst the remainder of the breast, belly and undertail-coverts are bright yellow. The rather larger western race *verreauxi* differs principally in having the uppertail-coverts and tail olive-green, which are hence concolorous with the rest of the upperparts. The eastern race *emini*, the smallest, is to some extent intermediate in coloration since its uppertail-coverts and tail are dull olive-rufous and are therefore poorly contrasting. This summary applies, however, almost equally well—see below—to *C. ndussumensis* and therein lies the problem. In Upper Guinea, separation of *C. calurus verreauxi* from *C. olivaceus* is straightforward since the latter has a yellow, not a white, throat and a green (except for a limited area in the centre of the belly), not a yellow, breast and belly. The uppertail-coverts and tail are also green and in this it therefore resembles the sympatric *C. calurus verreauxi*.

Background to the problem

Gyldenstolpe (1923, 1924) gave the name *Trichophorus swainsoni bannermani* to six specimens collected in the Semliki Valley area of eastern Congo-Kinshasa that differed 'from the races of *Trichophorus calurus* by having a shorter and considerably weaker bill'—*Trichophorus* is now treated as a synonym of *Criniger* (although Oberholser (1905) makes the case that, in fact, *Criniger* should be considered the junior synonym of *Trichophorus*!). For one of these races, the one which he said occurred alongside *bannermani* in the Semliki Valley, Gyldenstolpe used the name *T. calurus ndussumensis*. Chapin (1948, 1953) pointed out that the type of *C. ndussumensis*, described by Reichenow in 1904, and collected from within 40 km of the type locality of *T. swainsoni bannermani*, was in fact also slender-billed and that therefore the latter was a junior synonym of the former. He, however, disputed whether the slender billed *C. ndussumensis* did co-exist in the Semliki Valley with a thicker billed form, stating that there 'most' were 'strikingly slender-billed' (Chapin 1948). For the thicker billed population, which he said occupied 'most of the Upper Congo Forest and many wooded areas in Uganda', he coined the name *Criniger calurus emini* and considered that *ndussumensis*, which he treated as another subspecies of *calurus*, was largely restricted to the Semliki, and parts of the Rutshuru, valleys (Chapin 1948, 1953).

Shortly thereafter, Berlioz (1954, 1955), on the basis of birds collected in Gabon, concluded that the slender- and stout-billed forms could in fact occur side by side and therefore represented two species. Furthermore, Berlioz (1955) pointed out that the slender-billed birds, for which he used the name *Criniger* (?*swainsoni*) *bannermani* in one place and ?*C. swainsoni* in a second, had rather stronger legs and longer toes than the stout-billed birds, which he called *C. calurus*. White (1956) agreed with Berlioz that two species were involved but declared that the name *swainsoni* could not be used for the slender-billed form since it was a junior synonym of *verreauxi*, the (thick-billed) Upper Guinea race of *C. calurus*. He went on to say that the slender-billed form resembled closely *C. olivaceus* of the Upper Guinea forests in bill structure and stated that Berlioz's specimens therefore 'must be called *C. o. ndussumensis*', but was unable to 'see much difference in the feet despite what Berlioz has written on this' (White 1956). The following year, Serle (1957) went further and, on the basis of measurements of a large series of skins of *C. calurus calurus* from Nigeria and Cameroon, concluded there were no differences in dimensions of either bill or leg to indicate that more than one species was involved, nor was there any 'consistent inverse correlation between the size of the digits and the bill', *contra* Berlioz (1954, 1955). He, however, measured bill length and depth, *not* width, and remarked that accurate measurement of digits on skins was not possible. Next to comment were Rand (1958) and Rand *et al.* (1959),

who contradicted Serle regarding bill shape differences but did not mention either legs or feet. Subsequently, in light of the observations of White (1956) and Rand (1958), Serle (1965) re-examined a more extensive series from Nigeria and Cameroon and, while conceding that they were indeed separable into stout- and slender-billed groups, retained them all under the heading *C. calurus calurus* and remained unconvinced that 'the two groups are biologically separated'. He, however, apparently considered closed the matter of leg and foot size for he did not to return it.

Despite Serle's lack of conviction, there has been little subsequent disagreement—Eisentraut (1973) is an exception—as to *C. ndussumensis* and *C. calurus* being specifically distinct, even if (reputedly) impossible to tell apart unless in the hand. The issue of whether to treat *ndussumensis* as a species in its own right or as a subspecies as *C. olivaceus*, as White (1956, 1962) had proposed, has nonetheless continued. Thus, while Prigogine (1971), Mackworth-Praed & Grant (1973), Chappuis (1975, 2000), Dowsett & Dowsett-Lemaire (1993), Dowsett & Forbes-Watson (1993) and Christy & Clarke (1994) consider *ndussumensis* a subspecies of *olivaceus*, Hall & Moreau (1970), Lippens & Wille (1976), Keith (1992), Borrow & Demey (2001) and Fishpool & Tobias (2005), for example, all treat them as separate species.

Other characters

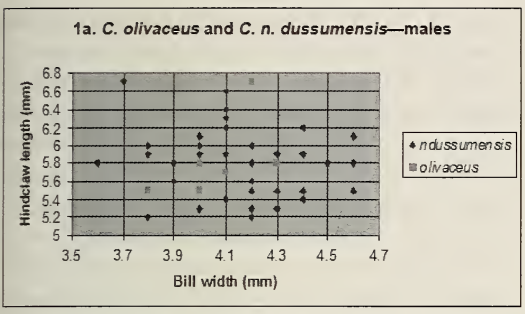
In addition to bill size and shape, other characters by which *C. ndussumensis* has been reported to differ from *C. calurus* include a more distinct, greyish-white ante-ocular spot; greyer, less brown, crown, more extensively dusky olive flanks and breast; less well-developed nuchal hairs and rictal bristles and, finally, cinnamon or buffy, rather than yellowish, undertail-coverts. These characters are reported variously by White (1956), Rand (1958), Rand *et al.* (1959) and Serle (1965), and most are repeated in subsequently published handbooks and field guides. It is readily apparent that none of these is particularly striking; a study of skins suggests that neither, with the possible exceptions of rictal bristle length and strength of nuchal hairs, is infallible.

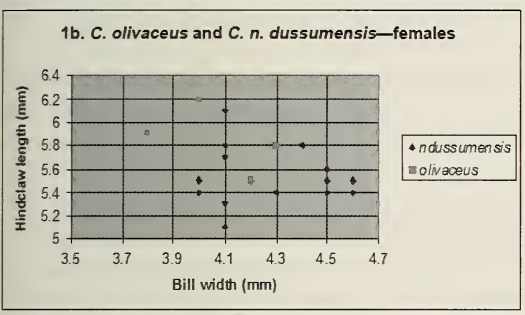
The most reliable means of separating the two species in the field has hitherto proved to be song, for, although similar, there are consistent differences between them which are diagnostic. Thus, the song of *C. calurus* consists of a cheerful, rising *chup-chup-chwirulup*, whereas that of *C. ndussumensis* is a harsh, evenly pitched *whut-chruw-chruw*, which lacks the former's cheerful, sprightly quality (Dowsett-Lemaire & Dowsett 1991, Keith 1992, Christy & Clarke 1994, Chappuis 2000, Borrow & Demey 2001). It is notable that the song of *C. olivaceus* is indistinguishable (or almost so—see section on Voice below) from that of *C. ndussumensis*, and indeed Chappuis (2000) demonstrated that the former can be provoked into song and aggressive display by playback of the voice of the latter, something which has been confirmed by others (F. Dowsett-Lemaire *in litt.* 2008). This has been advanced as further evidence of the close affinity between the two and, indeed, of their conspecificity (Chappuis 1975, 2000, Dowsett & Dowsett-Lemaire 1993).

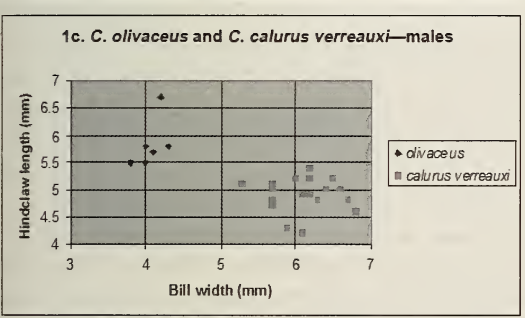
In addition, in the east of its range, where sympatric with *C. calurus emini*, *C. ndussumensis* often also differs from it in having a more rufous, as opposed to a greenish, tail. This indeed was one of the distinguishing characters mentioned in the type description (Gyldenstolpe 1923) and was reaffirmed by Chapin (1948, 1953), who considered that the combination of a reddish tail and uppertail-coverts plus a narrow bill was diagnostic of *C. ndussumensis*, whilst a greenish tail and a broad bill typified *C. calurus emini*. Inspection of specimen material, identified on the basis of bill and foot morphology, reveals however that there is sufficient variation in tail colour of both *C. ndussumensis* and *C. calurus emini* for it not to be reliable as a distinguishing feature; the only *consistent* character difference between them then known, as Field (1979) noted, was in fact bill width, but of this Chapin (1948, 1953) was unaware. This misunderstanding has given rise to incorrect reports of intergrades and hybrids between the two—see below.

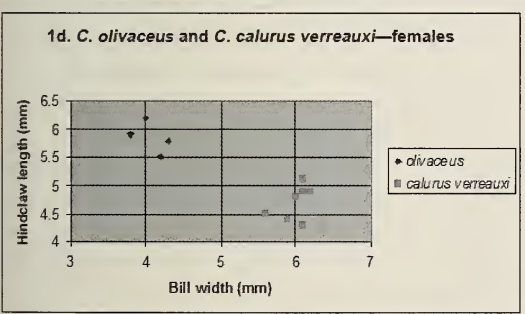
Ecomorphology—resolution of the problem

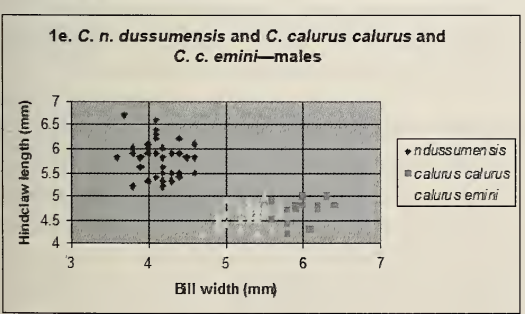
The point of departure for trying to resolve the confusion between *C. calurus* and *C. ndussumensis* lies, as was pointed out by Field (1979), in the situation that pertains in the Upper Guinea forests. Here, *C. calurus verreauxi* occurs alongside *C. olivaceus*. As mentioned above, the latter, with a yellow throat and olive-green breast and flanks, is readily distinguishable from the white-throated, yellow-bellied *C. calurus verreauxi*. *C. olivaceus* is











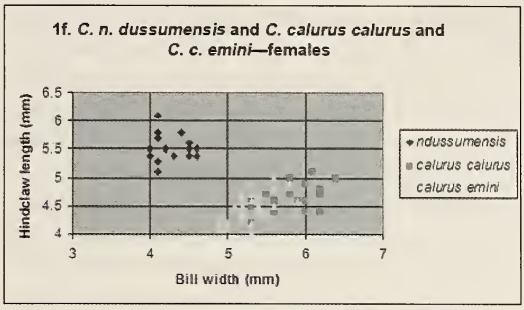


Figure 1. Scatter plots of hindclaw length against bill width (mm) of allopatric *Criniger olivaceus* and *C. ndussumensis* males (a) and females (b), to show similarities, and of *C. olivaceus* and *C. calurus verreauxi* males (c) and females (d) (sympatric in Upper Guinea) and *C. ndussumensis, C. calurus calurus* and *C. calurus emini* males (e) and females (f) (sympatric in Lower Guinea and Congo Basin), to show differences.

Position relative de la longueur de l'ongle de l'orteil postérieur contre la largeur du bec (en mm) des espèces allopatriques *Criniger olivaceus* et *C. ndussumensis* mâles (a) et femelles (b) pour présenter leurs ressemblances, et de *C. olivaceus* et *C. calurus verreauxi* mâles (c) et femelles (d) (sympatriques en Haute Guinée) et *C. ndussumensis, C. calurus calurus* et *C. calurus emini* mâles (e) et femelles (f) (sympatriques en Basse Guinée et dans le bassin du Congo), pour présenter les différences.

further distinguished by its behaviour; to quote Field (1979) ' . . . food is obtained by searching the trunks and branches of trees, the birds clinging in an almost nuthatch-like manner, peering into crevices and even investigating the undersides of branches'. In the region, this foraging behaviour is unique to *C. olivaceus*, never having been recorded for *C. calurus verreauxi* (Field 1979, Fishpool *et al.* 1994, Gatter 1997, Borrow & Demey 2001, Fishpool & Tobias 2005). The method commonly used by *C. calurus verreauxi* is to snatch invertebrate prey from leaves (often from the under-surfaces) and, more rarely, to take berries in hovering flight from perches on thin branches and stems, often horizontally oriented (Field 1979, Gatter 1997, Fishpool & Tobias 2005). Both are conspicuous elements of mixed foraging parties, although *C. calurus* is usually much the more common (see below).

Given that *C. olivaceus* is a specialist at clinging to vertical surfaces and overhangs, one might expect this to be reflected in foot structure, since it is known that birds which forage in this manner show a number of associated morphological adaptations. These include the possession of relatively

longer and more curved claws, in order to be able to cling more effectively to vertical surfaces, than birds—such as *C. calurus verreauxi*—which do not (Richardson 1942, Bock & Miller 1959, Norberg 1986). From this it follows they should differ in the dimensions of the foot, whilst it might be expected that *C. olivaceus* and *C. ndussumensis*, given their presumed close relationship, should not. One would also expect the other two races of *C. calurus* to resemble *verreauxi* in foot morphology.

In order to test this—mindful of the comments of Berlioz (1954, 1955) regarding leg and foot structure—and also to confirm whether there are indeed differences in bill shape between the races of *C. calurus* on the one hand and *C. olivaceus* and *C. ndussumensis* on the other, a series of skins were measured using calipers. Measurements were made of bill length (to skull) and width at the distal end of the nostrils (immediately anterior to the thread often used in skins to tie together the two mandibles), and the length of the hindclaw, from the mid-point—generally the lowest—of the distal toe pad to the claw tip. While Serle's (1957) remark, mentioned above, concerning the difficulty of measuring toes on skins is certainly largely correct, it is possible to measure claw length accurately on most specimens. The claw on the hallux, as well as being the largest in all cases, was also often found to be the most readily accessible.

The results of these measurements are presented in Table 1 and in Fig. 1 as scatter plots of claw length against bill width. Data are presented separately for males and females since, for all members of the genus, males average larger than females in standard measurements (Keith 1992, Fishpool & Tobias 2005). The results show the close correspondence between *C. olivaceus* and *C. ndussumensis* in hindclaw length and bill width in both sexes (Fig. 1a, b); t-test statistics confirm there to be no significant difference in either character in males, nor for bill width in females (Table 1). There is a difference in hindclaw length in females, significant at the 5% level, which may be attributable to the small sample size of *C. olivaceus* (Table 1). Between *C. olivaceus* and *C. calurus verreauxi*, however, there are considerable differences in both parameters, with *C. olivaceus* conspicuously longer clawed and narrower billed; there is no overlap in the range of either metric and the differences are highly significant (Table 1, Fig. 1c, d). Moreover, *C. ndussumensis* differs similarly, and as significantly, from both *C. calurus calurus* and *C. calurus emini* (Table 1, Fig. 1e, f). Although in *C. calurus emini* the ranges of hindclaw length in females and of bill width in males approach their equivalents in *C. ndussumensis*, there is again no overlap. Only in hindclaw length of female *C. calurus calurus* is there a minimal amount of overlap with female *C. ndussumensis*; the longest clawed *C. calurus calurus* and the shortest clawed *C. ndussumensis* (one specimen of each) both measured 5.1 mm.

Overall, therefore, *C. olivaceus* and *C. ndussumensis* resemble each other closely in size of hindclaw and in bill width, and both differ consistently from all races of *C. calurus* in these parameters. Table 1 and Fig. 1 also show that the three races of *C. calurus* are similar in proportions of hindclaw length and bill width, although in the smallest race, *C. calurus emini*, bill width averages rather narrower (a difference not reflected in hindclaw length). Figs. 2 and 3 illustrate the differences between *C. calurus* and *C. ndussumensis* and, for claw length, the similarity between *C. ndussumensis* and *C. olivaceus*.

Bill length data (tip to skull) are also presented in Table 1 and show, for *C. ndussumensis* and *C. olivaceus,* extensive overlap in their ranges in both sexes and no significant difference between females, whilst bills in male *C. olivaceus* were found to average rather shorter, a difference significant at the 5% level, perhaps again explicable by the small sample of *C. olivaceus* available. By contrast, there are strongly significant differences between *C. olivaceus* and *C. calurus verreauxi*, and between *C. ndussumensis* and both *C. calurus calurus* and *C. calurus emini*, with *C. calurus calurus* having longer bills in all cases. While, however, the ranges of *C. olivaceus* and *C. calurus verreauxi* differ considerably and there is little overlap between *C. ndussumensis* and *C. calurus calurus*, with *C. ndussumensis* and *C. calurus emini*, the smallest of the three races, the overlap is extensive.

Other morphological characters

Of the other reported morphological character differences between *C. calurus* and *C. ndussumensis* mentioned above, the most consistent appears, from an examination of large series of museum skins, to be the development of the rictal bristles. Although no quantitative assessments were

attempted, the bristles of *C. calurus* seemed to be consistently longer and more robust, probably related to differences in their foraging strategies. Thus, in *C. ndussumensis* they extend only weakly beyond the distal edge of the nares and, at most, appear no longer or thicker than a human eyelash, whereas the bristles of *C. calurus* often extend strongly beyond the nares, up to three-quarters the length of the bill, with the largest conspicuously more robust than a human eyelash (Figs. 2 and 4).

It is also probable that *C. calurus* may have consistently longer, thicker, more robust nuchal hairs or filoplumes than *C. ndussumensis*; these long, bristle-like feathers on the neck, a feature of the genus, are of unknown function. Again, while no attempt was made to quantify this difference, superficial examination did suggest that while equally numerous as those of *C. calurus*, in *C. ndussumensis* they often appeared shorter, narrower and more flexible.

More conspicuous both in the museum tray and the field are the undertail-coverts which, in the majority of *C. calurus*, are the same sulphur yellow colour, or almost so, as the breast and belly, whilst in most *C. ndussumensis* they are cinnamon or buffy and therefore contrast with the yellow belly and breast (Fig. 4). This contrast is readily apparent in the field (pers. obs.). Unfortunately, examination of skin material suggests this distinction is not infallible; three of 75 *C. ndussumensis*

Table 1. Comparative measurements of length of hindclaw and width and length of bill of three *Criniger* species. Hindclaw measured from lowest point of distal toe pad to claw tip, bill width at distal edge of nares, bill length from tip to skull. Comparison of allopatric *C. olivaceus* and *C. ndussumensis* to show similarity, and comparisons of *C. olivaceus* and *C. calurus verreauxi* (sympatric in Upper Guinea) and of *C. ndussumensis* with both *C. calurus calurus* and *C. calurus emini* (sympatric in Lower Guinea and the Congo Basin) to show differences. Results of two-tailed Student's t-test shown, where n.s. indicates not significant, * indicates significance at 5% level and ** at 1% level. Data for sexes presented separately since males average larger than females in standard measurements. Data for unsexed specimens are omitted. All measurements by the author.

Tableau 1. Mensurations comparatives de la longueur de l'ongle de l'orteil postérieur et de la largeur et la longueur du bec de trois espèces de *Criniger*. L'ongle de l'orteil postérieur a été mesuré à partir du point le plus bas jusqu'au bout de l'ongle, la largeur du bec entre les points les plus éloignés des narines, la longueur du bec de son bout jusqu'au crâne. Les espèces allopatriques *C. olivaceus* et *C. ndussumensis* ont été comparées afin de faire ressortir leurs ressemblances ; la comparaison de *C. olivaceus* et *C. calurus verreauxi* (sympatriques en Haute Guinée) et de *C. ndussumensis* avec *C. calurus calurus* et *C. calurus emini* (sympatriques en Basse Guinée et dans le bassin du Congo), met en évidence leurs différences. Les résultats du test bilatéral de Student sont présentés ; n.s. = pas significatif, * = significatif au niveau de 5% et ** au niveau de 1%. Les données des mâles et des femelles sont présentées séparément, car les premiers sont en moyenne plus grands que les dernières en ce qui concerne les mensurations standards. Les données de spécimens dont le sexe n'avait pas été établi ont été omises. Toutes les mensurations ont été prises par l'auteur.

	Hindclaw				Bill width				Bill length			
	Range	Mean ± s.e.	*n*	t-test differences	Range	Mean ± s.e.	*n*	t-test differences	Range	Mean ± s.e.	*n*	t-test differences
Males												
C. ndussumensis	5.5–6.7	5.79 ± 0.057	41		3.6–4.6	4.15 ± 0.037	43		17.9–20.5	19.19 ± 0.129	33	
C. olivaceus	5.5–6.7	5.83 ± 0.153	7	ns	3.8–4.3	4.06 ± 0.061	7	ns	18.0–19.1	18.59 ± 0.162	7	*
C. olivaceus	5.5–6.7	5.83 ± 0.153	7		3.8–4.3	4.06 ± 0.061	7		18.0–19.1	18.59 ± 0.162	7	
C. calurus verreauxi	4.2–5.4	4.9 ± 0.07	19	**	5.3–6.8	6.12 ± 0.095	18	**	20.7–24.7	22.74 ± 0.252	18	**
C. ndussumensis	5.5–6.7	5.79 ± 0.057	41		3.6–4.6	4.15 ± 0.037	43		17.9–20.5	19.19 ± 0.129	33	
C. calurus calurus	4.2–5.0	4.73 ± 0.05	20	**	5.4–6.4	5.9 ± 0.06	20	**	20.4–23.9	22.39 ± 0.175	20	**
C. calurus emini	4.2–5.0	4.61 ± 0.038	31	**	4.7–5.7	5.26 ± 0.047	31	**	17.8–21.9	19.95 ± 0.15	30	**
Females												
C. ndussumensis	5.1–6.1	5.54 ± 0.054	18		4.0–4.6	4.25 ± 0.048	19		17.4–19.9	18.7 ± 0.182	16	
C. olivaceus	5.5–6.2	5.8 ± 0.109	6	*	3.8–4.3	4.13 ± 0.08	6	ns	17.2–19.6	18.6 ± 0.364	6	ns
C. olivaceus	5.5–6.2	5.8 ± 0.109	6		3.8–4.3	4.13 ± 0.08	6		17.2–19.6	18.6 ± 0.364	6	
C. calurus verreauxi	4.3–5.1	4.7 ± 0.113	7	**	5.9–6.2	6.01 ± 0.067	8	**	20.6–22.3	21.41 ± 0.258	7	**
C. ndussumensis	5.1–6.1	5.54 ± 0.054	18		4.0–4.6	4.25 ± 0.048	19		17.4–19.9	18.7 ± 0.182	16	
C. calurus calurus	4.2–5.1	4.66 ± 0.051	20	**	5.3–6.4	5.85 ± 0.075	20	**	19.5–24.0	20.94 ± 0.278	20	**
C. calurus emini	4.0–5.0	4.50 ± 0.049	28	**	4.9–5.9	5.30 ± 0.048	28	**	17.9–20.9	19.49 ± 0.17	27	**

specimens were considered to have yellow or yellowish undertail-coverts while, of 134 *C. calurus*, 13, involving all three subspecies, were recorded as gingery or 'gingery?'. Although this assessment was complicated because the process of skin preparation appeared to have resulted in some discoloration of the feathering around the ventral region of a number of specimens, and that at least two of the *C. calurus* specimens scored as gingery were clearly juveniles (of which this colour may be a feature—Keith (1992) reported a 'very young' *C. calurus emini*, still with some downy feathers, as having 'undertail-coverts ochre', and this is also true of skins of the nominate race of a similar age examined in the Natural History Museum (NHM), Tring, UK, it seems clear that this difference is not absolute.

The same is true of the extent of olive-green on the flanks and breast-band; in *C. ndussumensis* the olive on the flanks and across the breast tends to be more extensive with correspondingly less yellow on the lower breast and belly (Fig. 4) but some skins are indistinguishable from *C. calurus* in this respect. There does seem to be a slight but seemingly consistent—although I did not systematically check a large series—difference in crown colour, with that of *C. ndussumensis* being greyer than *C. calurus*, in which it is rather brown-er and warmer, but this must be hard, if not impossible, to detect in the field.

Finally, I could find no difference in the colour of the lores; the presence of a larger, more contrasting greyish-white ante-ocular spot in *C. ndussumensis* was first reported by White (1956) and repeated, sometimes with a caveat, by a number of other authors (Rand 1958, Rand *et al.* 1959, Hall & Moreau 1970, Keith 1992, Christy & Clarke 1994, Borrow & Demey 2001, Sinclair & Ryan 2003), but I have been unable to detect such a difference either in the museum or, more significantly, in live birds in the hand. During field work in the proposed extension to Cross River National Park (CRNP), Oban Division, Nigeria, east of Old Ndebiji village (*c.*05°35'N 08°50'E) in December 2004, an area where *C. ndussumensis* was encountered frequently, I was able to watch a number at close range on several occasions as well as to examine birds caught in mist-nets. Two *C. ndussumensis* captured and photographed—bill width of both at distal end of nostrils 4.3 mm—had the orbit of the eye and the lores sparsely feathered whitish grey, under which blue-grey skin could be seen, contrasting somewhat with the surrounding darker grey feathering of the head and giving the bird a rather spectacled appearance (Fig. 5).

Table 2. Character differences between *Criniger ndussumensis* and *C. calurus calurus* and *C. calurus emini*. Corresponding data also given for *C. olivaceus* but not all differences between it and the others are shown. Ranges of measurements for both sexes combined.

Tableau 2. Différences entre les caractères de *Criniger ndussumensis* d'une part et *C. calurus calurus* et *C. calurus emini* d'autre part. Les données correspondantes de *C. olivaceus* sont incluses, mais les différences entre cette espèce et les autres ne sont pas toutes présentées. Les mensurations des deux sexes ont été combinées.

	C. ndussumensis	*C. c. calurus* and *C. c. emini*	*C. olivaceus*
Bill width at distal edge of nares	Narrow, 3.6–4.6 mm	Wide, 4.7–6.4 mm	Narrow, 3.8–4.3 mm
Hindclaw length	Long, 5.1–6.7 mm	Short, 4.0–5.1 mm	Long, 5.5–6.7 mm
Rictal bristles	Relatively short and slender	Relatively long and stout	Relatively short and slender
Filoplumes	Relatively short and slender	Relatively long and stout	Relatively short and slender
Crown	Olive grey-brown, colder	Olive-brown, warmer	Olive-green
Flanks	Broadly dark olive-green	Dark olive-green may be more confined, with yellow of belly more extensive	Dark olive-green
Undertail-coverts	Usually pale cinnamon or buffy, contrasting with belly and breast	Usually sulphur yellow or dirty yellow, contrasting little or not at all with breast and belly	Dark olive-green, tinged buffy
Upper tail	Rufous but may be duller, more olive in east of range	Rufous (nominate), dull olive-rufous (*emini*). [Green in *C. c. verreauxi*]	Green
Foraging behaviour	Scansorial; clings to branches and trunks	Non-scansorial	Scansorial; clings to branches and trunks
Song	Harsh, level *whut-chruw-chruw*	Cheerful, lively, rising *chup-chup-chwirulup*	Harsh *whut-chruw-chruw*
Call	*querg-querg, trur-trur*	*tyip-tyip*	?
Social unit	Pairs or small family parties	Small or, frequently, large groups	Pairs or small family parties
Habitat	Good-quality evergreen forest	Good-quality and more degraded evergreen forest, semi-evergreen forest, riparian forest and even thicket	Good-quality evergreen forest

However, *C. calurus* has an extremely similar face pattern, the main difference being that the spectacled effect is more pronounced, both by the slightly more contrasting browner tones of the surrounding head feathering, and because the sparsely feathered peri-orbital area appears to be wider (pers. obs.; see also the photograph and line drawing in Brosset [1971] and the line drawing in Keith [1992]). These features are of course not apparent in skin preparations.

Voice

The field work in CRNP, Oban, also enabled me to confirm that a commonly heard call, often uttered in shorter or longer series and which I transliterated variously as *querg-querg*, *querk-querk-querk* or *queg-queg*, was made by *C. ndussumensis*, for not only were these calls made by birds which foraged on tree trunks in the manner described above, but also one bird of the pair caught in the mist-net mentioned above obligingly uttered a single, soft *querg* as I approached. This call is, in fact, included on Chappuis (2000) as the second cut of the *C. ndussumensis* recording as 'song and calls, March, Ngotto Forest, Gabon [in error for Central African Republic] P. Christy'. Françoise Dowsett-Lemaire (*in litt.* 2008) has confirmed that she is familiar with this call from south-east Nigeria, Cameroon and Congo-Brazzaville, and indeed refers to it in Dowsett-Lemaire and Dowsett (1991) where it is transliterated as 'trur'. In addition, what appears to be the same call is ascribed to *C. ndussumensis* by Christy & Clarke (1994) and rendered *prrreuk prrreuk prrreuk*. Also present in the same area of CRNP was *C. calurus calurus* and its well-known call, variously rendered *tyip-tyip*, *peeyu, peeyu*, *kiu, kiu* and *piîh, piîh* (Keith 1992, Christy & Clarke 1994, Chappuis 2000, Borrow & Demey 2001, Fishpool & Tobias 2005; Dowsett-Lemaire & Dowsett 1991 present a sonogram), was frequently heard, as were the songs of both species, which appear on Chappuis (2000).

Although, as noted above, the song of *C. ndussumensis* is very similar to that of *C. olivaceus* of Upper Guinea, F. Dowsett-Lemaire (*in litt.* 2008) has pointed out that it is not, in fact, identical. In *C. olivaceus* the last note is not a monotonous *krrur* as it is in *C. ndussumensis*, but is modulated in frequency. This is apparent on a close listening to recordings on Chappuis (2000) where the song of *C. ndussumensis* can also be heard to consist of two or three notes, wheras in *C. olivaceus* it comprises four, albeit the first is very short. In the field, however, one often hears just the three notes so it is possible this first note is not always included (F. Dowsett-Lemaire *in litt.* 2008). As mentioned above, however, these differences are not sufficient to prevent *C. olivaceus* reacting to playback of the song of *C. ndussumensis.*

Ecological requirements and social behaviour

There are differences too between *C. ndussumensis* and *C. calurus* in both their habitat preferences and social behaviour. Thus, *C. ndussumensis* (and, indeed, *C. olivaceus*) are largely restricted to tall-canopy primary and mature secondary evergreen rain forest, and hence are usually absent from degraded, secondary habitats, open canopy, semi-evergreen forest, gallery forest etc. *C. calurus* is, on the other hand, less specialised and thus more tolerant of disturbed forest types, including edges of clearings and even overgrown gardens, as well as occurring in drier forests including riverine thicket habitats (Dowsett-Lemaire & Dowsett 1991, Fishpool & Tobias 2005; F. Dowsett-Lemaire *in litt.* 2008). As a result, *C. calurus* is more geographically widespread in areas of overlap than both *C. ndussumensis* and *C. olivaceus*.

Moreover, where the two species co-occur, *C. calurus* is almost always more numerous than *C. ndussumensis* (Rand 1958, Prigogine 1971, Dowsett-Lemaire & Dowsett 1991). An explanation for this is provided by Dowsett-Lemaire & Dowsett (1991) and F. Dowsett-Lemaire (*in litt.* 2006) who point out that *C. ndussumensis* is almost invariably seen or caught in mist-nets in territorial pairs or, at most, together with one or two immatures; by contrast, the social unit of *C. calurus* is usually larger, such that five or six are regularly seen together, while, occasionally, groups may number at least twice that many. The situation is similar in Upper Guinea where *C. olivaceus*, like *C. ndussumensis*, occurs in pairs or small family parties, not in large groups.

The features by which *C. ndussumensis* can be separated from *C. calurus* are summarised in Table 2. Overall, in the field, birds showing scansorial behaviour are *C. ndussumensis*, and can be further distinguished by vocalisations and, rather less reliably, by coloration of undertail-coverts and of the flanks. In the hand, individuals with a combina-

tion of long hindclaws (≥5.1 mm) and narrow bills (≥4.6 mm) are *C. ndussumensis* whilst birds with short hindclaws (≤5.1 mm) and wide bills (≥4.9 mm) are *C. calurus*, either nominate or *emini*.

Discussion

Given that *C. ndussumensis* differs consistently and significantly from sympatric races of *C. calurus* in claw length and bill shape, while exactly resembling *C. olivaceus* in these characters, it is reasonable to infer that *C. ndussumensis* shares the same foraging strategy and scansorial behaviour as *C. olivaceus* and, equally, that all races of *C. calurus*, lacking the requisite adaptations, are unlikely to be able to forage in this way. There are, however, numerous statements in the literature, relating to Lower Guinea and the Congo Basin, which aver that *C. calurus* does glean food from the bark of trunks and branches or that both species do so, such that they are therefore indistinguishable in behaviour. Examples include Chapin (1953) [already pointed out by Field (1979) as more likely attributable to *C. ndussumensis*], Brosset (1971), Lippens & Wille (1976), Brosset & Erard (1986), Dowsett-Lemaire & Dowsett (1991), Keith (1992), Sargeant (1993), Christy & Clarke (1994) and Sinclair & Ryan (2003). While I do not mean to suggest that *C. calurus*, a generalist feeder, does not occasionally snatch prey from tree bark by sally-gleaning and hovering or take food items from bark that it can reach while perched, nor that *C. ndussumensis* must necessarily feed exclusively from tree bark, I believe that reports that *C. calurus* exhibits scansorial behaviour should be treated with caution; I consider it much more likely that they refer to *C. ndussumensis* and to *C. ndussumensis* alone.

This confusion has meant, and continues to mean, that other information provided by these authors cannot be unequivocally attributed to either species. In particular, Brosset & Erard (1986) state that although they caught, collected or ringed birds 'on several occasions' with the characteristics of *C. ndussumensis*, they explicitly refer all their observations to *C. calurus*, as they were unable to separate them in the field using either voice or behaviour. An explanation for this has been provided by F. Dowsett-Lemaire (*in litt.* 2008) who reports a conversation she once had with A. Brosset, the author of the bulbul accounts in Brosset & Erard (1986), in which he acknowledged that since he was tone deaf, he was, to his great sorrow, unable to distinguish between them. From the descriptions of foraging behaviour, in which they say '*C. calurus*' resembles a woodpecker rather than a bulbul, it is apparent however that they were indeed regularly encountering *C. ndussumensis* and therefore the value of their data on population densities, breeding, food etc. is reduced as it must be a mix of observations of the two species. In other field studies the same identification difficulties have led authors to be explicit about the uncertainty as to which species their observations refer—see for example Bowden (1986) and Rodewald *et al.* (1994).

Even though the advent of knowledge of the songs of *C. calurus* and *C. ndussumensis*, with their relatively subtle but diagnostic differences (Chappuis 1975, Dowsett-Lemaire & Dowsett 1991), helped considerably in field identification of the two species and has become recognised as the most effective means of distinguishing between them, confusion has persisted.

Although there is no doubt that *C. calurus* is responsible for the *kiu* or *tyip* call and there is unequivocal evidence to link the *querg* call with *C. ndussumensis*, it remains to be established categorically that these calls are exclusive to each species. During field work in CRNP both species were frequently seen in, and both calls commonly heard from, mixed-species flocks but attributing calls to individual, identifiable birds under such conditions was often not feasible; however, when pairs or small groups of birds were encountered separately, they were heard to make only the one type of call. This supports the observations of Dowsett-Lemaire & Dowsett (1991) who state that the *kiu* call is made by *C. calurus* alone and of Christy & Clarke (1994), mentioned above, who associate one call exclusively with each species. I suspect therefore that Dowsett-Lemaire & Dowsett (1991) are correct in saying that the two species share only an alarm-call, *tchic*. As a result, I am doubtful that the third recording attributed to *C. ndussumensis* on Chappuis (2000) and annotated 'another type of call? (identification not certain) July, Korup National Park, SW Cameroon, P. Rodewald' was in fact made by that species since it sounds to me more like a slight variant of the *kiu* call of *C. calurus*.

It is intriguing that the *querg-querg* call of *C. ndussumensis* has not been recorded for *C. oli-*

vaceus; this call is unreported in Upper Guinea (Fishpool *et al.* 1994, Borrow & Demey 2001; R. Demey pers. comm.; pers. obs.). This is all the more curious given the similarity in their songs, as mentioned above.

It should be noted that although hindclaw length has been used in this analysis, this is only one of a number of possible metrics, and not necessarily the most appropriate, that could have been used to assess differences in foot morphology. It was however the one found most feasible in museum specimens. Thus, in addition to length, the degree of curvature of the hindclaw—the claw arc—could have been measured (differences between the claw arcs of both *C. ndussumensis* and *C. olivaceus* from those of *C. calurus* are readily apparent in Fig. 3, where it also appears that the claw tips of *C. ndussumensis* and *C. olivaceus* are sharper and more pointed). I also believe that Berlioz (1954, 1955) was correct in stating that *C. ndussumensis* has longer, narrower toes than *C. calurus*, a view which is supported by the images shown in Fig. 6. I am not however persuaded that the two differ in tarsal size, *contra* Berlioz. Notches in the distal toe pads, reported to be a feature of certain climbing passerines (Clark 1973), were not found in *C. ndussumensis* or *C. olivaceus*.

The validity of the contrasting loral spot as a diagnostic character in *C. ndussumensis* has been questioned before. Thus, Friedmann & Williams (1971) noted that four specimens with 'fairly greyish' lores from their series of 35 from Bwamba, Uganda, did not have 'particularly narrow bills' while one that had a bill 'as narrow as any [of Rand's loaned specimens of] *C. ndussumensis*' did not have grey on the lores. Sargeant (1993) and Bowden (2001) also found the loral spot unreliable as a distinguishing feature.

An illustration of the observation, mentioned above, that across much of its range, *C. ndussumensis* is considerably less common than *C. calurus*, attributable to the latter being both more widespread and usually occurring at higher densities, is provided by the relative number of skins in museums; thus, NHM, Tring has 25 *C. ndussumensis* and 106 *C. calurus calurus* and *C. calurus emini*, while comparable figures for the Field Museum of Natural History, Chicago and the Royal Museum for Central Africa (RMCA), Tervuren, Belgium are 15 vs. 92 and 23 vs. >400, respectively.

Chapin, in his 1948 description of *Criniger calurus emini*, wrote of 'intergradation between *C. ndussumensis* and *emini*', reporting it 'in specimens taken 46 kilometers south of Irumu and at Angumu, 190 kilometers west of Lake Edward' and, later, he (Chapin 1953) referred to the specimen from near Irumu as a 'thin-billed example of *emini*' whilst of the Angumu material he noted that of '13 specimens of *C. calurus* . . . nine agree with *emini*, but four have bills virtually as slender as those of *C. ndussumensis*. Even these have tails and tail-coverts less rufous, with one possible exception'.

These observations have been repeated by others (e.g. Hall & Moreau 1970, Lippens & Wille 1976) and, in some cases, taken rather further. Thus, Rand (1958), referring to both Chapin's observations and his own examination of the same specimens, refers to 'hybrids', as also does Rand (1960)—who writes that *C. ndussumensis* 'hybridises extensively with *C. calurus emini* in Semliki Valley area'—White (1962) and Keith (1992).

During a visit to the American Museum of Natural History (AMNH), New York, Nigel Collar was able to locate 13 of the 14 specimens to which Chapin (1953) refers. These he kindly examined on my behalf and measured their bill widths and hindclaw lengths. His measurements reveal that, for both characters, seven fall squarely within the ranges of *emini* shown in Table 1 (where these data are not included), while five are equally unequivocally *C. ndussumensis*; the measurement of the hindclaw of the final individual is anomalously small, possibly as a result of damage, and is well outside the range of both. The bill width however suggests it to be *C. ndussumensis*. The colour of the upper tail of all specimens was noted as dull olive-rufous. The anomalous specimen aside, these findings therefore demonstrate that there is no 'intergradation' between *C. calurus emini* and *C. ndussumensis* in the Semliki Valley area; in consequence, there is nothing to suggest that *C. ndussumensis* and *C. calurus emini* behave as anything other than separate species in this part of their range, as elsewhere. These observations further confirm that tail colour is unreliable as a distinguishing character, as well as providing independent verification of the utility of the bill and claw metrics in diagnosing *C. calurus emini* and *C. ndussumensis*.

As a final point, the English vernacular names currently in use for the species of this genus are

particularly unsatisfactory and confusing. Thus, White-bearded Greenbul for *C. ndussumensis*, as used by Keith (1992), Borrow & Demey (2001), Sinclair & Ryan (2003) and Fishpool & Tobias (2005), has been used by Serle *et al.* (1977) and others for *C. calurus*, while *C. barbatus* is equally white-bearded. *C. calurus* is now usually called Red-tailed Greenbul, e.g. by Keith (1992), Dowsett & Forbes-Watson (1993), Borrow & Demey (2001), Sinclair & Ryan (2003) and Fishpool & Tobias (2005), but this is only really applicable to the nominate race, the tail in the other races being green or greenish, whilst many other bulbuls, including *C. ndussumensis*, have red or reddish tails which contrast with the back and wings. The earlier name Thick-billed Red-tailed Greenbul of Mackworth-Praed & Grant (1973), is little better, and neither indicates that the bird is a

Captions to photos on opposite page

Figure 2. Dorsal views of bills of *Criniger calurus emini* (left) and *C. ndussumensis* (right) illustrating differences in width. Also apparent are the longer, more robust rictal bristles in *C. calurus*. Left-hand specimen no. 58585, male, Congo-Kinshasa; right-hand specimen no. 31984, male, Cameroon. Background scale in mm. (L. D. C. Fishpool, © Royal Museum for Central Africa, Tervuren, Belgium)

Vue dorsale des becs de *Criniger calurus emini* (à gauche) et *C. ndussumensis* (à droite) illustrant la différence en largeur. Les vibrisses plus longues et robustes de *C. calurus* sont également bien visibles. Spécimen de gauche no. 58585, mâle, Congo-Kinshasa; spécimen de droite no. 31984, mâle, Cameroun. Échelle en mm. (L. D. C. Fishpool, © Musée Royal de l'Afrique Centrale, Tervuren, Belgique)

Figure 3. From top to bottom: lateral views of hindclaws of *Criniger calurus calurus*, *C. calurus emini*, *C. ndussumensis* and *C. olivaceus* illustrating differences between the upper and lower pairs in length and curvature. Upper specimen no. 1902.7.15.10 male, Cameroon, NHM, Tring; upper middle specimen no. 67257, female, Congo-Kinshasa, RMCA, Tervuren; lower middle specimen no. 1911.5.31.355, male, Cameroon, NHM, Tring; bottom specimen no. 1930.12.17.44, female, Guinea, NHM, Tring. Background scale in mm. (L. D. C. Fishpool, top and lower two © The Natural History Museum, Tring; upper middle specimen © Royal Museum for Central Africa, Tervuren, Belgium)

De haut en bas : vue latérale de l'ongle de l'orteil postérieur de *Criniger calurus calurus*, *C. calurus emini*, *C. ndussumensis* et *C. olivaceus* illustrant la différence en longueur et courbure entre les paires du haut et du bas. Spécimen du haut no. 1902.7.15.10, mâle, Cameroun, NHM, Tring ; deuxième spécimen du haut no. 67257, femelle, Congo-Kinshasa, MRAC, Tervuren ; deuxième spécimen du bas no. 1911.5.31.355, mâle, Cameroun, NHM, Tring ; spécimen du bas no. 1930.12.17.44, femelle, Guinée, NHM, Tring. Échelle en mm. (L. D. C. Fishpool, spécimen du haut et les deux du bas © The Natural History Museum, Tring ; le quatrième © Musée Royal de l'Afrique Centrale, Tervuren, Belgique)

Figure 4. Ventral views of *Criniger calurus calurus* (top) and *C. ndussumensis* showing more buffy undertail-coverts and more extensively olive-green flanks in *C. ndussumensis*. The slenderer bill and weaker rictal bristles of *C. ndussumensis* are also apparent. Upper specimen no. CG.1954.65, female, Gabon; lower specimen no. CG 1955.456, female, Gabon. (L. D. C. Fishpool, © Muséum National d'Histoire Naturelle, Paris)

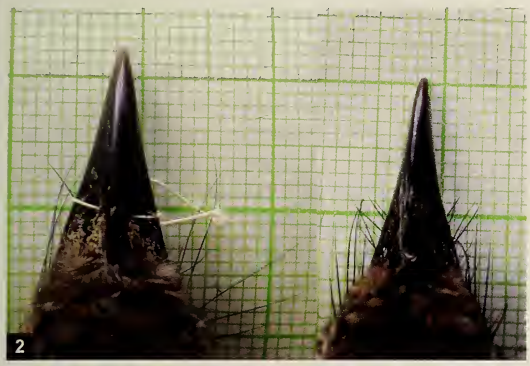
Vue ventrale de *Criniger calurus calurus* (en haut) et *C. ndussumensis* illustrant les sous-caudales plus roussâtres et les flancs au vert-olive plus étendu de *C. ndussumensis*. Le bec plus fin et les vibrisses moins longues de *C. ndussumensis* sont également visibles. Spécimen du haut no. CG.1954.65, femelle, Gabon ; spécimen du bas no. CG 1955.456, femelle, Gabon. (L. D. C. Fishpool, © Muséum National d'Histoire Naturelle, Paris)

Figure 5. *Criniger ndussumensis*, east of Old Ndebiji, Nigeria, in proposed extension to Cross River National Park, Oban Division, 9 December 2004. Identification based, amongst other things, upon vocalisation of individual in mist-net and bill width of 4.3 mm at distal end of nostrils (see text). Sexed as male on presence of cloacal protuberance. (L. D. C. Fishpool)

Criniger ndussumensis, à l'est de Old Ndebiji, Nigeria, dans l'extension proposée du Parc National de Cross River, Division d'Oban, 9 décembre 2004. Identification basée, entre autres, sur les vocalisations de l'oiseau dans le filet japonais et la largeur du bec (4,3 mm) entre les points les plus éloignés des narines (voir texte). Déterminé comme mâle sur la base de la présence d'une protubérance cloacale. (L. D. C. Fishpool)

Figure 6. Dorsal views of anterior portions of feet of *Criniger c. calurus* (left) and *C. ndussumensis* (right) illustrating differences in toe length. Left-hand specimen no. 1902.15.10, male, Cameroon; right-hand specimen no. 1947.90.61, Nigeria, male. (L. D. C. Fishpool, © The Natural History Museum, Tring)

Vue dorsale de la partie antérieure des pattes de *Criniger c. calurus* (à gauche) et *C. ndussumensis* (à droite) illustrant les différences en longueur des orteils. Spécimen de gauche no. 1902.15.10, mâle, Cameroun ; spécimen de droite no. 1947.90.61, Nigeria, mâle. (L. D. C. Fishpool, © The Natural History Museum, Tring)



bearded greenbul. Similarly, Yellow-bearded Greenbul for *C. olivaceus*, as used by Keith (1992), Borrow & Demey (2001), Sinclair & Ryan (2003) and Fishpool & Tobias (2005), as well as Yellow-throated Olive Greenbul of Mackworth-Praed & Grant (1973), do not satisfactorily distinguish it from the equally yellow-bearded *C. barbatus*. Dowsett & Forbes-Watson (1993) use White-bearded Greenbul for the yellow-throated *C. olivaceus* because they treat *C. ndussumensis* as a race of it.

I therefore offer the following alternative vernaculars which are unambiguous, more accurate and more informative:

C. barbatus . . .Western Greater Bearded Greenbul
C. chloronotus . . .Eastern Greater Bearded Greenbul
C. calurus . . . . . .Lesser Bearded Greenbul
C. olivaceus . . .Western Slender Bearded Greenbul
C. ndussumensis Eastern Slender Bearded Greenbul

These better indicate both the coherence of the genus and their relative sizes and distributions, whilst the epithet slender for *C. olivaceus* and *C. ndussumensis* reflects their more gracile bills and feet.

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Type locality, habitat, behaviour, voice, nest, eggs and plight of the Sidamo Lark *Heteromirafra sidamoensis*

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Localité type, habitat, comportement, voix, œufs et détresse de l'Alouette d'Érard *Heteromirafra sidamoensis*. La localité type de l'Alouette d'Érard *Heteromirafra sidamoensis* est mentionnée comme étant à 2 km au sud de Negele, au sud-est de l'Éthiopie. L'espèce n'a toutefois jamais été trouvée ici depuis, mais uniquement sur la plaine de Liben, qui commence à environ 10 km à l'est de Negele. Nous pouvons confirmer que la localité type est en fait située à la limite nord-ouest de la plaine de Liben. Aujourd'hui l'habitat de cette alouette consiste en des prairies relativement rases, mais des indications provenant des décennies antérieures suggèrent que des zones à herbes plus hautes pourraient avoir été importantes. Avec ses longues pattes, son cou plutôt long et mince, et ses rectrices relativement faibles, l'espèce est essentiellement terrestre et semble mal équipée pour une dispersion aérienne à longue distance. Le chant, un sifflement gazouillé continu et ondulé, est émis lors d'un vol nuptial sur place, court (environ 20 secondes en moyenne) et bas (5–15 m), qui peut stimuler les voisins à en faire autant ; un faible *toui-toui-toui* (jusqu'à neuf notes) pourrait être un cri d'alarme. En juin 2007 trois œufs blanchâtres tachetés de brun ont été trouvés dans un nid tissé d'herbes avec une esquisse de dôme sous un petit arbuste de *Solanum tettense*. Un adulte a été capturé et, après la prise d'un échantillon sanguin, relâché. En juin 2008 nous avons trouvé que l'Alouette d'Érard était proche de l'extinction à cause du surpâturage, de l'expansion des cultures et de l'invasion du milieu par les broussailles.

Summary. The type locality of the Sidamo Lark *Heteromirafra sidamoensis* was given as 2 km south of Negele, south-east Ethiopia, but the species has never been found there since, only on the Liben Plain, which starts *c.*10 km east of Negele; we now confirm that the type locality is in fact at the north-westernmost edge of the Liben Plain. The lark's habitat today consists of relatively short grassland, but evidence from earlier decades suggests that areas of longer grass may have been important. With its long legs, rather long thin neck and relatively feeble rectrices, the species is largely terrestrial and appears to be poorly adapted for long-distance aerial dispersal. The song, a jingling, chirping, continuous whistling, undulating in pitch, is delivered in a short (mean *c.*20 seconds) low (5–15 m) hovering display-flight that may stimulate neighbours to do the same; a soft *twi-twi-twi* call (up to nine notes) may be an alarm. In June 2007 three brown-flecked whitish eggs were found in a feebly roofed grass-woven nest under a small *Solanum tettense* shrub, and an adult specimen was caught, sampled and released. In June 2008 overgrazing, scrub invasion and agricultural expansion were found to be threatening the Sidamo Lark with imminent extinction.

So far as is known, the Sidamo Lark *Heteromirafra sidamoensis* is confined to the Liben Plain, centred on 05°15'N 39°43'E, a small plateau with a core of grassland east of Negele in the Borana Zone of southern Ethiopia (Collar & Stuart 1985, Ash & Gullick 1989, Robertson 1995, Stattersfield & Capper 2000). Owing to its tiny range, and to reports of agricultural transformation of the plain, it is listed as globally threatened, category Endangered (BirdLife International 2007). The small genus to which it belongs is of considerable taxonomic and conservation interest, since all three taxa, currently treated as three species (Sidamo Lark, Archer's Lark *H. archeri* of Somalia and Rudd's Lark *H. ruddi* of South Africa), are very similar in morphology although one of them is highly disjunct (by some 4,000 km), and all three have highly adverse conservation status (Archer's Lark Critically Endangered, Rudd's Lark Vulnerable).

Although in recent years the Sidamo Lark has been seen by dozens of bird-tour parties, the only

published accounts from the wild are those (1) by Robertson (1995), who supplied the first field description of the species and its call, discussed its likely song-type and reviewed the state of its habitat (the year of observation, initially given as 1974, was in fact 1994), and (2) by Francis & Shirihai (1999; also Shirihai & Francis 1999), who gave a further field description and provided some intriguing information on its habitat. On 3–4 July (LDCF, MNG, CNS) and 2 October 2006 (MNG, CNS and Callan Cohen), 9–16 and 21 June 2007 (all authors except LDCF, and with YDA and MW departing after 13 June) and 15–19 June 2008 (all authors except YDA and LDCF, and with Paul Dolman and Kiragu Mwangi), we visited the Liben Plain, in 2006 to make initial assessments of the situation, in 2007 to attempt a comprehensive first survey of the Sidamo Lark, its habitat, threats and population status, and in 2008 to scope the species for more detailed ecological study. The main results of the 2007 survey will appear elsewhere (Spottiswoode *et al.* in prep.); here we provide additional information on the species gathered during the field work, relating to field identification, voice, display-flight, feeding behaviour and breeding. All of this, however, needs to be set against early information relating to the type locality, the habitat it held, and the reported flight behaviour of the two specimens collected to date.

Where is the type locality?

Érard (1975) reported that the type specimen of Sidamo Lark, an adult male, was taken on 18 May 1968, less than 2 km south of Negele. However, all subsequent records, starting with that of Ash & Olson (1985) and concluding with our own (Spottiswoode *et al.* in prep.), have come from the open grasslands of the Liben Plain, which begins some 10 km east of Negele and covers an irregularly shaped area with an approximate total span of 10 × 10 km, at an altitude of *c.*1,550 m (EWNHS 1996, 2001, Spottiswoode *et al.* in prep., Wondafrash *et al.* in prep.). Subsequent searches at the type locality proved unsuccessful (Érard 1975) and the agriculture found there in 1989 was presumed to have replaced the habitat (see below) that Érard described (Ash & Gullick 1989). Indeed, on 21 June 2007, using local information as to where the centre of the town had been in 1968, NJC, MNG and CNS reached a point 2 km south of Negele and found the habitat no longer suitable, being heavily farmed with a patchwork of cereal and other crops, field boundaries and tree cover, as reported by Ash & Gullick (1989) almost 20 years earlier. Moreover, it was rather different in relief from the habitat which the species occupies on the Liben Plain, such that we found it hard to credit that we were really in the area where Érard had taken the type. A further possibility was an area 6 km south of Negele where Robertson (1995) had mentioned a grassland whose 'habitat looked very suitable for larks', but on 4 July 2006 LDCF and CNS found only cultivated and unsuitable terrain at this site, with no sign of grassland.

In December 2007 NJC and CNS asked Christian Érard if he was able to recall any details of the type locality that would help explain this circumstance, and he kindly went back to his notebooks and discovered that his collecting at Negele was in fact undertaken just west of the junction of the Arero road with the Negele–Filtu road, and immediately to the north of this junction, around the army camp there. This clearly resolves the issue of the type locality: it is at the north-westernmost fringe of the Liben Plain, rather than being disjunct from it, and therefore lies at approximately 05°18'N 39°39'E (although GPS indicates that this point lies somewhere slightly above 1,550 m, not at 1,450 m).

What is the preferred habitat?

Érard (1975; our translations throughout) reported that the type was collected in herbaceous steppe dotted with acacias or (as later described) open wooded savanna at 1,450 m; he found his work impeded by the very dense herb-layer, which led Collar & Stuart (1985), and hence Vivero Pol (2001), to describe the habitat of the species as the 'seasonally lush grass of a herbaceous steppe'. In December 2007 Christian Érard confirmed that the type, collected by a skin preparator, was retrieved from waist-high grass (>1 m high), of which there were many patches in the vicinity, although these were not continuous; and he reported that in that year, 1968, there were many cattle on the Liben Plain, as well as several species of wild ungulate.

Érard (1975) speculated that the ecology of the Sidamo Lark might differ from that of the species' only two congeners, Archer's Lark *H.*

archeri (Somalia) and Rudd's Lark *H. ruddi* (South Africa), because the latter both occupy open grassland, but he noted that 'this habitat difference requires further study'. Six years later, in April 1974 when John Ash collected the second specimen, the Liben Plain held 'much new grass' but with 'extensive areas of tall dead grass, some of it forming tussocks' (Ash & Olson 1985, Collar & Stuart 1985). The first bird Robertson (1995) saw—and this was the first bird anyone saw alive, knowing what it was—ran 'across a patch of bare ground surrounded by taller grass', and he reported that prolonged rains in 1994 had resulted in 'a good growth of grass' although he did not indicate its height. EWNHS (1996, 2001) asserted that 'more than 95% of the site [Liben Plain] is covered with long grass', and in September 1997 Francis & Shirihai (1999) found the species at the junction of the Arero and Filtu roads east of Negele (this being Ash's site: Robertson 1995) only 'by driving it out of the long grass'. They judged that it 'seems to be associated mainly with isolated patches of high grasses surrounded by dense acacia savanna' but added that 'these unique yellow-grass patches have been adversely affected by increased grazing, cultivation and military activity'. Julian Francis (*in litt.* December 2007) has confirmed that the first sentence ('seems...savanna') was intended to refer to the entire Liben Plain (which is indeed surrounded by dense acacia; but to our knowledge, and as indicated by a careful examination of the images of south-east Ethiopia on Google Earth, there is no other such patch elsewhere in the entire region: Spottiswoode *et al.* in prep.), whilst the second ('these . . . activity') was a generalisation based on other published reports. Francis also recollects that the 'long' grass was, as with Érard, about waist-high.

In July and October 2006, June 2007 and June 2008 we saw no grass patches that we would characterise as tall, long or waist-high (in 2006 and 2007 the tallest grasses were typically little higher than 0.4 m, while in 2008 we could find no patches of grass above 0.1 m tall). Variations in rainfall between years could have been responsible for this apparent discrepancy, or perhaps in the 1990s grazing pressure was much less intense, resulting in areas of taller grass (which can of course appear more dominant and uniform than it is when viewed at eye-level). In June 2007 we talked to one or two herdsmen who reported that when their grandparents lived on the plain it was covered in grass that they seemed to indicate as *head*-high; elders in 2008 said similar things. We likewise interpret this as possible evidence of still less grazing, but even so there must then also have been patches of shorter grass, given (a) the presence of the harvester ant *Messor cephalotes*, which keeps grass heights short around its nests, and (b) our current findings, which strongly suggest that the Sidamo Lark selects open 'short-grass' areas of plains land, avoiding both more degraded areas and those with apparently encroaching scrub and trees (Spottiswoode *et al.* in prep.; see Figs. 1–5). Whether this habitat is optimal for the species, or whether it is the best that now remains following considerable degradation by cattle, is difficult to gauge, but the latter seems (especially on 2008 evidence: see final paragraph) far more likely, and the testimony of earlier observers suggests that, at the very least, other habitats may be—or may have been—used. On the other hand, Rudd's Lark favours 'short' dense grass cover, with low average ground cover and grass around 0.6 m high, and it 'avoids patches where grass [is] >0.7 m tall and cover dense', optimal habitat being formed by annual burning and heavy winter grazing (Hockey *et al.* 2005).

Field appearance, feeding and general behaviour

Francis & Shirihai (1999) remarked that in the field the Sidamo Lark 'has a most unusual shape', with an almost triangular head, rather long and distinctly thin neck and relatively long legs; Figs. 6–7 show how apt these points are. On occasion we found that, when a bird ran very upright, its rather long strides, perhaps partly influenced by the seemingly cumbersome hindclaw, gave it a slightly gangling appearance, although we saw others that ran rapidly and efficiently while pressed very close to the ground in a mouse-like fashion. When standing upright, the broad buff hindcrown and nape with vague mid-brown speckling was usually very obvious, and the pale face and head-sides, continuous with the pale nape, reinforced the dark-crowned, dark-eyed effect. This, the shortish, curved culmen, scaly back pattern and relatively long thin neck (perhaps an adaptation for stretching and peering, suggestive of a species that lives in grass at least as high as its shoulder; see Fig. 6) gave it, as

Robertson (1995) also observed, a somewhat quail-like (*Coturnix*) appearance.

The Sidamo Larks that we observed fed by a combination of quick, barely perceptible dabs and pecks at stalks and blades of head-height grass, and much more obvious digs and probes at the soil surface (as the earth on the bills of the birds in Figs. 6, 7 and 15 confirms, although curiously Rudd's Lark is 'not known to dig for food': Hockey *et al.* 2005). Food items taken from stems and blades were either very small seeds or, much more likely, very small invertebrates, the mandibles barely being moved to process them. Food taken from the ground was larger but normally no items could be identified, although small grasshoppers were caught. Twice single red spherical objects (*c.*0.5 cm; possibly engorged ticks or velvet mites *Trombidium*) were taken, and on two other occasions a fairly large black hairy caterpillar was (in one case) briefly mandibulated, then dropped and ignored, and (in the other) picked up, thrashed about and apparently part-eaten.

Sidamo Larks spend relatively little time in the air. The display-flights (see below) are much shorter and lower than in many continental grassland larks in the genera *Alauda*, *Mirafra* and *Calandrella* (see Ryan *et al.* 2004). When flushed or making unforced flights (not a common phenomenon, apparently) the birds fly a few feet above the ground for relatively short distances in a direct, bounding flight. Neither in normal flight nor in display-flight do they suggest great aerodynamic qualities. On the contrary, the long legs and massive hindclaws seem incapable of full retraction (see Fig. 8) and strongly suggest an ancient adaptation to terrestrial living which has dispensed with aerial dispersal over any distance. In this, the species sits in strong contrast to the buoyant-winged Somali Short-toed Lark *Calandrella somalica*, a common inhabitant of the Liben Plain whose effortless high flights, whether displaying or not, denote a species well adapted for moving with speed and efficiency between habitat patches many kilometres apart. The difference between the thin, slightly frayed-edged rectrices of *Heteromirafra* larks and the broader, stronger ones of most *Mirafra* further emphasises the relatively weak flight capacity of the former. Altogether, therefore, the Sidamo Lark gives a strong impression of being a poor disperser and colonist, a relict species confined by evolutionary circumstance to tracts of grassland (if indeed there are now more than one) between which it cannot move unless by flying only short distances and walking when climatic conditions join them up; this conforms with 'several analyses' that place *Heteromirafra* basal in the Alaudidae (*fide* de Juana *et al.* 2004).

Display flight, song and calls

Érard (1975) had expected that the specimen which subsequently proved to be the type of *H. sidamoensis* was a Flappet Lark *Mirafra rufocinnamomea*, because the larks he was trying to collect were making intermittent, vigorous snapping noises with their wings as they circled in display flight at *c.*20 m. 'It was while searching the area where *one of these birds* had "fallen"', he wrote (our italics), 'that the *Heteromirafra* was found', but he acknowledged that this did not prove that the bird he saw in flappeting flight was the same as the one he collected. He also acknowledged that Rudd's Lark does not snap its wings, whilst the behaviour of Archer's Lark was (and remains) unknown. Ash & Olson (1985) also mentioned the possibility of the Sidamo Lark having a flappeting display, as John Ash heard several birds showing such behaviour at the site at which his specimen was collected, but he too was unable to be certain whether the bird he collected had been one such. (Incidentally, given that Flappet Larks tend to be associated with bushes and trees, we should report that our few encounters with the species on the Liben Plain involved flappeting birds at least several hundred metres from the plain–thornbush ecotone, i.e. we cannot assume that Érard's or Ash's records imply a tolerance by the Sidamo Lark of bushed habitat.)

Subsequent field observations on the Liben Plain, including at least 62 individual singing birds in June 2007 (Spottiswoode *et al.* in prep.), have established that, contrary to the indication in de Juana *et al.* (2004), the Sidamo Lark does not possess a flappeting display—Robertson (1995) correctly judged that such behaviour 'probably refers to another species'—but rather sings in a low, hovering, more or less stationary flight (generally 5–10 m but perhaps up to 15 m above ground level). The bird takes off on an upcurving trajectory in a fluttering flight, begins singing within 1–2 seconds of leaving the ground, sings during the next *c.*3–5 seconds as it reaches the apex, and continues in a stationary, hovering posi-


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tion for up to 35 seconds longer. In this hovering phase, the body is held at roughly 45°, the head turns from side to side to broadcast the song, and the legs are not fully retracted, the tarsi and feet with their long hindclaws being easily visible at moderate range (see Fig. 8). The total song lasts 11.3–38.5 seconds (mean 19.7 of 15 songs pooled from four individuals), breaking off as the bird switches abruptly from hovering to a steep gliding descent, wings fixed in an arching parachute posture with tips pointing at the ground, the drop back to earth taking only a few seconds. Nine inter-song intervals from three singers averaged 49 (14–124) seconds.

The song is a jingling, chirping, continuous whistling, in general timbre and tone recalling (to ears familiar with Palearctic species) a Skylark *Alauda arvensis* but following a distinct structure. It opens with 5–6 short high whistles, each note slightly lower than the preceding (*tii-tii-tii-tii-tii*, rather like the thin descending flight-call of a Meadow Pipit *Anthus pratensis*) (two seconds), merging into a short jumble of jingling whistles (two seconds). This immediately merges into the main part of the song, begun at the start of the hovering flight, a variable number of repetitions (up to 16, but as few as five) of a stereotyped rising or falling phrase (each phrase *c.*2.5 seconds long; see below), terminating in a short burry coda, each note often slightly rising but also often lower than the preceding (*swerzz-wrz-wrz-wrz-wrz-wrz*, two seconds) (see Figs. 9a–c). Both duration and content appear to be variable between and within individuals. The variable repeated phrase in the main part of the song is usually a series of notes that rise up the scale, the first two chirping and throaty but shifting to clearer, cleaner, higher notes, very rapid and complex, e.g. very roughly expressed as a buzzy jumbled quick *skoriol-skuriul-skeriel-skee*; occasionally, however, the phrase runs down the scale, with the clear high jingling notes becoming a throaty chirping as it does so (Fig. 9b). Sometimes there is a distinct if tiny break between phrases; sometimes everything is run together. The rise and fall in pitch over the duration of the song is sometimes blurred by the Skylark-like jumbling and crowding of many notes together, but is usually obvious and distinctive, and the whole song sounds bright and cheerful without being notably musical. The sound carries in good conditions for at least 300 m, with maximum distance at which we detected song somewhat over 450 m (from a bird measured as singing 444 m perpendicular to the transect line) (Spottiswoode *et al.* in prep.). Once it has been learnt, and once it is heard, it gives the observer an immediate cue to search for a hoverfly-like dot holding a position low in the sky for 15–30 seconds before dropping from view (although in 2008 we found two males that briefly counter-sang full songs from the ground).

Captions to photos on opposite page

Figure 1. Liben Plain, with tall and short grasses, and ant nest (*Messor cephalotes*) in foreground, June 2007 (Claire Spottiswoode)

La plaine de Liben, avec herbes hautes et basses, et une fourmilière (*Messor cephalotes*) au premier plan, juin 2007 (Claire Spottiswoode)

Figure 2. Liben Plain: central depression, with (progressively from camera) cattle, crops, eroding grassland and apparently invading trees, June 2007 (Claire Spottiswoode)

La plaine de Liben : dépression centrale avec bétail, cultures, prairie érodée et arbres invasifs, juin 2007 (Claire Spottiswoode)

Figure 3. Liben Plain, with variable grass heights, giant fennel *Ferula communis* and huts, June 2007 (Claire Spottiswoode)

La plaine de Liben : herbes de hauteur variable, férule *Ferula communis* et cases, juin 2007 (Claire Spottiswoode)

Figure 4. Liben Plain: south-eastern quarter, with grass erosion by cattle, June 2007 (Claire Spottiswoode)

La partie sud-est de la plaine de Liben : sol herbeux érodé par le bétail, juin 2007 (Claire Spottiswoode)

Figure 5. Liben Plain: south-eastern edge with apparently invading acacia, June 2007 (Claire Spottiswoode)

La limite sud-est de la plaine de Liben, apparemment envahie par des acacias, juin 2007 (Claire Spottiswoode)

Figure 6. Sidamo Lark *Heteromirafra sidamoensis*, Liben Plain, 2 August 2007 (Greg Davies)

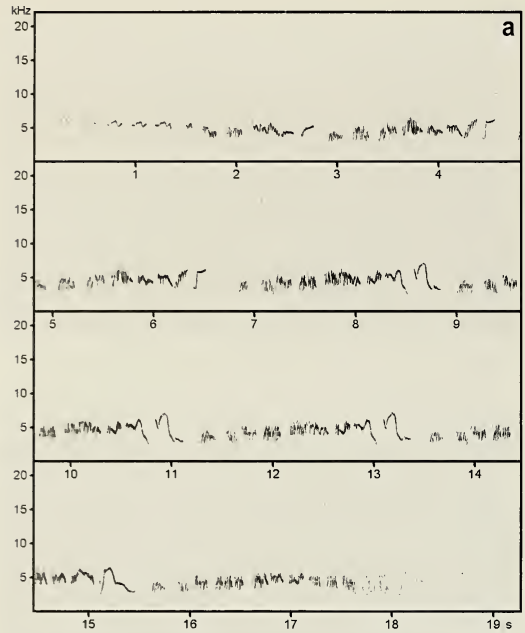
Alouette d'Érard *Heteromirafra sidamoensis*, plaine de Liben, 2 août 2007 (Greg Davies)

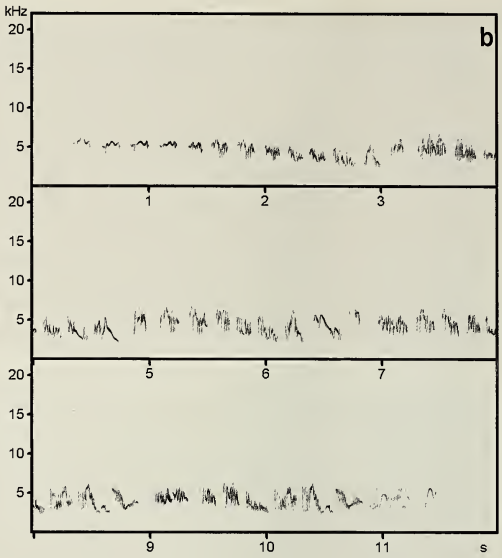
Figure 7. Sidamo Lark *Heteromirafra sidamoensis*, Liben Plain, 3 August 2007 (Greg Davies)

Alouette d'Érard *Heteromirafra sidamoensis*, plaine de Liben, 3 août 2007 (Greg Davies)

Figure 8. Sidamo Lark *Heteromirafra sidamoensis* in song-flight, Liben Plain, 2 October 2006 (Claire Spottiswoode)

Alouette d'Érard *Heteromirafra sidamoensis* en vol chanté, plaine de Liben, 2 octobre 2006 (Claire Spottiswoode)





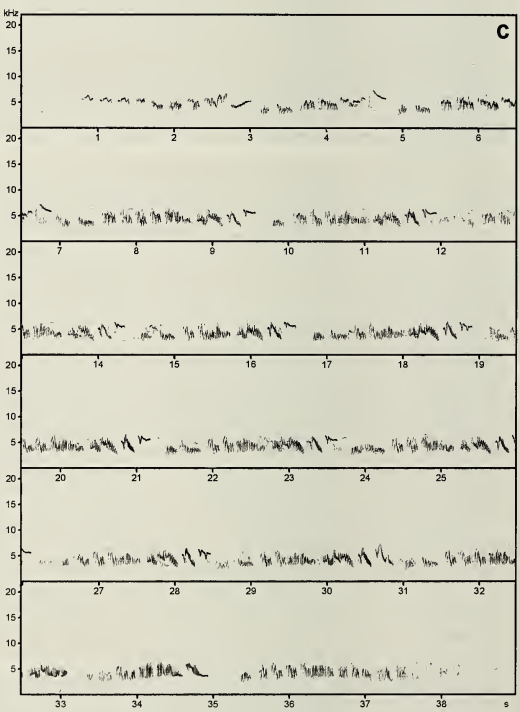


Figure 9. Sonograms of songs of Sidamo Lark *Heteromirafra sidamoensis*: (a) and (c) are by the same bird and show rising phrases in the main body of the song, one version notably longer than the other; (b) is a different bird with falling phrases in the song (recorded by Claire Spottiswoode, 10 June 2007, on Sony MZ-RH1 minidisc recorder with Sennheiser MKE 300 microphone). Sonograms produced using Avisoft.

Sonogrammmes de chants de l'Alouette d'Érard *Heteromirafra sidamoensis* : (a) et (c) sont du même oiseau et contiennent des phrases montantes au milieu du chant, une version étant nettement plus longue que l'autre ; (b) est d'un oiseau différent et contient des phrases descendantes (enregistrés par Claire Spottiswoode, 10 juin 2007, avec un enregistreur-minidisque Sony MZ-RH1 et un microphone Sennheiser MKE 300). Sonogrammes produits avec Avisoft.

From this it can be seen that the recent description of the song as a 'short series of 3- to 5-note melodious whistles given repeatedly in high display flight' (Sinclair & Ryan 2003) is outside our experience, and seems to be based on a misreading of Robertson (1995), whilst the description of the species singing 'in protracted aerial display, with several males calling at once while circling over territories' (Ryan 2004) is also out of line with our evidence. However, we did observe birds that we have no doubt were the same male, singing from different sites within a territory (within a radius of perhaps 50 m). Moreover, it is certainly the case that neighbours have the effect of stimulating each other to sing: we observed repeatedly that a second and sometimes a third male would sing in almost immediate response to a first bird performing a song display-flight. It is unclear, however, whether territories are clumped. On 2 October 2006, south of the Arero/Filtu road junction east of Negele, seven males were found singing and their positions logged with a GPS. The area in which they were displaying occupied

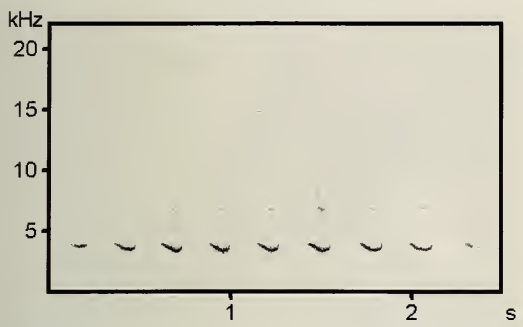


Figure 10. Sonogram of apparent contact-alarm (possibly nestling-warning) call of Sidamo Lark *Heteromirafra sidamoensis* (recorded by Claire Spottiswoode, 9 June 2007)

Sonogramme d'un cri, probablement de contact-alarme (peut-être un avertissement pour les oisillons), de l'Alouette d'Érard *Heteromirafra sidamoensis* (enregistré par Claire Spottiswoode, 9 juin 2007)

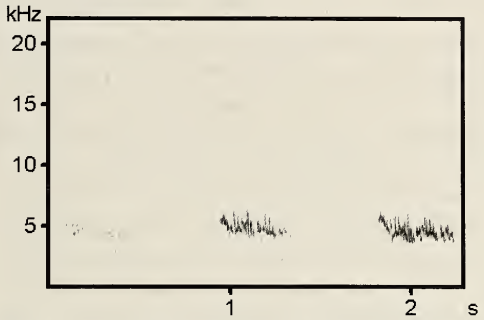


Figure 11. Sonogram of apparent contact or flight-call of Sidamo Lark *Heteromirafra sidamoensis* (recorded by Claire Spottiswoode, 10 June 2007)

Sonogramme d'un cri, probablement de contact ou en vol, de l'Alouette d'Érard *Heteromirafra sidamoensis* (enregistré par Claire Spottiswoode, 10 juin 2007)

28 ha, yielding a density of one singing male per 4 ha; this value was certainly not encountered elsewhere across the Liben Plain in June 2007 (Spottiswoode *et al.* in prep.), but whether it represents a patchiness that reflects habitat quality or some other biological characteristic is not known.

There are (to our knowledge) two other aerially displaying larks on the Liben Plain, Somali Short-toed Lark and Flappet Lark, both of which undertake much higher and more sustained flights, moving through and around a wide airspace rather than hovering in one place, and accompanied by very different sounds: Somali Short-toed Larks give a jerky, often discontinuous song, interspersed with chirruping notes and sometimes short mimicked phrases of Sidamo Lark and Pectoral-patch Cisticola *Cisticola brunnescens*, which also occurs commonly on the plains. This discontinuous song is matched by its flight, which consists of alternate flutters and glides, the sound seemingly synchronised with the physical movement of the birds. The display-flight of the Flappet Lark, which we saw or heard only towards the eastern fringes of the Liben Plain where scattered *Acacia* trees adjoin light woodland, involves short bursts of wing-rattling at intervals, with no song, given at heights comparable to and possibly higher than those of Somali Short-toed Larks, and entirely unmistakable for either Somali Short-toed or Sidamo Lark.

Robertson (1995) described the call of flushed birds as 'a soft *tswee-ee-eep* at the point where they hovered before dropping back into cover'. We also heard (and tape-recorded) this call from a flushed bird shortly before it landed (flight reaching no higher than 3 m), describing it as a bright, clear *twi-twi-twi-twi-twi-twi-twi-twi-twi* (nine notes over 2.3 seconds, the last barely audible), somewhat reminiscent of a Pectoral-patch Cisticola but sweeter and longer, each note more upward-inflected, and with a certain plaintive tone (Fig. 10). We heard it, too, from another bird on the ground, and from unseen birds quite close at hand, which we assumed were on the ground. We speculated that this might well be a contact/alarm-call, possibly directed at offspring, but we have no good evidence of this other than one observation of it being given by a bird carrying food. Hockey *et al.* (2005) described a clearly homologous call in Rudd's Lark as an 'alarm call when [an] intruder approaches [the] nest'.

In 2007 we also once heard, from a male that had been singing a minute before, a series of seven notes, each a dry sibilant rolling *swirrrr*, *swirrrr*, etc., as it flew off (Fig. 11). We assumed this might have been a general contact call. However, in 2008 we heard this call from one of two birds as we were approaching their nest.

Ground display, nest and eggs

During an hour-long observation by NJC of a foraging bird (A) in the mid afternoon of 12 June 2007, it moved 50 m upslope into an area over which a male (B) had earlier performed a song-flight. B sang again, and (in an example of the stimulus that singing provides) a second male (C)

then did so *c.*75 m to the east. When B landed, it did so in short grass and stood conspicuously upright, and ran rapidly towards A. B stood very close in front of A; both were then part-obscured by a passing cow, but it appeared that B gave a rapid burst of bobbing movements while facing A. Immediately, the two flew off in a flight-chase, directly over the area where C had sung, the chaser dropping a little beyond C's area, the chased bird continuing another 25 m before also dropping. Whether this was courtship or aggression is unclear, although the fact that A had given no song-display but had walked into an area occupied by a singing bird tends to suggest that A was female.

At 09.30 hrs during a transect on 13 June 2007 MW discovered a nest of a Sidamo Lark containing three very fresh eggs (less than two days old: CNS). By running to the left from close in front of him but not flying, the bird instantly suggested it had just vacated a nest, and this was discovered within seconds, recessed into the ground at the base of a very small *Solanum tettense* shrub (Fig. 12). The nest was a bowl constructed entirely of fine dry grass and unlined, with a weak partial canopy of pulled-down stems (Fig. 13), the entrance opening 63 mm across. The eggs were off-white with fairly dense but fine flecking in various shades of dark brown and occasionally grey, most heavily concentrated at the larger end (Fig. 14); they measured 21.4 × 15.2, 20.8 × 15.3 and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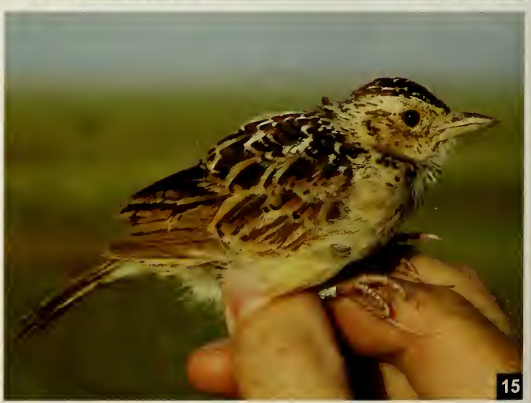
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Figure 12. *Solanum tettense* shrub under which a nest of the Sidamo Lark *Heteromirafra sidamoensis* was discovered, with the discoverer Mengistu Wondafrash, 13 June 2007 (N. J. Collar)

L'arbuste *Solanum tettense* sous lequel un nid de l'Alouette d'Érard *Heteromirafra sidamoensis* a été trouvé, avec Mengistu Wondafrash, qui l'a découvert, 13 juin 2007 (N. J. Collar)

Figure 13. Nest of Sidamo Lark *Heteromirafra sidamoensis*, showing its weak canopy, 13 June 2007 (N. J. Collar)

Nid de l'Alouette d'Érard *Heteromirafra sidamoensis*, avec son faible dôme,13 juin 2007 (N. J. Collar)

Figure 14. Eggs of the Sidamo Lark *Heteromirafra sidamoensis*, 13 June 2007 (Claire Spottiswoode)

Œufs de l'Alouette d'Érard *Heteromirafra sidamoensis*, 13 juin 2007 (Claire Spottiswoode)

Figure 15. Sidamo Lark *Heteromirafra sidamoensis* in the hand, Liben Plain, 21 June 2007 (Claire Spottiswoode)

Alouette d'Érard *Heteromirafra sidamoensis* en main, plaine de Liben, 21 juin 2007 (Claire Spottiswoode)

21.5 × 15.2 mm. This is the first record of the nest and eggs of Sidamo Lark.

The nest was empty when it was inspected eight days later on 21 June 2007, with no sign of broken shells. We presume the eggs were taken by an animal capable of consuming them without breaking them, perhaps a snake or crow. Nest failure of ground-nesting birds must be frequent on the Liben Plain, given the number of cattle that move across the area. During the hour-long watch of the individual bird (A) mentioned above, three herds of cattle moved through its immediate vicinity, causing it little if any disturbance but suggesting a great potential for the trampling of nests, although local people declared that they do not take eggs of any size and leave all birds unmolested.

On 17 June 2008 we found a Sidamo Lark nest with three young roughly three or four days old; the nest was well concealed below a small thistle and associated ungrazed grass leaves (0.4 m), the thistle itself being in very short-grazed grassland. This nest and the sitting bird were predated on the night of 18 June. A few adult flight feathers and the nest base were collected and deposited at the Natural History Museum, Tring, UK.

Data on a trapped individual

At 16.45 hrs on 21 June 2007 CNS and NJC mist-netted a single Sidamo Lark at a point marked with a GPS where a bird had been singing the previous week. The bird caught possessed some cloacal protuberance, so was possibly male; the skull was ossified and the feathers were very worn but showed no moult. There was no (or else a very old) brood-patch, and the following notes (measurements in mm) were taken: upper mandible pale brown over the maxilla, creamy horn along the cutting edge; lower mandible creamy horn; irides mid-brown; legs flesh-pink with red earth in the grooves; bill from skull 14; wing-chord 75, 82 flat; tail (worn) 50.5; tarsus 29; right hindclaw 14.5, left hindclaw 13; weight 28.0 g.

The bird was sampled for blood (to be deposited at the Zoological Museum, University of Copenhagen), photographed (see Fig. 15), ringed with a South African ring (FA46590) and released at the point of capture at 17.30 hrs, one hour before sunset. This is the first live (and only the third) specimen of the species to be sampled.

Conservation

Our research in 2007 indicated that the Sidamo Lark occupies an exceptionally small range, especially for an open-country species: only some 40 km² of habitat appears to remain to it, all on the Liben Plain, and the total male population of the species, on the well-justified assumption that no other sites exist for it at least within a 200 km radius (as suggested by Google Earth maps), does not exceed 250 individuals (Spottiswoode *et al.* in prep.). There is considerable evidence that the grasslands of the Liben Plain have been deteriorating in quality and extent for several decades (Figs. 2–5), almost certainly to the detriment of the Sidamo Lark, and this, combined with the very low population size and single location, suggests that the species should be uplisted to Critically Endangered (Spottiswoode *et al.* in prep.).

In 2008 we were dismayed to find that the plain's pasturelands were even more heavily grazed: grass across the entire plain was all less than 5 cm, and the eastern half of the area comprised extensive bare earth covering more than 50% of the ground within a severely overgrazed and degraded sward. Despite three days of field work and transect walking in eastern and northern areas of the plain that had been occupied in 2007, no Sidamo Larks were seen or heard in these severely degraded areas, with all observations from a small area of grassland immediately south-east of the junction of the Arero and Negele–Filtu roads. The predation of the nest and sitting adult, presumably female, was a depressing indication that in such conditions, where predators can simply move from one tiny clump of taller cover to another, breeding success is likely to be zero or near-zero, and that there may well be a serious skew in sex ratio, such that the effective population size may be even lower than the 2007 estimate (which assumed an equal sex ratio). Moreover, several new areas of agricultural cropland had been created, whilst others were marked out for ploughing. NJC and Kiragu Mwangi met with some elders who expressed their own deep concerns for the future of the Liben Plain. The failure of adequate rains in spring 2008, overgrazing of the plain (which, as a commons, is visited by herds from a 50-km radius or more), rapid scrub encroachment (which in 2008 we confirmed by transects and interviews) and the expansion of agriculture (largely driven by the plain's inability to support its livestock load) are

combining in a way that suggests that the Sidamo Lark is unlikely to survive even for another few years without major management intervention (an endeavour to which we are now committed).

Acknowledgements

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The avifauna of Ghana: additions and corrections

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L'avifaune du Ghana: additions et corrections. Cet article présente une mise à jour de la liste des oiseaux du Ghana depuis Dowsett (1993). En tout 22 espèces et une sous-espèce sont ajoutées ou confirmées, mais 24 espèces doivent être supprimées ou mises en doute. Le nom d'une espèce a changé : la Cisticole de Dorst *Cisticola guinea* (au lieu de Cisticole à tête rousse *C. ruficeps*).

Summary. This article brings up to date the list of the birds of Ghana (Dowsett 1993). In all, 22 species and one subspecies are added or confirmed, but 24 species should be rejected or questioned. The name of one species has changed: Dorst's Cisticola *Cisticola guinea* (instead of Red-pate Cisticola *C. ruficeps*).

The birds of Ghana have received a good deal of attention in recent years by a number of experienced observers, and it has become clear that there is much in the standard works (e.g. Grimes 1987, Ntiamoa-Baidu *et al.* 2001) that needs updating or correcting. AH has lived in Ghana since April 2004, and has travelled widely; RJD & FD-L have spent a total of almost 8 months in the field (7 July–11 September 2004, 17 December 2004–5 April 2005, and 22 February–7 April 2008), during which time they surveyed all of the protected areas managed by the Ghana Wildlife Division.

Pending completion of a detailed review of distribution and status, we present here what we believe should be additions to or deletions from the avifauna of Ghana (Grimes 1987, as amended by Dowsett 1993). We deal with 22 species (and one subspecies) which are additions or confirmations for the Ghana list, and a further 24 species which we recommend be considered erroneous or in need of supporting details. We also draw attention here to an important name change: Dorst's Cisticola *Cisticola guinea* is the same bird as that called Red-pate Cisticola *Cisticola ruficeps* by Grimes (1987), see Dowsett-Lemaire *et al.* (2005).

The current Ghana avifauna consists of 732 species. Coordinates are given for localities not mentioned in Grimes (1987). Abbreviations are: NP/PN for National Park and FR for Forest Reserve.

Additions to the avifauna of Ghana

Ntiamoa-Baidu *et al.* (2000a) comment that **African Goshawk** *Accipiter tachiro* 'was recorded for the first time for Ghana' during their field work; this is incorrect, for it has long been known (often as *A. toussenelii*), and we have 40 localities on file, from Cape Three Points north to Kyabobo (Dowsett-Lemaire & Dowsett 2005, 2007) and Wenchi (Grimes 1987).

Cory's Shearwater *Calonectris diomedea*
AH had good views of up to 15 birds a few km off Ada in April 2005. Two were reportedly well seen off Ada, on 13 November 1994, with a large flock of Black Terns *Chlidonias niger* (J. Simms *in Bull. ABC* 2: 62). This Palearctic migrant is known from several West African countries.

Western Red-footed Falcon *Falco vespertinus*
Helsens (1996) reported a single male at Elmina, in April 1993, and van den Brink *et al.* (1998) up to 15 birds on three dates during the period 7–27 December 1996, at Legon, Buipe and Accra-Elmina. One was also seen at Sakumo Lagoon, near Accra, date not available, by H. Fletcher (pers. comm. to AH). This Palearctic migrant has been reported in small numbers from most parts of West Africa.

Eleonora's Falcon *Falco eleonorae*
An all-black falcon was seen in flight and at rest along the Volta lakeshore, in Digya NP, at Daditokolo (07°42'N 00°09'W) on 22–23 January 2005. RJD had close views of it at rest and in flight. It was long-winged and long-tailed, the underwing showing a marked contrast between the black coverts and paler flight-feathers. It was thus Eleonora's rather than the similar Sooty Falcon *F. concolor* (which is also less likely geographically). An Eleonora's Falcon ringed in the Canary Islands was recovered in Mali (at Doura: 14°59'N 05°12'W) on 7 March (Delgado &

Figure 1a and b. American Golden Plover *Pluvialis dominica,* Sakumono lagoon, Ghana, 17 February 2008 (Tony Traub-Evans).

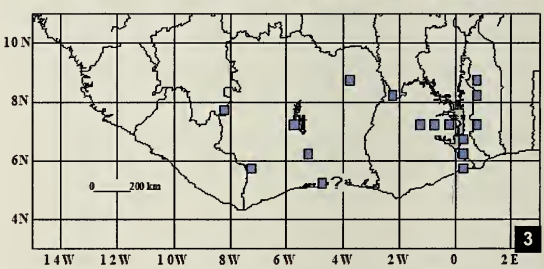
Pluvier bronzé *Pluvialis dominica,* lagune de Sakumono, Ghana, 17 février 2008 (Tony Traub-Evans).

Figure 2. Barred Owlet *Glaucidium capense* perched in a large *Ceiba* tree in Afadjato hill forest, Ghana, 2 April 2008 (Tony Traub-Evans).

Chevêchette du Cap *Glaucidium capense* perchée dans un grand *Ceiba* dans la forêt du Mont Afadjato, Ghana, 2 avril 2008 (Tony Traub-Evans).

Figure 3. Map of distribution (30' squares) in Upper Guinea of Barred Owlet *Glaucidium capense.* '?' denotes a published record considered in need of confirmation (Lachenaud 2006).

Distribution (par carrés de 30') de la Chevêchette du Cap *Glaucidium capense* en Afrique Occidentale. '?' désigne une donnée publiée qui nécessite confirmation (Lachenaud 2006).



Quilis 1990), on a direct line between north-west Africa and the wintering area in Madagascar. One is also reported to have been filmed in Mt. Péko NP, Côte d'Ivoire (07°05'N 07°13'W), in March (G. Rondeau *in Bull. ABC* 8: 147).

Buff-spotted Flufftail *Sarothrura elegans*
C. Carter (*in litt.* 2005) heard two of this species calling at night at Ntronang (06°21'N 01°05'W) on 8 May 1995; one of them called incessantly for at least two hours from 22.30 hrs and again at dawn. He was extremely familiar with it in Zambia and Zaïre. L. Carter (pers. comm. to C. Carter) had heard it regularly there at night from 30 April, and it was last heard at dawn on 11 May. Grimes (1987) accepted a nocturnal sound record from near Tarkwa, even though the description 'does not tally completely' with published accounts, but that report was not accepted by Keith *et al.* (1970) and was queried by Dowsett (1993). The present record is the first between Ubiaja, Nigeria (06°37'N 06°20'E) (Bannerman 1935) and Mt. Sangbé NP, Côte d'Ivoire (07°55'N 07°17'W) (H. Rainey *in Bull. ABC* 10: 57).

Red-chested Flufftail *Sarothrura rufa*
One was calling from a large reedbed at a gold mine detention pond near Obuasi, mid-May 2007 (AH, who is familiar with the species in South Africa). Already known from neighbouring Togo (Cheke & Walsh 1996), but otherwise the nearest record is of a male observed at Fadar Fadar, Burkina Faso (*c.*15°N 00°40'W) (Weesie 1996), surprisingly far north. There is no certain record from Côte d'Ivoire (Thiollay 1985).

American Golden Plover *Pluvialis dominica*
Two were well seen in rice fields *c.*50 km east of Accra, on 12–13 November 2005 (AH, H. Fletcher & C. Pearman). Up to four were present at Sakumono lagoon, Tema (05°37'N 00°02'W)

and Prampram between 3 November 2007 and 28 February 2008, one of them in partial breeding dress by February (AH, RJD, FD-L *et al.*), and photographs by T. Traub-Evans (Fig. 1) show clearly the key features of the species (marked supercilium, buffy chest and grey underwing-coverts). Macdonald (1978—not 1987, as in Grimes 1987) claimed one from Nakwa lagoon (05°12'N 00°56'W), on 4 October 1977, but Dowsett (1993) considered the details insufficient to be sure of the species.

Red-necked Phalarope *Phalaropus lobatus*
The first for Ghana was a female in almost full breeding plumage at Sakumono lagoon, on 22 July 2004 (AH). One was at the same place on 5 December 2004 (AH), and another was at Panbros saltworks (05°31'N 00°19'W), on 15 January 2006 (AH, H. Fletcher & P. Samuels).

Barred Owlet *Glaucidium capense*
RJD & FD-L found this owlet in 2004–08 in eight protected areas, from Shai Hills Resource Reserve north to Kyabobo NP (*c.*08°45'N 00°45'E) and west to Bui NP (08°21'N 02°18'W) (Fig. 3: 10 × 30' squares). It was tape-recorded and seen on 17 January 2005, in the south-east of Kogyae Strict Nature Reserve (Kyariase: 07°12'N 01°02'W), singing at dawn in a patch of transition woodland, with a pocket of dry forest (*Anogeissus* and *Manilkara*) on the edge of a banana farm. In 2008 we saw and heard it in the eastern highlands, and it was photographed by T. Traub-Evans in the open canopy of dry semi-evergreen forest at Afadjato (07°01'N 00°34'E: Fig. 2). The first records for Ghana of a species with a limited distribution in West Africa (Côte d'Ivoire, Liberia), the nearest known locality hitherto being Comoé NP (*c.*08°45'N 03°45'W) in Côte d'Ivoire (Salewski 2000). All localities are within the forest/savanna transition zone, the habitat being the edge of riparian or gallery forest (Wli Falls, Kalakpa, Kyabobo, south of Bui NP), dry forest (Shai Hills, Afadjato, Amedzofe) and transition *Daniellia* woodland with a few forest trees (Kogyae, Digya, Kyabobo—see also Dowsett-Lemaire & Dowsett 2007). The vocal dialect fits that of the race *etchecopari* published by Chappuis (1978, 2000); *cf.* sonograms in Dowsett & Dowsett-Lemaire (1993). This race differs only slightly in size and the markings on the upperparts, features not visible in the field.

African Black Swift *Apus barbatus*
At least four swifts of this species were identified flying high across the Pru River (07°56'N 01°09'W) on 14 March 2008 (FD-L). They were similar to Common Swifts *A. apus* in size and shape, identification being based on their distinctive calls (characteristic, buzzing trills), with which FD-L has been familiar since 1976. FD-L and RJD saw 25–35 African Black Swifts near the peak of Mt. Afadjato in eastern Ghana on 2 April 2008. Most were circling over a rocky hill (Aduadu) to the north of Afadjato, at an altitude of 800 m. Some pairs were interacting and calling. It is likely that the eastern highlands of Ghana (and adjacent Togo) have a small breeding population, hitherto unknown. There are possible sight records from Togo (Cheke & Walsh 1996), as close to Afadjato as Evou Apegamé (07°32'N 01°02'E, not 00°02'E as published). This represents a major range extension, as the nearest population is in the highlands of the Nimba range (Gatter 1993).

Horus Swift *Apus horus*
At least two, seen by RJD & FD-L over the southern boundary road of Mole NP (*c.*09°13'N 01°57'W), on 13 August 2004, next to African White-rumped Swift *A. caffer*, were identified by the only moderately forked tail but far more extensive white rump than *A. caffer*. One seen by the same observers low over the water at Dam 1, Mole NP (09°16'N 01°51'W), on 9 March 2005. These sightings extend the range from southern Niger (Tapoa in PN du W, at 12°15'N 02°15'E: Crisler *et al.* 2003). This species breeds in large sand cliffs (often in bee-eater holes) and could be more widespread in West Africa.

Mountain Wagtail *Motacilla clara*
We do not share the misgivings of Grimes (1987) regarding C. M. Morrison's confident report of one seen at a waterfall near Begoro, subject to the usual caveat regarding single-observer sight records. This bird is not montane in West Africa (as Grimes suggested), and is known from several similar sites in neighbouring Côte d'Ivoire (e.g. Thiollay 1985).

White Wagtail *Motacilla alba*
Plat (1997) saw two (one almost fully adult) just east of Bolgatanga, i.e. on the Atamore River (10°47'N 00°51'W), on 12–13 February 1997. This is about as far south as the species is likely to winter in West Africa. Grimes's (1987) inclusion of this wagtail on the Ghana list results from his considering it to be conspecific with African Pied Wagtail *M. aguimp*.

Lowland Akalat *Sheppardia cyornithopsis*
A female was mist-netted, ringed and photographed, on 7 February 2005, near a stream at an upland site (above 700 m) in the Atewa Range FR (RJD, FD-L). The bird had an active brood patch, and thus was brooding nestlings (eggs would have been laid January); wing-length 69.5 mm, weight 17 g (18 birds ringed in west-central Africa had wings ranging from 66.5–78.0 mm, mean 72 mm; RJD pers. obs.). AH had brief, but good, views of a single bird on 20 October 2006 in the same area of the Atewa Hills, and excellent views of another halfway up the northern side of the range, on 26 August 2007.

This akalat occurs in neighbouring countries immediately west of Ghana (Côte d'Ivoire to Liberia, Sierra Leone and southern Guinea). A specimen from Atewa, claimed as Equatorial Akalat *S. aequatorialis* by Ntiamoa-Baidu *et al.* (2000b), was subsequently identified, by J. Fjeldså, as a Lowland Akalat (J. Fjeldså *in litt.* 1997); Roy *et al.* (2001) later confirmed that the specimen was unquestionably *S. cyornithopsis*, based on analysis of its DNA (see rejected species below).

Little Rush Warbler *Bradypterus baboecala*
Heard by RJD & FD-L singing in dense *Typha* reedbeds on the far side of the lake at Owabi Wildlife Sanctuary (06°45'N 01°43'W) on 11 January 2005. The songster was too distant to be tape-recorded, but the observers are familiar with its song from several countries in Africa, including Zambia, Malawi and Cameroon. AH has heard this species on numerous occasions throughout the year, in dense reedbeds at the northern end of Sakumono lagoon, east of Accra, and RJD heard it there on 28 February 2008.

This warbler of dense aquatic vegetation is widespread in tropical and southern Africa but tends to become scarce west of Cameroon. It is known from few sites in Nigeria and has only recently been identified in southern Togo (Selfe 2003). Further west there is only a possible record of a singing bird from Ferkessédougou, northern Côte d'Ivoire (09°24'N 05°14'W) (Thiollay 1985), which that author considered unconfirmed.

It was not listed for Ghana by Grimes (1987), even though Chappuis (1978) had published a good tape-recording of the song said to have been obtained in Ghana by Grimes. However, L. G. Grimes (*in litt.* 2006) informs us that this recording came in fact from Cameroon, not Ghana, and is that originally attributed to *B. lopezi camerunensis* (Grimes 1971) but corrected to *B. baboecala* (Grimes 1972). The Owabi and Sakumono records are thus the first for the country.

African Reed Warbler *Acrocephalus scirpaceus* (*baeticatus*-group)
Quite common in rank, moist grass on the Volta lakeshore at Walando (Digya NP: 07°38'N 00°20'W) in January 2005, but less numerous than European birds (RJD, FD-L). The two taxa were well seen side by side, and both were mist-netted and ringed: five of the local race of *baeticatus*, *cinnamomeus*, were in fresh plumage, one (female) apparently fattening as if to lay (weighing 14.4 g) had not yet developed a brood patch. There are few West African records of the *baeticatus*-group between Lake Chad and Senegal. Treated by some authors as a separate species, but a molecular study (Parkin *et al.* 2004) has confirmed the morphological and behavioural evidence for them being conspecific (Dowsett-Lemaire & Dowsett 1987).

Nimba Flycatcher *Melaenornis annamarulae*
Confirmation of the presence of this semi-montane Upper Guinea endemic in the Atewa Range has been documented elsewhere (Demey & Hester 2008). This is the easternmost record of the species, the nearest of several localities in neighbouring Côte d'Ivoire being Mopri FR (05°50'N 04°55'W) (Gartshore *et al.* 1995).

Eurasian Golden Oriole *Oriolus oriolus*
On 15 March 2005 an adult male (all-black wings) was seen in woodland near Gruppe (09°13'N 02°13'W), just beyond the southern boundary of Mole NP (RJD, FD-L). AH observed

a male on 3 April 2007 in almost the same area, south of the southern boundary of Mole NP. One male was seen in the west of Digya NP (07°23'N 00°37'W) on 8 March 2008 (FD-L). The first admissible records for Ghana, as Grimes (1987) did not accept a sighting of a female near Legon.

Wattled Starling *Creatophora cinerea*
One in non-breeding plumage was seen closely at Dansoman, Accra (05°33'N 00°12'W), around 1 July 2003 (Hobberstad 2008). This is the only record we know of between the Lake Chad area, Nigeria (Ottosson *et al.* 2002) and The Gambia (Gore 1990), but the species is prone to vagrancy, having even reached the Seychelles and Aldabra occasionally (Skerrett *et al.* 2001).

Common Myna *Acridotheres tristis*
One photographed at Labadi Beach (05°33'N 00°09'W), Accra, on 21 July–1 August 2001 (A. Johnston, *in Bull. ABC* 9: 68 & *in litt.* to P. W. Atkinson), was either ship-assisted or an escape from captivity. This is the first report of this undesirable alien species in West Africa.

Common Waxbill *Estrilda astrild*
AH observed the species on a few occasions in September 2006 (5–6 in a group) near Sunyani, in mixed agricultural land and modified grassland. Sight records from three localities (Winterbottom *in* Bannerman 1949, Sutton 1965), including Winterbottom's from Sunyani, were rejected by Grimes (1987) as probably referring to Black-rumped Waxbill *E. troglodytes*. However, he accepted a single sighting from Tumu (the reference is not Sutton 1965, as might be inferred from Grimes, but Sutton 1970), on the grounds that the observer also reported *E. troglodytes* commonly. There is clearly a population at least in the Sunyani area of central-west Ghana, and the species is also reported from several places in neighbouring Côte d'Ivoire (e.g. Thiollay 1985). A report of three in Accra on 9 January 2006 (R. Cruse *in Bull. ABC* 13: 102) must surely refer to escaped cagebirds.

Cameroon Indigobird *Vidua camerunensis*
Specimens from Mole and Damongo, apparently attributed by Payne (1982) to another *Vidua*, were subsequently identified as *V. camerunensis* (R. B. Payne *in* Fry & Keith 2004). Several males singing in the south of Mole NP in August 2004 produced clear imitations of Black-bellied Firefinch *Lagonosticta rara* (FD-L).

Ortolan Bunting *Emberiza hortulana*
An adult male was filmed at Mole motel by several observers on 23 March 2006 (Lister 2007), a further record indicative of the winter range of this Palearctic migrant (McGregor 2004).

Species whose claimed occurrence in Ghana is erroneous or needs confirmation

We consider below species that were accepted by Grimes (1987), but which we think there is reason to doubt, as well as records that have appeared subsequently in print, and which might be thought to be candidates for the Ghanaian List, but which remain unconfirmed.

Great Crested Grebe *Podiceps cristatus*
Gordon (1992) reported 43 sightings on a total of 37 days in the Amansuri wetlands, on the south-west coast. No dates or other details are given and no mention is made of the fact that this species is known in West Africa only as an extreme vagrant to a few Sahelian countries (Borrow & Demey 2001). This record is surely in error.

Olive Ibis *Bostrychia olivacea*
Grimes (1987) included this species on the basis of a single sight record, at the ferry on the Kade–Akropong road (this is the Akropong at 06°12'N 00°39'W, not the better known locality in Akwapim, and the ferry was on the Birrim River). However, the observer himself wrote 'this identification is not certain' (Holman 1947: 626); his description of the voice could apply to either this species or to Spot-breasted Ibis *B. rara*, and the latter in the field is not the 'appreciably smaller bird' that he felt published descriptions implied. We cannot eliminate the possibility that these were *B. rara,* known with certainty from ten places in Ghana, including Atewa Range FR (Dowsett-Lemaire & Dowsett 2005), a few km east of Holman's locality. Spot-breasted Ibis ranges from Cape Three Points north to the Sene River at 07°30'N 00°54'W (Dowsett-Lemaire & Dowsett 2005; pers. obs.). The voice of *B. rara* was tape-recorded on 6 May 2007 by B. Phalan (pers. comm.) at Bonsa River FR (05°15'N 02°10'W). We believe there is no completely acceptable

record of *B. olivacea* in West Africa between Yapo, Côte d'Ivoire (05°42'N 04°06'W) (Demey & Fishpool 1991) and Campo, Cameroon (02°22'N 09°49'E) (R. Demey pers. comm.). A recent report from south-east Nigeria (A. Ajagbe *et al.*, *in Bull. ABC* 12: 187) remains to be documented.

Egyptian Vulture *Neophron percnopterus*
The sighting of an adult along the Mole scarp on 9 August 1968 (Harvey & Harrison 1970) should not be accepted as the only record for Ghana in the absence of supporting information, despite its inclusion by Grimes (1987). The species is unlikely to occur substantially south of the Sahel.

Rüppell's Griffon Vulture *Gyps rueppellii*
Grimes (1987) mentioned an 'uncertain' sighting of one in Mole, on 11 January (Sutton 1970), but it, and even more so an undocumented sighting in the forest zone of southern Ghana, seems not to warrant inclusion on the Ghana List without convincing details. Both this species and the last were rejected from Mole by Greig-Smith (1976).

Black-rumped (Hottentot) Buttonquail *Turnix hottentottus*
A specimen was reported from Accra (Bannerman 1931: 308, not p. 487 as in Grimes 1987), and Maze (1971) claimed to have seen five in Mole NP in April, but these should not be accepted in the absence of supporting details. This intra-African migrant (of which there are few authentic West African records) is readily misidentified.

Nubian Bustard *Neotis nuba*
'Vagrant, the one record in the Shai Hills is way south of its normal range: identified by Game Wardens, 30 Mar 1968' (Grimes 2005).The occurrence of this Sahel species is extremely unlikely, and identification by GWD staff undoubtedly mistaken.

Cream-coloured Courser *Cursorius cursor*
Van Gastel & van Gastel (1999) thought they saw this Palearctic migrant on the coast east of Prampram on 19 May 1996; we have reservations, and would retain the record in square brackets, as there is no other indication that the species occurs south of the Sahel.

European Golden Plover *Pluvialis apricaria* and **Pacific Golden Plover** *Pluvialis fulva*
Grimes (1987) placed all reports of golden plovers under one heading (i.e. *Pluvialus apricaria, P. fulva* and *P. dominica*). One record identified as *P. apricaria* from Songaw lagoon (05°49'N 00°28'E), on 16 January 1986, cannot be accepted, notwithstanding that one of the observers was very experienced. Nor do we think a report of 'presumed' *P. fulva* at Nungua, on 2 April 1966, meets the criteria sufficient to eliminate other species. These three species can be difficult to separate, and any one could occur in West Africa (although *P. apricaria* would seem the least likely as far south as the coast of Ghana, and there have since been acceptable records of *P. dominica*, see above). Both *P. fulva* and *dominica* are reported from Côte d'Ivoire (Demey & Fishpool 1991).

Short-billed Dowitcher *Limnodromus griseus*
Macdonald (1977) reported a sighting from Iture, which he took to be this species rather than the very similar Long-billed Dowitcher *L. scolopaceus* on the basis of its call. Although Grimes (1987) mentioned that T. Inskipp considered the details insufficient to make identification certain, he nevertheless accepted the record. The description published is certainly slight for such a difficult to identify, extreme rarity, and the voice as described would seem perhaps more likely to refer to *L. scolopaceus*. Under the circumstances, it now seems best to treat the record as a *Limnodromus* sp.

Pennant-winged Nightjar *Macrodipteryx vexillarius*
Grimes (1987) rejected this intra-African migrant on the basis of an out-of-season (early February) sighting at Accra. Similarly, its listing from Shai Hills by Rice (n.d.)—a reference not mentioned by Grimes (1987)—should not be accepted in the absence of details. There are few acceptable records of vagrants of this species in West Africa.

Speckled Mousebird *Colius striatus*
Accepted by Grimes (1987) as occurring in Ghana on the basis of its being listed as 'rare (seen regularly in small numbers)' in savanna in Mole NP by Greig-Smith (1976), with no indication that the latter was aware of how astonishing this would be, i.e. the first report from west of Nigeria. Grimes interpreted Greig-Smith's (1976) 'small numbers'

as meaning '*c.*5 or less', and even attributed this to the race *nigricollis*, although neither specimen nor photographs exist. The only other observer to mention this species for Mole is Wilson (1993), who wrote: 'Appears to be widespread and common'. This species is quite unknown to the more experienced guards, two of whom were already working in Mole in the 1990s. It could, under certain circumstances, be confused with Yellow-billed Shrike *Corvinella corvina*, but both Greig-Smith (1976) and Wilson (1993) also listed that species. Given the very great zoological interest that an isolated population in Mole would represent, we believe proof is required before it can be accepted as occurring in the past. J. F. Walsh (*in litt.* 2007) never saw the species in Ghana when he was resident (1970–76), including in several days spent in Mole (1971–72, 1974–75 and 1979). Extensive surveys in 2004–05 have failed to locate any (RJD, FD-L). Ornithologists who have travelled widely in Ghana in recent years, in addition to ourselves, have failed to find the species (R. Cruse, D. Hoddinott, D. Moyer, A. Riley *in litt.* 2005–06). A sighting from an Accra garden (Rainey & Lachenaud 2002), if correctly identified, could only have been an escape from captivity, in this well-worked locality. As regards Ghana, we believe it should be retained in square brackets.

H. Schifter (*in litt.* 2003) has examined and published on the great majority of *Colius* museum specimens in existence; he has no proof of the occurrence of *C. striatus* anywhere in West Africa. Apart from the Ghanaian claims, there is a sighting by H. Rainey from Côte d'Ivoire: a group of at least five 'near a cocoa plantation south of Vavoua' (07°23'N 06°29'W), on 4 July 1998 (Rainey & Lachenaud 2002). The status in West Africa of what is normally an easily observed species remains a mystery.

Lyre-tailed Honeyguide *Melichneutes robustus*
One was reportedly seen at Nkwanta, Ankasa (05°10'N 02°39'W) and 'the distinctive trumpeting display' heard once at Boin-Tano (05°29'N 02°39'W), presumably in August 1989 (Dutson & Branscombe 1990). G. Dutson (*in litt.* 2007) informs us that this was not his record (we have been unable to contact J. Branscombe). Ntiamoa-Baidu *et al.* (2000a) list it as present at one forest site, without giving details. No-one else has reported this species, and so we believe the records remain to be confirmed.

Crested Lark *Galerida cristata*
Greig-Smith (1976) listed it as 'seen regularly in small numbers' in bovals in Mole NP, and although he gave no supporting details, this was accepted by Grimes (1987) as the first and only record for Ghana. This was clearly a misidentification of Sun Lark *G. modesta* (not listed by Greig-Smith), which RJD & FD-L found to be common on all bovals visited in Mole, in August 2004 and March 2005. Birds were singing on the ground and aerially, occurring in pairs and groups of up to six. In West Africa, Crested Larks are confined to extensive sandy plains in the Sahel, and have never been observed on laterite bovals within the Sudanian region.

Richard's Pipit *Anthus richardi*
Grimes (1987) accepted a sighting from the Keta Plains north of Srogboe. Whether this would be a Palearctic migrant (the date is unusual, 22 May) or an intra-African vagrant (local populations are essentially montane in West Africa), we prefer to retain such a record in square brackets, as some species of pipit are very difficult to identify.

Yellow-bellied Bulbul *Chlorocichla flaviventris* and **Yellow-streaked Bulbul** *Phyllastrephus flavostriatus*
Ntiamoa-Baidu *et al.* (2000b) claimed from Atewa the first occurrence in Ghana of 'Yellow-bellied Greenbul *Phyllastrephus flavostriatus*', combining the English name of *C. flaviventris* with the scientific name of Yellow-streaked Bulbul. In an unpublished, undated annual report of the Ghana Wildlife Society the same bird is treated as both Yellow-bellied Greenbul *C. flaviventris* (p. 9) and Yellow-bellied Greenbul (*sic*) *Phyllastrephus flavostriatus* (p. 37). In another paper Ntiamoa-Baidu *et al.* (2000a) listed *P. flavostriatus* as present in at least two forest sites, without giving details. Either species is impossible in Ghana: the *Chlorocichla* is a bulbul of dry thicket in the Zambezian and coastal regions of southern Africa; the *Phyllastrephus* is confined to the montane and some lowland forests of eastern Africa (from the Albertine Rift to South Africa).

Tiny Greenbul *Phyllastrephus debilis*
Van den Brink *et al.* (1998: 48–49) trapped and ringed three bulbuls at Ayensudo (05°09'N 01°28'W) and Piase (Pease: 06°38'N 01°27'W) which they listed as this East African coastal species. B. van den Brink (*in litt.* 2005) informs us this was a slip for Little Greenbul *Andropadus virens.*

Equatorial Akalat *Sheppardia aequatorialis*
Ntiamoa-Baidu *et al.* (2000b) claimed (as a first for Ghana) *S. aequatorialis*, collected in a mist-net at Atewa. In another paper, Ntiamoa-Baidu *et al.* (2000a) listed the species as present in at least two forest sites, without presenting details. This akalat is an Afromontane endemic with a very small range in eastern Africa (from the Imatong Mts., in southern Sudan, to the Albertine Rift and western Kenya). It is clear that this was a misidentification of *S. cyornithopsis* (see the Additions section above).

Yellow-bellied Eremomela *Eremomela icteropygialis*
Grimes (1987) accepted sight records from Mole NP, but we did not find it there and neither have other recent observers. We know of no other record in this part of West Africa south of Gonse (Gonsen), Burkina Faso (12°40'N 01°25'W) (B. Portier *in litt.* 2004), and thus prefer to place this species in square brackets. Confusion with Senegal (Green-backed) Eremomela *E. pusilla* is always possible.

Chattering Cisticola *Cisticola anonymus*
Although listed for Ghana in some old publications, it has been shown that the only specimens claimed were undoubtedly mislabelled, and from Nigeria not Gold Coast (Lindsell 2007). The species is listed as occurring at one 'forest site' in Ghana (Ntiamoa-Baidu *et al.* 2000a), but with no indication that the observers were aware of how unusual this would be, and no details of where and how identified. Competent observers who know this cisticola well have failed to find it in Ghana.

Collared Flycatcher *Ficedula albicollis*
All Ghanaian specimens are in fact Pied Flycatcher *F. hypoleuca* (L. Svensson *in* Urban *et al.* 1997: 503), and this is doubtless true also of the sight records, as anticipated by Grimes (2005). There are few authentic records of *F. albicollis* in Upper Guinea, and it is readily confused with its siblings *F. hypoleuca* and Semi-collared Flycatcher *F. semitorquata.*

Cassin's Malimbe *Malimbus cassini*
Reportedly seen in five different places (Macdonald & Taylor 1977, Dutson & Branscombe 1990), and the well-worked Kakum NP (R. Cruse *in Bull. ABC* 10: 59). Aware that this Lower Guinea species is unlikely to occur in Ghana, it has been suggested they might in fact be Ibadan Malimbe *M. ibadanensis* (R. Cruse). Neither of these identifications is correct, and birds seen several times at Kakum and attributed to either species were in fact Crested Malimbe *M. malimbicus* (R. Ntakor pers. comm., present on some occasions). At Tafo, the site of some of Macdonald & Taylor's observations, a presumed *M. cassini* was seen in January 1978 by J. F. Walsh (*in litt.* 2005), who sent us a written description that accords well with a juvenile *M. malimbicus* ('above black with red crown and nape, continuous with bib. Face, chin and throat black').

Red-headed Malimbe *Malimbus 'coronatus'*
This Lower Guinea species was listed for Kakum (Moyer 1996: 109), but this must be a slip of the pen, through confusion with the English name of *M. rubricollis.*

A number of the species reported from parts of northern Ghana by Mombu *et al.* (2007) and the Nature Conservation Research Centre (2002) would be new for the country, but we have reservations about their accuracy, and no identification details are given.

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Birds of Fazao-Malfakassa National Park, including the first record for Togo of White-browed Forest Flycatcher *Fraseria cinerascens*

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Les oiseaux du Parc National de Fazao-Malfakassa, incluant la première mention pour le Togo du Gobemouche à sourcils blancs *Fraseria cinerascens*. Le Parc National de Fazao-Malfakassa (08°40'N 00°43'E) comporte une végétation variée, allant de la forêt dense à la savane. Bien que le parc soit une Zone d'Importance pour la Conservation des Oiseaux, peu de données sont disponibles sur les espèces d'oiseaux présentes. En six semaines de travail sur le terrain, du 27 octobre au 13 décembre 2005, nous y avons recensé 199 espèces d'oiseaux, dont une, le Gobemouche à sourcils blancs *Fraseria cinerascens*, n'avait pas encore été signalée au Togo. Le total des espèces d'oiseaux recensées jusqu'à ce jour dans le parc de Fazao-Malfakassa est de 242 espèces.

Summary. Fazao-Malfakassa National Park (08°40'N 00°43'E) has a varied vegetation, from forest to savanna. Despite that the park is an Important Bird Area, few data on its birds are available. During six weeks of field work, between 27 October and 13 December 2005, we recorded 199 bird species, amongst them one, White-browed Forest Flycatcher *Fraseria cinerascens*, that had not been recorded previously in Togo. Our work brings the total number of species known from Fazao-Malfakassa National Park to 242.

Covering 192,000 ha, between 300 and 800 m in elevation, Fazao-Malfakassa National Park (08°40'N 00°43'E) is the largest of Togo's three national parks. It is located in the transition zone between forest (Upper Guinea Forest block) and savanna, and comprises the most extensive area of relatively undisturbed vegetation in the country (Cheke 2001).

With relatively low rainfall (compared to neighbouring Ghana), resulting in primarily xerophytic vegetation, Togo almost completely lacks tropical forest, and savanna (primarily grassland, wooded grassland, and woodland) extends almost to the coast (Jenik 1984, Cheke & Walsh 1996, Cheke 2001). Habitats within Fazao-Malfakassa National Park are varied, but consist primarily of Guinea savanna and woodland, semi-evergreen gallery forest and forest patches, and grass-covered hilltops (Figs. 1–3; Cheke 2001). The park's terrain is rugged, including the Monts de Malfakassa in the north, the central Monts du Fazao, and precipitous rock and cliff faces associated with the Falaise de Boulowou at the western edge (Cheke 2001). Buffer zones at the park borders comprise moderately to heavily cultivated areas of grassland and woodland, and wetlands and rivers fringed by dense reedbeds (Fig. 4). Created as a concession to the local human populations, these buffer zones are considered within park boundaries and jurisdiction, and species observed in these areas were included in our list.

The dry season in Togo is November–February and the rainy season May–September, peaking in August (Cheke & Walsh 1996). The typical north–south pattern of rainfall in West Africa is disrupted by the effects of the Togo and Atakora Mountains, resulting in higher average rainfall in central Togo compared to the southern, coastal zone (Cheke & Walsh 1996). For example, mean annual rainfall for Sokodé (08°59'N), *c.*20 km east of park, is 1,441 mm, whereas the mean for coastal Lomé (06°08'N) is 924 mm (Cheke & Walsh 1996).

Although designated an Important Bird Area (Cheke 2001), few bird surveys have been undertaken in Fazao-Malfakassa National Park, the most recent in March–April 1984 (Cheke & Walsh 1996). Here we present the results of an avifaunal survey conducted at the onset of the dry season, between 27 October and 13 December 2005. We also list additional bird species previously recorded by other observers but not by us, to produce a preliminary bird list of the park.

Methods

We endeavoured to cover as much of the park's area as possible, using four villages at its borders as starting points for our survey: Fazao (08°41'N 00°46'E), Boulohou (08°46'N 00°40'E), Tchitchako (08°34'N 00°37'E, including a stretch along the Koué River, 08°30'N 00°37'E, at the Togo/Ghana border), and Bounako (09°10'N 00°53'E). We also camped beside the Kamassi River east of Boulohou (08°47'N 00°43'E) and near Mt. Kpeya (08°48'N 00°49'E), both well within the park boundaries. As time was limited, we were unable to visit the southern section of the park (between 08°30'N and 08°20'N), which is more extensively forested.

Surveys consisted of walking slowly through representative habitat (i.e., those areas representative of the majority of the park), stopping at locations of high bird activity, and recording all species detected visually or aurally. We paid special attention to globally threatened or rare species. Several nocturnal surveys were conducted by listening from fixed points and/or by walking trails.

Borrow & Demey (2001, 2004), whose nomenclature, taxonomy and sequence is followed here, was used for field identification, Chappuis (2000) to identify vocalisations, and Cheke & Walsh (1996) for information on range and status in Togo.

Results and Discussion

During approximately six weeks of field work, we recorded 199 bird species, one of which, White-browed Forest Flycatcher *Fraseria cinerascens*, is new for Togo. These are listed in Appendix 1, with their relative abundance and biome in which they were observed, where applicable. A list of 43 species (some requiring confirmation [e.g., MEPFT 2001]) previously recorded in the park but not encountered by us, forms Appendix 2.

Cheke & Walsh (1996) cite four additional species for the park that we have excluded from Appendix 2: Latham's Forest Francolin *Francolinus lathami*, Blue-headed Crested Flycatcher *Trochocercus nitens*, Dusky-blue Flycatcher *Muscicapa comitata* and Sooty Boubou *Laniarius leucorhynchus*. The latter three are based upon an unpublished report (cited as 'Minster Agriculture Limited 1984'). Dusky-blue Flycatcher and Sooty Boubou have since been deemed doubtful or wrong, and Blue-headed Crested Flycatcher does not figure on the report's list (Dowsett-Lemaire & Dowsett 2007). As Latham's Forest Francolin was claimed from Fazao by an observer of unknown experience and is not yet documented from neighbouring eastern Ghana, its occurrence is best treated as unconfirmed (Dowsett-Lemaire & Dowsett 2007), although a specimen was collected just south of the park, at Bismarckburg, by Reichenow in 1891 (Cheke & Walsh 1996).

This brings the total number of bird species recorded from the park to 242, or 39% of the species documented for Togo (Cheke & Walsh 1996). This is indicative of the relative quality and importance of the park to the conservation of Togo's birds and should serve as impetus to its further, and increased, protection. Twenty-four species restricted to the Sudan-Guinea Savanna biome were recorded in the park, along with an equal number from the Guinea-Congo Forests biome (Appendices 1 and 2). It should be noted that the adjacent, proposed Kyabobo National Park in Ghana, holds nearly three times the Guinea-Congolian forest species of Fazao-Malfakassa National Park (Dowsett-Lemaire & Dowsett 2007).

As data concerning migrants in Western Africa are frequently lacking (R. J. Dowsett & F. Dowsett-Lemaire pers. comm.), Appendix 1 also includes the dates of first detection for both Palearctic and intra-African migrants (following Borrow & Demey 2001, 2004) observed at Fazao-Malfakassa National Park. Dates given are only for migrants that are not considered annual residents in the area of the park (Borrow & Demey 2001, 2004). It should be noted, however, that in some cases dates given might also be an affect of when specific habitats were surveyed during our work, and are not necessarily indicative of a given species' arrival or occurrence.

The present total should be considered provisional, as our survey was conducted at the onset of the dry season and did not cover the entire park. An increasing number of Palearctic and intra-African migrants were detected towards the end of our visit, in early December. Therefore, survey work further into the dry season (January–April) and during the rainy season should yield some additional species. Likewise, for a more accurate overall species profile, surveys should certainly be undertaken in the southern, more heavily forested portions of the park, where up to 40 not yet doc-

umented forest species could potentially occur (Dowsett-Lemaire & Dowsett 2007).

Notes on selected species

White-crested Tiger Heron *Tigriornis leucolopha*
One flushed from cover along the Kamassi River (at *c.*08°47'N 00°43'E) on 30 November. Listed as a rare resident by Cheke & Walsh (1996), with only one recent record, of two individuals, along the Koué River, in the Fazao Mountains, in 1988. Also known from Kyobobo National Park, eastern Ghana (Dowsett-Lemaire & Dowsett 2007).

Black Stork *Ciconia nigra*
One flushed from cover along the Loukoulou River, in wooded savanna south-east of Mt. Kpeya, on 12 December. Considered a rare Palearctic migrant to Togo, where generally recorded from protected areas in the northern savannas of the country (Cheke & Walsh 1996).

Glossy Ibis *Plegadis falcinellus*
One in flight along a river near Bounako on 3 December and another along the Loukoulou River near Mt. Kpeya on 11 December. Listed as a rare Palearctic migrant to Togo by Cheke & Walsh (1996).

Bateleur *Terathopius ecaudatus*
An adult male and a juvenile observed in the north of the park, several km south of Bounako, on 8 December. Numbers are declining in many areas (Cheke & Walsh 1996).

Cassin's Hawk Eagle *Spizaetus africanus*
One seen perched and in flight over the heavily wooded slopes above Boulohou on 12 November; another over forest along a marshy area south-east of Tchitchako on 23 November. Identified by its blackish upperparts and white underparts with black markings on its breast-sides, axillaries and thighs. A rare resident in Togo (Cheke & Walsh 1996).

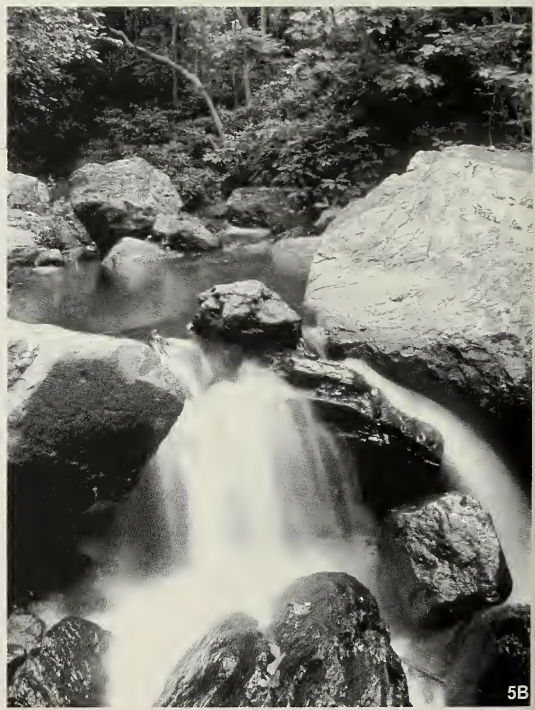
Black-shouldered Nightjar *Caprimulgus nigriscapularis*
One calling in woodland along the Kamassi River, east of Boulohou, on the evening of 29 November. At least two heard at forest edge near Mt. Kpeya during the nights of 10–12 December. A rare resident in Togo, previously known only from two specimens (Cheke & Walsh 1996). Also documented in Kyobobo National Park, eastern Ghana (Dowsett-Lemaire & Dowsett 2007).

Abyssinian Ground Hornbill *Bucorvus abyssinicus*
A pair in wooded savanna *c.*10 km north of Fazao on 10 December. Rare resident, in Togo now almost entirely restricted to Fazao-Malfakassa and Keran National Parks (Cheke & Walsh 1996).

Double-toothed Barbet *Lybius bidentatus* and **Bearded Barbet** *Lybius dubius*
One *L. bidentatus* calling in a wooded, semi-cultivated area along a small stream near the Koue River, at the south-western boundary of the park, on 24 November. One *L. dubius* observed calling in open woodland on the north bank of the Mô River, at the north-eastern boundary of the park, on 5 December. Unlike reports of these two species by Dowsett-Lemaire & Dowsett (2007) at Kyobobo National Park, we did not observe them in close proximity to one another, but at the northern (*L. dubius*) and southern (*L. bidentatus*) extremities of our survey area.

Western Olivaceous Warbler *Hippolais opaca*
One seen in wooded habitat near Boulohou on 16 November. Earliest record of this uncommon Palearctic migrant in Togo: Cheke & Walsh (1996) give 25 November as the earliest date.

White-browed Forest Flycatcher *Fraseria cinerascens*
One perching low in tangled vegetation in a patch of closed-canopy forest along the Sékou River (Fig. 5), near Souroukou (08°45'N 00°40'E), on 11 November. Observed from 6 m for *c.*8 minutes and identified by its slate-grey upperparts and tail, whitish underparts with a pale grey wash and blackish scalloping on the breast, blackish forecrown, lores and ear-coverts, and a clean white supraloral spot extending above the eye. Not previously recorded in Togo. Dowsett-Lemaire & Dowsett (2007) list this species as a rare resident in nearby Kyabobo National Park in eastern Ghana, part of which shares a border with Fazao-Malfakassa.



Gambaga Flycatcher *Muscicapa gambagae*
One hawking insects in a small cultivated area within open woodland habitat a few km from Fazao, on 1 November. Identification was based on the grey-brown head and upperparts, and whitish underparts with very faintly streaked upper breast (Spotted Flycatcher *M. striata* has a more heavily streaked breast). An uncommon res-

ident of Northern Guinea Savanna (Cheke & Walsh 1996), our observation requires confirmation.

Lead-coloured Flycatcher *Myioparus plumbeus*
One at the edge of riparian forest *c.*4 km north of Fazao on 31 October. Cheke & Walsh (1996) list this species as a scarce resident in Togo. However, Dowsett-Lemaire & Dowsett (2007) report it to be the commonest flycatcher in Kyobobo National Park, eastern Ghana.

Brubru *Nilaus afer*
Two singing in savanna several km south of Bounako on 6 December and one foraging in wooded savanna south of Mt. Kpeya on 13 December. Listed as a very scarce resident with only three recent records by Cheke & Walsh (1996). Also known from Kyobobo National Park, eastern Ghana (Dowsett-Lemaire & Dowsett 2007).

Eurasian Golden Oriole *Oriolus oriolus*
One in woodland broken by cultivation a few km west of Fazao on 6 November. The black wings were clearly observed. Only three previous records of this Palearctic migrant to Togo are mentioned by Cheke & Walsh (1996).

Exclamatory Paradise Whydah *Vidua interjecta*
Single males in breeding plumage seen at Fazao on 29 October, at Tchitchako on 27 November, and at Bounako on 3 December. Identified by the relatively dark maroon nape and the broad, rather blunt-ended tail streamers (as broad as, or broader than, the bird's body in flight). Red-winged Pytilia *Pytilia phoenicoptera*, the species' host, was found in the park during our survey. Status in Togo uncertain but probably an uncommon resident (Cheke & Walsh 1996). Togo Paradise Whydah *V. togoensis* might also occur in the park as the species it parasitises, Yellow-winged Pytilia *Pytilia hypogrammica*, is present.

Captions to photos on opposite page

Figure 1. Savanna woodland and dry forest, Fazao-Malfakassa National Park, November 2005 (P. M. Radley)

Savane arborée et forêt sèche, Parc National de Fazao-Malfakassa, novembre 2005 (P. M. Radley)

Figure 2. Dry forest north of Tchitchako, Fazao-Malfakassa National Park, November 2005 (P. M. Radley)

Forêt sèche au nord de Tchitchako, Parc National de Fazao-Malfakassa, novembre 2005 (P. M. Radley)

Figure 3. Riparian habitat along the Kpaza River, Fazao-Malfakassa National Park, 23 November 2005 (P. M. Radley)

Végétation riveraine le long de la Kpaza, Parc National de Fazao-Malfakassa, 23 novembre 2005 (P. M. Radley)

Figure 4. Cultivated woodland near Fazao, Fazao-Malfakassa National Park, 1 November 2005 (P. M. Radley)

Zone arborée et cultivée près de Fazao, Parc National de Fazao-Malfakassa, 1 novembre 2005 (P. M. Radley)

Figure 5. Habitat in which White-browed Forest Flycatcher *Fraseria cinerascens* was found, Fazao-Malfakassa National Park: (A) Riparian forest and waterfall *c.*2 km south-east of Boulohou that feeds into the Sékou River; (B) Riparian forest along the Sékou River, 18 November 2005 (P. M. Radley)

Habitat dans lequel le Gobemouche à sourcils blancs *Fraseria cinerascens* a été trouvé, Parc National de Fazao-Malfakassa : (A) Forêt riveraine et chutes environ 2 km sud-est de Boulohou dont l'eau se jette dans la rivière Sékou ; (B) Forêt riveraine le long de la Sékou, 18 novembre 2005 (P. M. Radley)

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Appendix 1. Bird species recorded in Fazao-Malfakassa National Park, 27 October–13 December 2006.
Annexe 1. Espèces d'oiseaux observées dans le Parc national de Fazao-Malfakassa, 27 octobre–13 décembre 2006.

Family / *Species*			**Biome**	**Abundance**	**Migrant/Date**
Ardeidae					
Tigriornis leucolopha	White-crested Tiger Heron	Onoré à huppe blanche	GCF	R	
Bubulcus ibis	Cattle Egret	Héron garde-bœufs		F	AM, 27 Oct
Butorides striata	Green-backed Heron	Héron strié		F	
Egretta garzetta	Little Egret	Aigrette garzette		U	
Ardea purpurea	Purple Heron	Héron pourpré		R	
Ardea cinerea	Grey Heron	Héron cendré		F	
Scopidae					
Scopus umbretta	Hamerkop	Ombrette africaine		C	
Ciconiidae					
Ciconia nigra	Black Stork	Cigogne noire		R	PM, 11 Dec
Ciconia ciconia	White Stork	Cigogne blanche		R	PM, 5 Nov
Threskiornithidae					
Plegadis falcinellus	Glossy Ibis	Ibis falcinelle		R	PM, 3 Dec
Accipitridae					
Milvus migrans	Black Kite	Milan noir		C	AM, 27 Oct
Gypohierax angolensis	Palm-nut Vulture	Palmiste africain		F	
Necrosyrtes monachus	Hooded Vulture	Vautour charognard		U	
Gyps africanus	African White-backed Vulture	Vautour africain		R	
Terathopius ecaudatus	Bateleur	Bateleur des savanes		R	
Polyboroides typus	African Harrier Hawk	Gymnogène d'Afrique		F	
Micronisus gabar	Gabar Goshawk	Autour gabar		R	
Accipiter tachiro	African Goshawk	Autour tachiro		R	
Accipiter badius	Shikra	Epervier shikra		F	
Accipiter erythropus	Red-thighed Sparrowhawk	Epervier de Hartlaub	GCF	R	
Accipiter melanoleucus	Black Sparrowhawk	Autour noir		R	
Kaupifalco monogrammicus	Lizard Buzzard	Autour unibande		F	
Buteo auguralis	Red-necked Buzzard	Buse d'Afrique		F	
Spizaetus africanus	Cassin's Hawk Eagle	Aigle de Cassin	GCF	U	
Polemaetus bellicosus	Martial Eagle	Aigle martial		U	
Falconidae					
Falco alopex	Fox Kestrel	Crécerelle renard	SGS	U	
Falco chicquera	Red-necked Falcon	Faucon chicquera		R	
Falco biarmicus	Lanner Falcon	Faucon lanier		U	
Falco peregrinus	Peregrine Falcon	Faucon pèlerin		R	
Phasianidae					
Ptilopachus petrosus	Stone Partridge	Poule de roche		C	

Francolinus ahantensis	Ahanta Francolin	Francolin d'Ahanta	GCF	F	
Francolinus bicalcaratus	Double-spurred Francolin	Francolin à double éperon		F	
Numididae					
Numida meleagris	Helmeted Guineafowl	Pintade de Numidie		U	
Rallidae					
Amaurornis flavirostra	Black Crake	Râle à bec jaune		R	
Burhinidae					
Burhinus senegalensis	Senegal Thick-knee	Oedicnème du Sénégal		R	
Charadriidae					
Vanellus spinosus	Spur-winged Lapwing	Vanneau à éperons		R	
Scolopacidae					
Tringa ochropus	Green Sandpiper	Chevalier culblanc		C	PM, 23 Nov
Actitis hypoleucos	Common Sandpiper	Chevalier guignette		C	PM, 23 Nov
Columbidae					
Treron calvus	African Green Pigeon	Colombar à front nu		C	
Turtur tympanistria	Tambourine Dove	Tourtelette tambourette		R	
Turtur afer	Blue-spotted Wood Dove	Tourtelette améthystine		F	
Turtur abyssinicus	Black-billed Wood Dove	Tourtelette d'Abyssinie		R	
Streptopelia semitorquata	Red-eyed Dove	Tourterelle à collier		F	
Streptopelia vinacea	Vinaceous Dove	Tourterelle vineuse		C	
Psittacidae					
Poicephalus senegalus	Senegal Parrot	Perroquet youyou	SGS	F	
Psittacula krameri	Rose-ringed Parakeet	Perruche à collier		U	
Musophagidae					
Tauraco persa	Green Turaco	Touraco vert	GCF	C	
Musophaga violacea	Violet Turaco	Touraco violet	SGS	U	
Crinifer piscator	Western Grey Plantain-eater	Touraco gris		F	
Cuculidae					
Chrysococcyx klaas	Klaas's Cuckoo	Coucou de Klaas		U	AM, 30 Nov
Ceuthmochares aereus	Yellowbill	Malcoha à bec jaune		R	
Centropus senegalensis	Senegal Coucal	Coucal du Sénégal		C	
Tytonidae					
Tyto alba	Barn Owl	Effraie des clochers		U	
Strigidae					
Otus senegalensis	African Scops Owl	Petit-duc africain		F	
Bubo cinerascens	Greyish Eagle Owl	Grand-duc du Sahel		F	
Glaucidium perlatum	Pearl-spotted Owlet	Chevêchette perlée		R	
Strix woodfordii	African Wood Owl	Chouette africaine		F	
Caprimulgidae					
Caprimulgus climacurus	Long-tailed Nightjar	Engoulevent à longue queue		U	
Caprimulgus nigriscapularis	Black-shouldered Nightjar	Engoulevent à épaulette noires	GCF	R	
Apodidae					
Telacanthura ussheri	Mottled Spinetail	Martinet d'Ussher		F	
Cypsiurus parvus	African Palm Swift	Martinet des palmes		F	
Apus affinis	Little Swift	Martinet des maisons		F	
Tachymarptis melba	Alpine Swift	Martinet à ventre blanc		R	AM, 12 Dec
Trogonidae					
Apaloderma narina	Narina's Trogon	Trogon narina		R	
Alcedinidae					
Halcyon leucocephala	Grey-headed Kingfisher	Martin-chasseur à tête grise		F	AM, 31 Oct
Halcyon malimbica	Blue-breasted Kingfisher	Martin-chasseur à poitrine bleue		F	
Halcyon chelicuti	Striped Kingfisher	Martin-chasseur strié		F	
Alcedo cristata	Malachite Kingfisher	Martin-pêcheur huppé		U	
Alcedo quadribrachys	Shining-blue Kingfisher	Martin-pêcheur azuré			U
Megaceryle maxima	Giant Kingfisher	Martin-pêcheur géant		R	
Meropidae					
Merops pusillus	Little Bee-eater	Guêpier nain		R	
Merops bulocki	Red-throated Bee-eater	Guêpier à gorge rouge	SGS	F	
Merops albicollis	White-throated Bee-eater	Guêpier à gorge blanche		R	AM, 28 Nov
Merops apiaster	European Bee-eater	Guêpier d'Europe		R	PM, 22 Nov
Merops nubicus	Northern Carmine Bee-eater	Guêpier écarlate		R	AM, 13 Nov

Coraciidae					
Coracias naevius	Rufous-crowned Roller	Rollier varié		U	AM, 8 Dec
Coracias cyanogaster	Blue-bellied Roller	Rollier à ventre bleu	SGS	R	
Eurystomus glaucurus	Broad-billed Roller	Rolle violet		U	AM, 6 Nov
Phoeniculidae					
Phoeniculus purpureus	Green Wood-hoopoe	Irrisor moqueur		R	
Rhinopomastus aterrimus	Black Wood-hoopoe	Irrisor noir		R	
Bucerotidae					
Bucorvus abyssinicus	Abyssinian Ground Hornbill	Bucorve d'Abyssinie		R	
Tockus fasciatus	African Pied Hornbill	Calao longibande	GCF	C	
Tockus nasutus	African Grey Hornbill	Calao à bec noir		C	
Bycanistes fistulator	Piping Hornbill	Calao siffleur	GCF	U	
Capitonidae					
Pogoniulus bilineatus	Yellow-rumped Tinkerbird	Barbion à croupion jaune		C	
Pogoniulus chrysoconus	Yellow-fronted Tinkerbird	Barbion à front jaune		C	
Lybius vieilloti	Vieillot's Barbet	Barbican de Vieillot		U	
Lybius bidentatus	Double-toothed Barbet	Barbican bidenté		U	
Lybius dubius	Bearded Barbet	Barbican à poitrine rouge	SGS	U	
Indicatoridae					
Indicator indicator	Greater Honeyguide	Grand Indicateur		R	
Indicator minor	Lesser Honeyguide	Petit Indicateur		R	
Picidae					
Campethera punctuligera	Fine-spotted Woodpecker	Pic à taches noires		R	
Campethera cailliautii	Green-backed Woodpecker	Pic de Cailliaut		U	
Dendropicos fuscescens	Cardinal Woodpecker	Pic cardinal		R	
Dendropicos goertae	Grey Woodpecker	Pic goertan		U	
Dendropicos obsoletus	Brown-backed Woodpecker	Pic à dos brun		R	
Alaudidae					
Pinarocorys erythropygia	Rufous-rumped Lark	Alouette à queue rousse		R	AM, 13 Dec
Hirundinidae					
Psalidoprocne obscura	Fanti Saw-wing	Hirondelle fanti	GCF	U	AM, 31 Oct
Hirundo abyssinica	Lesser Striped Swallow	Hirondelle à gorge striée		R	AM, 5 Dec
Hirundo daurica	Red-rumped Swallow	Hirondelle rousseline		R	AM, 26 Nov
Hirundo fuligula	Rock Martin	Hirondelle isabelline		U	
Hirundo smithii	Wire-tailed Swallow	Hirondelle à longs brins		U	
Hirundo lucida	Red-chested Swallow	Hirondelle de Guinée		R	
Hirundo rustica	Barn Swallow	Hirondelle rustique		U	PM, 28 Oct
Delichon urbicum	Common House Martin	Hirondelle de fenêtre		U	PM, 4 Nov
Motacillidae					
Motacilla flava	Yellow Wagtail	Bergeronnette printanière		U	PM, 23 Nov
Anthus sp.	Pipit sp.	Pipit sp.		R	
Campephagidae					
Coracina pectoralis	White-breasted Cuckooshrike	Échenilleur à ventre blanc		R	
Pycnonotidae					
Andropadus virens	Little Greenbul	Bulbul verdâtre		R	
Baeopogon indicator	Honeyguide Greenbul	Bulbul à queue blanche	GCF	U	
Pyrrhurus scandens	Leaflove	Bulbul à queue rousse	GCF	C	
Pycnonotus barbatus	Common Bulbul	Bulbul des jardins		C	
Nicator chloris	Western Nicator	Bulbul nicator	GCF	R	
Turdidae					
Cossypha niveicapilla	Snowy-crowned Robin Chat	Cossyphe à calotte neigeuse		R	
Cercomela familiaris	Familiar Chat	Traquet familier		U	
Myrmecocichla albifrons	White-fronted Black Chat	Traquet à front blanc	SGS	R	
Turdus pelios	African Thrush	Merle africain		F	
Sylviidae					
Melocichla mentalis	African Moustached Warbler	Mélocichle à moustaches		R	
Acrocephalus scirpaceus	Eurasian Reed Warbler	Rousserolle effarvatte		U	PM, 28 Nov
Acrocephalus arundinaceus	Great Reed Warbler	Rousserolle turdoïde		U	PM, 29 Nov
Hippolais opaca	Western Olivaceous Warbler	Hypolaïs pale		R	PM, 16 Nov
Hippolais polyglotta	Melodious Warbler	Hypolaïs polyglotte		F	PM, 15 Nov
Cisticola cantans	Singing Cisticola	Cisticole chanteuse		U	
Cisticola lateralis	Whistling Cisticola	Cisticole siffleuse		U	
Cisticola aberrans	Rock-loving Cisticola	Cisticole paresseuse		R	

Cisticola brachypterus	Short-winged Cisticola	Cisticole à ailes courtes		R	
Prinia subflava	Tawny-flanked Prinia	Prinia modeste		C	
Camaroptera brachyura	Grey-backed Camaroptera	Camaroptère à tête grise		C	
Eremomela pusilla	Senegal Eremomela	Érémomèle à dos vert	SGS	C	
Sylvietta brachyura	Northern Crombec	Crombec sitelle		R	
Sylvietta virens	Green Crombec	Crombec vert	GCF	U	
Phylloscopus trochilus	Willow Warbler	Pouillot fitis		R	PM, 6 Dec
Hypergerus atriceps	Oriole Warbler	Noircap loriot	SGS	R	
Muscicapidae					
Fraseria cinerascens	White-browed Forest Flycatcher	Gobemouche à sourcils blancs	GCF	R	
Melaenornis edolioides	Northern Black Flycatcher	Gobemouche drongo		U	
Muscicapa gambagae	Gambaga Flycatcher	Gobemouche de Gambaga	SGS	R	
Myioparus plumbeus	Lead-coloured Flycatcher	Gobemouche mésange		R	
Ficedula hypoleuca	European Pied Flycatcher	Gobemouche noir		C	PM, 11 Nov
Monarchidae					
Elminia longicauda	African Blue Flycatcher	Tchitrec bleu		U	
Terpsiphone viridis	African Paradise Flycatcher	Tchitrec d'Afrique		F	
Platysteiridae					
Megabyas flammulatus	Shrike Flycatcher	Bias écorcheur	GCF	U	
Platysteira cyanea	Common Wattle-eye	Pririt à collier		U	
Batis senegalensis	Senegal Batis	Pririt du Sénégal		U	
Timaliidae					
Illadopsis fulvescens	Brown Illadopsis	Akalat brun	GCF	R	
Turdoides plebejus	Brown Babbler	Cratérope brun		U	
Turdoides reinwardtii	Blackcap Babbler	Cratérope à tête noire	SGS	R	
Phyllanthus atripennis	Capuchin Babbler	Phyllanthe capucin	GCF	R	
Paridae					
Parus guineensis	White-shouldered Black Tit	Mésange à épaulettes		U	
Nectariniidae					
Cyanomitra verticalis	Green-headed Sunbird	Souimanga à tête verte		U	
Cyanomitra olivacea	Olive Sunbird	Souimanga olivâtre		R	
Chalcomitra adelberti	Buff-throated Sunbird	Souimanga à gorge rousse	GCF	R	
Chalcomitra senegalensis	Scarlet-chested Sunbird	Souimanga à poitrine rouge		U	
Hedydipna collaris	Collared Sunbird	Souimanga à collier		C	
Hedydipna platura	Pygmy Sunbird	Souimanga pygmée		U	AM, 30 Nov
Cinnyris venustus	Variable Sunbird	Souimanga à ventre jaune		C	
Cinnyris superbus	Superb Sunbird	Souimanga superbe	GCF	U	
Cinnyris coccinigastrus	Splendid Sunbird	Souimanga éclatant	SGS	R	
Cinnyris cupreus	Copper Sunbird	Souimanga cuivré		R	
Zosteropidae					
Zosterops senegalensis	Yellow White-eye	Zostérops jaune		R	
Laniidae					
Corvinella corvina	Yellow-billed Shrike	Corvinelle à bec jaune	SGS	R	
Malaconotidae					
Malaconotus sulfureopectus	Sulphur-breasted Bushshrike	Gladiateur soufré		R	
Antichromus minutus	Marsh Tchagra	Tchagra des marais		F	
Tchagra senegalus	Black-crowned Tchagra	Tchagra à tête noire		F	
Dryoscopus gambensis	Northern Puffback	Cubla de Gambie		F	
Laniarius aethiopicus	Tropical Boubou	Gonolek d'Abyssinie		F	
Nilaus afer	Brubru	Brubru africain		U	
Prionopidae					
Prionops plumatus	White Helmetshrike	Bagadais casqué		F	
Oriolidae					
Oriolus nigripennis	Black-winged Oriole	Loriot à ailes noires	GCF	U	
Oriolus auratus	African Golden Oriole	Loriot doré		F	AM, 31 Oct
Oriolus oriolus	Eurasian Golden Oriole	Loriot d'Europe		R	PM, 5 Nov
Dicruridae					
Dicrurus ludwigii	Square-tailed Drongo	Drongo de Ludwig		F	
Dicrurus adsimilis	Fork-tailed Drongo	Drongo brillant		F	
Corvidae					
Ptilostomus afer	Piapiac	Piapiac africain	SGS	R	
Sturnidae					
Lamprotornis purpureus	Purple Glossy Starling	Choucador pourpré	SGS	R	

Lamprotornis chalcurus	Bronze-tailed Glossy Starling	Choucador à queue violette	SGS	R	
Lamprotornis chloropterus	Lesser Blue-eared Starling	Choucador de Swainson		F	
Lamprotornis splendidus	Splendid Glossy Starling	Choucador splendide		R	
Passeridae					
Petronia dentata	Bush Petronia	Petit Moineau	SGS	F	AM, 3 Nov
Ploceidae					
Ploceus heuglini	Heuglin's Masked Weaver	Tisserin masque	SGS	U	
Ploceus cucullatus	Village Weaver	Tisserin gendarme		C	
Ploceus nigricollis	Black-necked Weaver	Tisserin à cou noir		R	
Anaplectes rubriceps	Red-headed Weaver	Tisserin écarlate		R	
Quelea erythrops	Red-headed Quelea	Travailleur à tête rouge		U	AM, 4 Nov
Euplectes hordeaceus	Black-winged Bishop	Euplecte monseigneur		U	
Euplectes franciscanus	Northern Red Bishop	Euplecte franciscain		U	
Euplectes macroura	Yellow-mantled Widowbird	Euplecte à dos d'or		R	
Estrildidae					
Nesocharis capistrata	Grey-headed Oliveback	Dos-vert à joues blanches	SGS	R	
Pytilia hypogrammica	Yellow-winged Pytilia	Beaumarquet à ailes jaunes	SGS	R	
Pytilia phoenicoptera	Red-winged Pytilia	Beaumarquet aurore	SGS	R	
Lagonosticta senegala	Red-billed Firefinch	Amarante du Sénégal		F	
Lagonosticta rara	Black-bellied Firefinch	Amarante à ventre noir	SGS	F	
Lagonosticta larvata	Black-faced Firefinch	Amarante masqué	SGS	R	
Estrilda melpoda	Orange-cheeked Waxbill	Astrild à joues oranges		F	
Spermestes cucullatus	Bronze Mannikin	Capucin nonnette		C	
Viduidae					
Vidua macroura	Pin-tailed Whydah	Veuve dominicaine		U	
Vidua interjecta	Exclamatory Paradise Whydah	Veuve d'Uelle	SGS	U	
Fringillidae					
Serinus mozambicus	Yellow-fronted Canary	Serin du Mozambique		F	
Emberizidae					
Emberiza tahapisi	Cinnamon-breasted Rock Bunting	Bruant cannelle		F	AM, 29 Oct
Emberiza cabanisi	Cabanis's Bunting	Bruant de Cabanis		U	

[1] = Requires confirmation

Biome
SGS = restricted to the Sudan-Guinea Savanna biome (24 species)
GCF = restricted to the Guinea-Congo Forests biome (20 species)

Migrant/Date
PM = Palearctic Migrant
AM = Intra-African Migrant

Abundance
C = Common: observed daily, either singly or in numbers
F = Fairly common: observed on most days
U = Uncommon: irregularly observed and not on the majority of days
R = Rare: rarely observed, one or two records of single individuals.

Appendix 2. Additional bird species previously reported from Fazao-Malfakassa National Park.
Annexe 2. Espèces d'oiseaux rapportées auparavant pour le Parc national de Fazao-Malfakassa par d'autres chercheurs.

Family/*Species*			Biome	Reference
Ardeidae				
Nycticorax nycticorax	Black-crowned Night Heron	Bihoreau gris		MEPFT 2001
Ciconiidae				
Ciconia episcopus	Woolly-necked Stork	Cigogne épiscopale		MEPFT 2001
Threskiornithidae				
Bostrychia hagedash	Hadada Ibis	Ibis hagedash		Cheke & Walsh 1996
Anatidae				
Dendrocygna bicolor	Fulvous Whistling Duck	Dendrocygne fauve		MEPFT 2001
Dendrocygna viduata	White-faced Whistling Duck	Dendrocygne veuf		MEPFT 2001
Pandionidae				
Pandion haliaetus	Osprey	Balbusard pêcheur		MEPFT 2001
Accipitridae				
Neophron percnopterus	Egyptian Vulture	Percnoptère d'Égypte		Cheke & Walsh 1996
Pernis apivorus	European Honey Buzzard	Bondrée apivore		R. Cheke *in litt.* 2006
Aquila rapax	Tawny Eagle	Aigle ravisseur		Cheke & Walsh 1996
Hieraaetus pennatus	Booted Eagle	Aigle botté		R. Cheke *in litt.* 2006
Hieraaetus ayresii	Ayres's Hawk Eagle	Aigle d'Ayres		Cheke & Walsh 1996
Stephanoaetus coronatus	Crowned Eagle	Aigle couronné		R. Cheke *in litt.* 2006

Numididae				
Guttera pucherani	Crested Guineafowl	Pintade huppée		Cheke & Walsh 1996
Rallidae				
Porphyrio porphyrio	Purple Swamphen	Talève sultane		MEPFT 2001
Gallinula chloropus	Common Moorhen	Gallinule poule-d'eau		MEPFT 2001
Heliornithidae				
Podica senegalensis	African Finfoot	Grébifoulque		Cheke & Walsh 1996
Otididae				
Lissotis melanogaster	Black-bellied Bustard	Outarde à ventre noir		Cheke & Walsh 1996
Jacanidae				
Actophilornis africana	African Jacana	Jacana à poitrine dorée		MEPFT 2001
Recurvirostridae				
Recurvirostra avosetta	Pied Avocet	Avocette élégante		MEPFT 2001
Glareolidae				
Pluvianus aegyptius	Egyptian Plover	Pluvian fluviatile		MEPFT 2001
Scolopacidae				
Tringa glareola	Wood Sandpiper	Chevalier sylvain		MEPFT 2001
Sternidae				
Chlidonias leucopterus	White-winged Tern	Guifette leucoptère		MEPFT 2001
Columbidae				
Treron waalia	Bruce's Green Pigeon	Colombar waalia		Cheke & Walsh 1996
Columba guinea	Speckled Pigeon	Pigeon roussard		MEPFT 2001
Streptopelia senegalensis	Laughing Dove	Tourterelle à collier		MEPFT 2001
Musophagidae				
Corythaeola cristata	Great Blue Turaco	Touraco géant		Cheke & Walsh 1996
Apodidae				
Apus apus	Common Swift	Martinet noir		R. Cheke *in litt.* 2006
Apus caffer	White-rumped Swift	Martinet cafre		R. Cheke *in litt.* 2006
Alcedinidae				
Ceryle rudis	Pied Kingfisher	Martin-pêcheur pie		MEPFT 2001
Coraciidae				
Coracias abyssinicus	Abyssinian Roller	Rollier d'Abyssinie		R. Cheke *in litt.* 2006
Bucerotidae				
Ceratogymna elata	Yellow-casqued Hornbill	Calao à casque jaune	GCF*	Cheke & Walsh 1996
Indicatoridae				
Indicator maculatus	Spotted Honeyguide	Indicateur tacheté	GCF	Cheke 2001
Picidae				
Jynx torquilla	Eurasian Wryneck	Torcol fourmilier		Cheke & Walsh 1996
Hirundinidae				
Hirundo senegalensis	Mosque Swallow	Hirondelle des mosquées		R. Cheke *in litt.* 2006
Hirundo aethiopica	Ethiopian Swallow	Hirondelle d'Ethiopie		Cheke & Walsh 1996
Motacillidae				
Motacilla aguimp	African Pied Wagtail	Bergeronnette pie		R. Cheke *in litt.* 2006
Pycnonotidae				
Thescelocichla leucopleura	Swamp Palm Bulbul	Bulbul des raphias	GCF	Cheke & Walsh 1996
Turdidae				
Neocossyphus poensis	White-tailed Ant Thrush	Néocossyphe à queue blanche	GCF	Cheke & Walsh 1996
Saxicola rubetra	Whinchat	Tarier des prés		R. Cheke *in litt.* 2006
Sylviidae				
Heliolais erythroptera	Red-winged Warbler	Prinia à ailes rousses		Cheke & Walsh 1996
Muscicapidae				
Melaenornis pallidus	Pale Flycatcher	Gobemouche pâle		Cheke & Walsh 1996
Sturnidae				
Cinnyricinclus leucogaster	Violet-backed Starling	Spréo améthyste		Cheke & Walsh 1996
Passeridae				
Passer griseus	Northern Grey-headed Sparrow	Moineau gris		Cheke & Walsh 1996

Biome

GCF = restricted to the Guinea-Congo Forests biome (four species). No species restricted to the Sudan-Guinea Savanna biome.

Selected notes on birds of Gola Forest and surroundings, Sierra Leone, including three new species for the country

Françoise Dowsett-Lemaire and Robert J. Dowsett

Notes sur certaines espèces d'oiseaux de la Forêt de Gola et des environs, Sierra Leone, y compris trois espèces nouvelles pour le pays. La Forêt de Gola forme deux blocs totalisant 750 km² de forêt ombrophile sempervirente et est la plus grande forêt protégée actuellement en Sierra Leone. Son avifaune était connue essentiellement par les travaux de Allport *et al.* (1989). Suite à une enquête faunistique de cinq semaines (22 janvier–28 février 2007), nous présentons des observations concernant *c.*50 des 236 espèces notées, notamment celles non ou rarement rapportées par Allport *et al.*, et des détails originaux sur le comportement et les vocalisations. Trois espèces sont nouvelles ou confirmées pour le pays (Inséparable à collier noir *Agapornis swindernianus*, Coucal à nuque bleue *Centropus monachus* et Martinet de Bates *Apus batesi*); une quatrième (le Souimanga de Bates *Nectarinia batesi*) a presque certainement été entendue mais une observation visuelle nous semble nécessaire pour confirmer sa présence. Nous apportons aussi des indications sur la saison de reproduction et soulignons l'importance de la forêt pour la conservation de certaines espèces menacées, notamment La Pintade à poitrine blanche *Agelastes meleagrides* (localement commune), la Chouette-pêcheuse rousse *Scotopelia ussheri* (apparemment assez répandue), et le Malimbe de Gola *Malimbus ballmanni* redécouvert dans une partie de Gola Nord en 2007, plus de 30 ans après sa découverte.

Summary. Based on five weeks of field work in January–February 2007 observations on status, voice and behaviour are presented for some 50 selected species of Gola Forest, Sierra Leone, including those un- or under-recorded by Allport *et al.* (1989). Three are new or confirmed for the country: Black-collared Lovebird *Agapornis swindernianus*, Blue-headed Coucal *Centropus monachus* and Bates's Swift *Apus batesi*, whilst a fourth, Bates's Sunbird *Nectarinia batesi*, has almost certainly been heard but visual confirmation is required. The highlight was the rediscovery of Gola Malimbe *Malimbus ballmanni* in a section of Gola North, more than 30 years after it was first found. We underline the importance of the forest for the conservation of several threatened species. Full details, including breeding and moult records, are available from the authors.

Gola Forest is the largest remnant of evergreen rain forest in Sierra Leone, and is close to the western limit of this forest type in West Africa. It covers some 750 km², in two main blocks: Gola West/East (separated by the main Kenema road) in the south, and Gola North to the north-east (Fig. 1). The altitude is *c.*100–250 m, with some hills reaching 350 m or a little higher. The largest river is the Mahoi, in the south, while Mogbai stream is the most important watercourse draining Gola North. They both flow into the Moro (Mano) River on the border with Liberia. There is a single rainy season, from May to November. Annual rainfall in Gola Forest is probably *c.*3,000 mm.

The bulk of our knowledge of the avifauna of Gola Forest comes from Allport *et al.* (1989), who spent nearly five months in the forest and its environs, from 8 October 1988 to 26 February 1989. They recorded most of the Upper Guinea endemics; the highlight of their work was the discovery of Nimba Flycatcher *Melaenornis annamarulae*, new for Sierra Leone (and then only recently described, from Liberia by Forbes-Watson 1970). On the other hand they did not find any Gola Malimbe *Malimbus ballmanni*, an equally rare species discovered in 1971 by G. Field (Field 1979), just prior to it being described from western Côte d'Ivoire (Wolters 1974).

We visited Gola Forest from 22 January to 28 February 2007, spending 32 full days in the forest reserve. We divided our time between Gola East and the margins of adjacent Gola West (15 days), and Gola North (19 days, including two around Lalehun village outside the reserve). Localities visited are shown in Fig. 1. Most of our observations

were opportunistic, such as systematic investigation of bird parties. A small amount of mist-netting was undertaken at five locations. We did not visit Tiwai Island to the west, which is not strictly speaking part of Gola Forest Reserve.

Floristically, the forest is dominated by Leguminosae (Caesalpiniaceae, Mimosaceae) and falls entirely within the evergreen rain forest belt. The tree *Heritiera utilis* (Sterculiaceae) is also endemic to this belt; it is very common and has been much exploited in the past. Selective logging took place in the 1970s and 1980s, with some also in 2000–02, near Sileti and Lalehun. In the hills above Belebu there was only limited logging by villagers, but many trees were felled by hurricanes. Thus the forest canopy around Belebu and on some other hilltops is largely open, with huge clearings invaded by secondary tangles. Near Sileti and the Mahoi bridge logged forest is recovering fast, but the 'canopy' can be as low as 10–15 m in places, with scattered large trees, and the understorey is very dense. A substantial section of Gola North was never logged (e.g. between Pandebu junction and Konella), but even there the structure of the forest is not what one would expect of primary forest. There are some tracts of tall, closed-canopy forest (25–30 m), with taller emergents, but also some large areas with a lower canopy, or gaps not easily explained by treefalls. There is some evidence that small sections of this forest were cultivated in the early 19th century (Unwin 1909). The forest is bordered locally by a few freshwater marshes in valley bottoms.

We recorded 236 species in Gola (21 strictly speaking outside the reserve, as in secondary forest at Lalehun). Of these we present information on

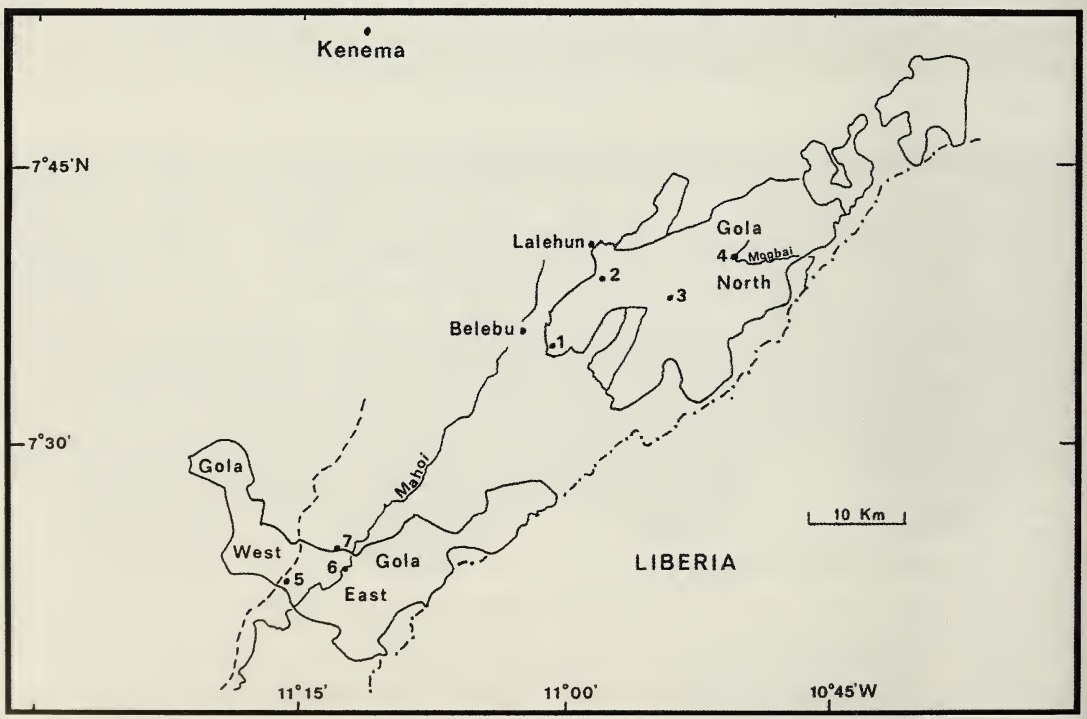

Figure 1. Map of Gola Forest. Gola West is separated from Gola East by the road (dashed line). Localities visited: 1 = Ngbonkelekei Hill; 2 = Lalehun DFO (old site of district forest office); 3 = Pandebu junction; 4 = Konella; 5 = Sileti camp; 6 = Mahoi bridge; 7 = Tunkia Nema.

Carte de la Forêt de Gola. 'Gola West' est séparé de 'Gola East' par la route (ligne hachurée). Localités visitées : 1 = Ngbonkelekei Hill ; 2 = Lalehun DFO (ancien site du bureau forestier du district) ; 3 = Pandebu junction ; 4 = Konella ; 5 = camp de Sileti ; 6 = pont sur la rivière Mahoi ; 7 = Tunkia Nema.

*c.*50 species, including those un- or under-recorded by Allport *et al.* (1989), but also describe little-known vocalisations or behaviour. Three species appear to be new or confirmed for the avifauna of Sierra Leone (Dowsett 1993). Our report (with a full annotated species list: Dowsett-Lemaire & Dowsett 2007b) can be obtained from us in the form of a PDF.

Notes on selected species

Hadada Ibis *Bostrychia hagedash*
The only ibis identified in Gola to date, with observations of singles or pairs on riverbanks in Gola East (three sites). Allport *et al.* (1989) noted four 'Ibis sp.' only once, without mentioning a locality. Although swamp forest is of limited extent in Gola, one might expect Spot-breasted Ibis *B. rara* to occur, but it has not yet been found in Sierra Leone (A. Siaka pers. comm.).

Congo Serpent Eagle *Dryotriorchis spectabilis*
Fairly vocal in January–February, when it sang mostly in the first two hours of morning, but also (the longer call, *cf.* Chappuis 2000) in late morning. Heard/seen on 15 of 32 days. At Sileti the local territorial bird was seen flying to different sections of its territory on each morning (to call); in more closed forest, this means the calling bird could be more easily missed. Other locations include Mahoi bridge, Tunkia Nema (forest edges), Belebu (forest edges), Pandebu junction (forest clearing) and Mogbai stream. Not reported by Allport *et al.* themselves, but noted by G. Field (*in* Allport *et al.* 1989: 81).

Ahanta Francolin *Francolinus ahantensis*
A marginal species of forest edges and second growth (Sileti, Belebu, Lalehun), calling mainly at night in January–February. Allport *et al.* (1989) noted only Double-spurred Francolin *F. bicalcaratus* in this habitat type (also present, especially in dry farmbush).

White-breasted Guineafowl *Agelastes meleagrides*
Vulnerable (BirdLife International 2004). Allport *et al.* (1989) met the species several times in Gola North and Gola East, mainly as small groups (2–5), the two largest numbering 12 and 14 birds (November and December). We came across two large groups in Gola North, the second (on 27 February) being attracted into view by a small amount of playback: the birds were moving away but returned soon after we started playing a few seconds of calls, apparently looking for the 'intruders'. Some birds with bright red heads, unlike the pink heads of other birds present, fought between themselves, in 'pairs'. They flew up vertically and kicked each other like cocks. They did this a few times, then calmed down, and the whole group (*c.*20, all adults) walked back in the direction they came from. One may suppose that birds with red heads were males, based on their aggressive behaviour. Sexual dimorphism in head colour is not mentioned in the literature: Urban *et al.* (1986) write that sexes are alike, and more recent studies (including a detailed survey in Côte d'Ivoire: Francis *et al.* 1992) have apparently not observed this interesting feature.

Crested Guineafowl *Guttera pucherani*
Seen, heard or feathers found in four locations (Sileti and in Gola North). Unreported by Allport *et al.* (1989).

Black-collared Lovebird *Agapornis swindernianus*
The characteristic rolled calls of this species were heard over the canopy of primary forest near Konella on 26 February. This confirms the identity of 'Lovebirds sp.' seen by Allport *et al.* (1989) in the same area of primary forest and elsewhere ('One seen flying over Mogbai, two and three over logged forest...'). As the Red-headed Lovebird *A. pullarius* is never found in rain forest, there is little doubt that these lovebirds were in fact all Black-collared. New for Sierra Leone, and the

Black-collared Lovebird / Inséparable à collier noir *Agapornis swindernianus* (Claudia Donati)

westernmost record—previously reported west to Grebo, Liberia (07°40'W; Demey 2007).

A. swindernianus is inexplicably rare in Liberia, where Gatter (1997) mentions the total absence of records in the 20th century, though it was collected frequently in the 19th century. This discreet forest species could have been overlooked. In Congo-Brazzaville and Cameroon we saw it mainly in pairs, trios, exceptionally small groups; knowledge of its voice is essential, as most records are of birds flying over the forest canopy—they may cover a large home range.

Blue-headed Coucal *Centropus monachus*
On 21 January, right in the centre of Kenema town, our attention was attracted by the slow, deep singing duet of a pair: they were perched in full view in a small patch of marsh and cultivation next to a rubbish pit. The darker back and inner wings, contrasting with rufous primaries, were clearly visible. On 7 February we saw one flying across a large marsh between Gola East and Kenema. Although new for Sierra Leone, this coucal is likely to be widespread in the country, especially in natural marshes. It may have been confused with Senegal Coucal *C. senegalensis* in the past. The song phrases are usually slower and deeper, although there is some overlap in tempo. The species is known from Liberia (Gatter 1997) solely on the basis of sound records. It would be desirable to confirm these with sight records, although this coucal should not be rare in marshes, moist farmbush or in wet grass at the edge of wetlands.

Rufous Fishing Owl *Scotopelia ussheri*
Endangered (BirdLife International 2004). FD-L saw one at dusk at close range (12 m) perched on the edge of the Kwadi stream in Gola East on 4 February. Two days later we saw one again in the vicinity of that stream, 500 m from the first sighting. The habitat consists of a permanent but fairly shallow stream, 5–10 m wide, with some rocks and small sandy beaches. Although most of the stream is in the deep shade of large trees, it is close to the reserve's boundary and the village of Tunkia Nema. We found traces of this owl on the Mogbai stream near Konella, with faecal deposits on a rock next to a belly feather (later confirmed to belong to this species: M. Adams, Natural History Museum, Tring, *in litt.* 2007). Feathers of an owl captured and eaten in a village near Sileti in January (exact origin unknown) were also identified as belonging to Rufous Fishing Owl. The species is probably widespread on the small streams of Gola Forest.

The only noise made by the owls we saw was some low grunts, probably in alarm (e.g. given when disturbed by torch light). In four nights spent on the Kwadi, we heard nothing that could be ascribed to a song. Its closest relative, the Vermiculated Fishing Owl *S. bouvieri*, has a complex duet of rhythmical hooting notes, and the larger Pel's Fishing Owl *S. peli* also sings in a duet. Therefore, the single, deep, well-spaced notes taped from a captive bird (Chappuis 2000) are unlikely to represent the song, which is as yet undescribed.

The first documented record for Gola was a captive juvenile (February 1989) from very disturbed second growth in a cocoa/coffee plantation, on a stream at the edge of Gola North (Allport *et al.* 1989). Although Klop (2006) has suggested the owl photographed in 1989 was in fact a Pel's Fishing Owl, the barring on the wings is shared by adults of both species, and the size of the bird points strongly to its being Rufous.

Pel's Fishing Owl *Scotopelia peli*
In Central Africa, e.g. in Congo-Brazzaville, we have noted this owl in the forest region mainly on larger rivers. In Gola, this remains to be confirmed, but one pair was heard duetting at Konella by A. Siaka (February 2007) on the Mogbai stream, at the edge of an artificial clearing in the forest. In this area the wide stream is exposed on one side by a total lack of trees (several ha having been cleared for cultivation during the civil war). This was less than 1 km from the site where we collected a feather of *S. ussheri*.

Red-chested Owlet *Glaucidium tephronotum*
Only one record in Allport *et al.* (1989), but we found it widespread in the canopy of secondary and primary forest: heard at five localities in Gola East and North, on 17 nights in all.

Brown Nightjar *Veles binotatus*
First identified in Gola in 2006 (Lindsell *et al.* 2008), and indeed found to be quite widespread in 2007 (Dowsett-Lemaire & Dowsett 2008).

African Black Swift *Apus barbatus*
Large black swifts seen in January (when silent) were tentatively taken to be the European species *A. apus*, but all large swifts heard calling later were unquestionably African *A. barbatus* (which has a distinctive, prolonged rolled scream, or buzzing trill, *cf.* Chappuis 2000). Large numbers (up to 100 or more) were seen flying around clouds of midges over the edge of forest at Belebu (10, 12 and 14 February) and dozens (often calling) in the region of Lalehun (14–16 February), with fewer in the second half of the month (Konella, Lalehun). The species is known or suspected to breed in rock cracks in some highlands of northern Liberia, including the Nimba range and its extension in neighbouring countries (Gatter 1993, 1997). Gatter (1993) also reported a flock of *c.*20 on 17 March 1984 in eastern Sierra Leone (between Sefadu and the Loma Mountains). The only specimen of this West African population comes from Rokupr (09°01'N) near the Sierra Leone coast, collected on 28 September 1937: initially misidentified as an *A. apus*, it clearly is *A. barbatus* (Benson 1967).

This species was not identified by Allport *et al.* (1989) who instead mention other migrant species, *A. apus*, Pallid Swift *A. pallidus* and Mottled Swift *A. aequatorialis*, the last in (sometimes) 'large numbers'. These records are not dated, but European *A. apus* should be recorded mainly on passage, as the bulk of the population winters in southern Africa. Interestingly, G. Field (*in* Gatter 1993) had unpublished observations of large flocks of swifts including Mottled and dark *A. apus*/*barbatus* in western Sierra Leone from Freetown northwards, particularly in May–June. He suggested these swifts were *A. barbatus*.

Bates's Swift *Apus batesi*
A small forest swift, differing from all migratory black swifts mentioned above by its smaller size and long, deeply forked tail. Identified near Sileti (small flocks of up to ten), Mahoi bridge and Belebu, on eight occasions. Not reported by Allport *et al.* (1989), this forest species was also located by J. Lindsell (pers. comm.) on 17 November 2006 over Belebu. Included with a query in the checklist of Sierra Leone by Dowsett (1993), as the only indication of its presence was an unpublished mention by G. Field (*in litt.* 1989). The species is unknown west of Gola.

White-bellied Kingfisher *Alcedo leucogaster*
The song of this widespread forest species is hitherto undescribed and not yet tape-recorded. At Pandebu junction, one sang for a few minutes on three successive mornings from an arched branch near a small stream: the song consisted of four notes and was repeated at intervals. The first note was a drawn-out whistle, followed by three short ones (*pseee, tsi-tsi-tsu*), the whole lasting just under one second. This simple song is shorter (with fewer notes) than that of Dwarf Kingfisher *Ceyx lecontei*, which at times was seen and heard very close to White-bellied. The song of Dwarf Kingfisher (which we have heard at several locations, from Congo-Brazzaville and Cameroon to Sierra Leone) is a 'dancing' jingle of high-pitched notes, more reminiscent of that of Pygmy Kingfisher *C. pictus*.

Yellow-casqued Hornbill *Ceratogymna elata*
Near Threatened (BirdLife International 2004). The commonest frugivorous hornbill throughout. Seen feeding on figs (*Ficus lutea*, *F. macrosperma*) and fruit of palms (*Raphia*, *Laccosperma*), also small fleshy fruit of various lianas (e.g. Apocynaceae, *Dichapetalum*). Its diet is similar to that of Black-casqued Hornbill *C. atrata* in Central Africa, including its special liking for palm fruits (pers. obs.; Brosset & Erard 1986). In Gola *C. atrata* is greatly outnumbered by *C. elata*.

Yellow-spotted Barbet *Buccanodon duchaillui*
The song comprises a series of 8–10 accelerating *poo-poo-poo...* notes, which was published by Chappuis (1981, 2000) under the wrong species, Naked-faced Barbet *Gymnobucco calvus* (see also Borrow & Demey 2001). This is presumably what confused Allport *et al.* (1989): 'confusion over the call of this species [*G. calvus*] means that its status in other forest types [than very secondary] remains uncertain'. One of the most numerous and vocal species in secondary and primary forest. Hundreds of songs heard on most days; a frequent member of mixed-species flocks, feeding at mid levels.

Yellow-footed Honeyguide *Melignomon eisentrauti*
Data Deficient (BirdLife International 2004). Allport *et al.*'s (1989) observation of one in Gola East (February 1989) was the first for the country. One reason why this species might be more easily

overlooked than other honeyguides is that birds sing for a shorter time, in the early afternoon (for details on the singing habits of this species: see Dowsett-Lemaire 2008). In five weeks in Gola, we located two song posts of Yellow-footed (one in Gola East, the other in Gola North) against two of Willcocks's *Indicator willcocksi*, three of Thick-billed (Lesser) *I.* (*minor*) *conirostris* and four of Spotted *I. maculatus*.

Preuss's Cliff Swallow *Hirundo preussi*
Small numbers noted from 24 January to 24 February in several locations. This fits with the recent range extension southwards documented for Sierra Leone by Lindsell *et al.* (2007).

Western Wattled Cuckooshrike *Lobotos lobatus*
Vulnerable (BirdLife International 2004). Only one observation, a male feeding quietly in a medium-sized tree, on 10 February, atop Ngbonkelekei Hill near Belebu. The habitat was tall forest opened up by hurricanes, with many fallen large trees. Visibility in the hills above Belebu was extremely reduced, due to the overgrown understorey, and the species could be more common. Allport *et al.* (1989) located two pairs in Gola North, one of which was nesting (feeding two nestlings, 4–7 January). G. Field (*in* Allport *et al.* 1989) saw the species on 20 occasions on 62 days in the forest in 1971–76. The reduced number of records subsequently could simply result from the lack of good access roads and especially of good visibility along paths, as logging roads available to Field have since become overgrown. The species moreover appears to be largely silent.

Baumann's Greenbul *Phyllastrephus baumanni*
Data Deficient (BirdLife International 2004). Not a forest species in the evergreen rain forest zone, where this bulbul is principally restricted to low second growth, mainly where it is no more than 2–4 m tall (Dowsett-Lemaire *et al.* in prep.). One record by Allport *et al.* (1989) from primary forest was considered doubtful (Fishpool 2000). We found a few just outside Gola West (near Sileti) in a vast area of *Chromolaena* and *Harungana* regrowth in abandoned fields, and in similar habitat at Tunkia Nema in Gola East. Two were involved in a territorial dispute and snatches of song were tape-recorded.

White-throated Greenbul *Phyllastrephus albigularis*
An understorey species keeping generally lower than its congener Icterine Greenbul *P. icterinus*, and quite common in secondary forest at Gola East (recorded daily). The full song is given rather rarely and the species is more often detected by its contact calls (a low soft *trrr-trrr, trrr-trrr*), which can be heard at any time of day. More local in Gola North (recorded on 8/17 days), mainly in secondary forest, e.g., near Lalehun DFO (where common), and locally in primary forest where the understorey is disturbed by treefalls etc. Under-recorded by Allport *et al.* (1989) who saw it only twice, but there was formerly much confusion over the voice of *Phyllastrephus* bulbuls, as Chappuis's (1975) recordings included some errors, all corrected in Chappuis (2000).

Green-tailed Bristlebill *Bleda eximius*
Vulnerable (BirdLife International 2004). Unlike its two congeners (Grey-headed Bristlebill *B. canicapillus* and Red-tailed Bristlebill *B. syndactylus*, both very vocal) this species appears to sing or call only irregularly, which may lead to its numbers being under-estimated. Thus the song was heard only once (in four days) in the Tunkia Nema area and once (in seven days) in the Sileti area, yet mist-netting revealed the species to be present in small numbers. One male trapped and colour-ringed near Konella sang persistently for two days after capture, then went silent for the next few days. The species was easily mist-netted (eight of 23 *Bleda* caught were this species) and was certainly more common than records based on vocalisations would have suggested. Silent individuals were also seen in a few mixed-species flocks.

Chattering Cisticola *Cisticola anonymus*
Lindsell (2007) has recently clarified the status of this cisticola in Sierra Leone, its population being isolated from that in Central Africa by *c.*1,500 km. The habitat near Gola consists of rank growth amidst rice fields (Lindsell 2007) and also natural freshwater swamp as near Sileti (A. Siaka & A. Hester pers. comm.). The rice fields were indeed established in natural swamps, which are found commonly in valley bottoms throughout the country. These freshwater swamps, invaded with sedges, grasses, an Araceae (*Cyrtosperma sene-*

galense) and ferns (*Thelypterys confluens*) are very similar to the natural habitat of Chattering Cisticola in Central Africa (pers. obs. in Congo-Brazzaville and Cameroon): here the species is common in freshwater as well as in saline forest swamps (with the sedge *Rhynchospora corymbosa* dominant). It has also widely adapted to moist farmbush throughout the region.

On 27 January we visited the marsh near Sileti where Chattering Cisticola was present in September 2006 (A. Siaka) and November 2005 (A. Hester pers. comm.), but the vegetation was bone-dry, and the birds apparently absent. However, two pairs were found in low forest regrowth in Konella clearing on 22–27 February, feeding in *Chromolaena odorata* (where they were picking aphids). They may have originated from a nearby swamp. It is curious that freshwater swamps of the kind present in Sierra Leone are not found today in Ghana (pers. obs.), nor apparently in adjacent countries, and this could explain the present wide gap in the distribution of Chattering Cisticola. The bird might, however, be expected to occur in Liberia, as swamps and lagoons are apparently common there (Gatter 1997).

Black-capped Apalis *Apalis nigriceps*
Hitherto unrecorded in Gola, a pair was found singing in a large *Piptadeniastrum* on a hill above Belebu (Popoda), on 11 February. It responded to playback of songs recorded in Gabon and Côte d'Ivoire (Chappuis 2000). It is otherwise known in Sierra Leone only from the Tingi Hills (Walker 1939) and Loma Mountains (Okoni-Williams *et al.* 2001). Similarly, in Liberia it is recorded mainly from forest above 500 m (up to 1,500 m), in the north of the country (Gatter 1997), although there are some recent records from lowland forest in the east (Demey 2007). In Central Africa this canopy apalis is also partial to hills and plateaux (e.g. Brosset & Erard 1986, Dowsett-Lemaire 1997). It could be more widespread in the hills in the north of Gola Forest.

Lead-coloured and **Grey-throated Flycatchers** *Myioparus plumbeus* and *M. griseigularis*
Allport *et al.* (1989) had no record of the former, and only three of the latter. The former was never found to penetrate forest, but was only encountered at edges (at Belebu, Konella clearing) and in highly disturbed forest near Lalehun village. *M. griseigularis* is common in low tangles in tall secondary forest, and more local in primary forest where this habitat is less frequent (in all we recorded it on 15 of 32 days): in January–February this species sang persistently in the early morning and in understorey parties (a song of 4–5 trembled whistles, typical of the genus). The alarm-call is a distinctive, soft *tutulee, ...tutulee* (third note higher). There are dialectal variations between the songs of Grey-throated in West and Central Africa: although motifs from West Africa are not specifically presented by Chappuis (2000), the second cut of Lead-coloured (from Côte d'Ivoire) is in fact a song of Grey-throated, as already remarked by R. Demey *in* Lachenaud (2006).

Shrike-Flycatcher *Megabyas flammulatus*
The usual song in Gola is a rising, sibilant trill, lasting <1 second. Up to 6–10 birds or pairs were encountered daily in Gola North, based on song and direct observations of canopy parties. The common occurrence of this species in 'primary' forest is surprising, as in most of its range this flycatcher is more characteristic of semi-evergreen forest with a broken canopy, and is usually common only in drier forest types (as in eastern Ghana, *cf.* Dowsett-Lemaire & Dowsett 2007a). But this comment does not apply just to this species: several other birds were found commonly in Gola North that are also more characteristic of secondary forest. These include Tambourine Dove *Turtur tympanistria*, Blue-breasted Kingfisher *Halcyon malimbica* and Gabon Woodpecker *Dendropicos gabonensis*. This may mean that, despite the absence of commercial logging, the forest in Gola North has not fully recovered from some localised exploitation or cultivation that occurred in the distant past.

Fernando Po (Bioko) Batis *Batis poensis*
Unrecorded by Allport *et al.* (1989) themselves, but listed by G. Field (p. 81). We found it at two places: edge of forest (road) at Sileti, and several pairs in secondary forest at Lalehun DFO. Located by its high-pitched staccato song *tsi-tsi-tsi-tsi*. Rare in the evergreen forest zone, where recorded mainly in secondary situations, this batis is commoner in the open canopy of semi-evergreen or upland rain forest (pers. obs. from Ghana to Congo-Brazzaville).

Illadopses *Illadopsis* spp.
We commonly encountered four species: Brown *I. fulvescens*, Pale-breasted *I. rufipennis*, Blackcap *I. cleaveri* and Rufous-winged *I. rufescens*—the first especially in secondary situations and logged forest, the last in more developed secondary and especially primary forest. We did not come across any Puvel's Illadopsis *I. puveli,* but N. Borrow (pers. comm.) found several in February 2008 in farmbush or low second growth, outside forest south of Sileti. Allport *et al.* (1989) had one record from farmbush and another from second growth in Gola North.

Tit-Hylia *Pholidornis rushiae*
At Sileti a pair was feeding two fledged young on aphids (collected in the foliage of *Chromolaena odorata*) on 26–28 January, whilst another pair was building a nest on a *Bridelia* branch arching 6 m above the road. The nest, a large ball, was constructed entirely of fluff taken from the open pods of a nearby *Funtumia africana*; the opening was on the lower side (facing down). Similar nests, entirely of *Funtumia* or 'rubber-seed' down, have already been described from Ghana by F. C. Holman (*in* Bannerman 1949) and from Nigeria by Foulkes-Roberts (cited by Chapin 1954). This information is given by Fry *et al.* (2000) as referring to *Funtumia elastica*, although neither original source gave the specific name (the two *Funtumia* species have similar downy seeds).

Brown Sunbird *Anthreptes gabonicus*
A discreet sunbird of thickets bordering large streams or rivers, observed on the Mahoi River on 30–31 January (FD-L). One or two were feeding in low trees (especially *Myrianthus libericus*) on sandy beaches in the riverbed. No previous records by Allport *et al.* (1989), nor G. Field, but seen in the same area in recent years by local researchers (E. Klop *in litt.* 2007).

? Bates's Sunbird *Nectarinia* (*Cinnyris*) *batesi*
A distinctive song was heard in the early morning, in forest canopy near Tunkia Nema, Gola East, on 4–5 February (FD-L). At least two different individuals were involved, separated by *c.*100 m. The song consisted of a series of 6–9 clear, detached, accentuated high whistles. It almost certainly belonged to Bates's Sunbird (*cf.* a recording of the song by Stjernstedt 1996, from Mwinilunga in Zambia). Given that this species is still unknown from Sierra Leone, we feel that a good visual record is essential to confirm this. Barely known from Liberia (Gatter 1997 mentions a specimen taken in the east) where it could also have been overlooked, its presence in Gola would represent a considerable westward range extension. We were not previously familiar with the song of Bates's Sunbird, but with that of other small canopy sunbirds (such as Green (Yellow-chinned) Sunbird *Anthreptes rectirostris* and Tiny Sunbird *Nectarinia* (*Cinnyris*) *minulla*), which are very different.

Tiny Sunbird *Nectarinia* (*Cinnyris*) *minulla*
Only one record by Allport *et al.* (1989), from a cocoa plantation. A sibling of Olive-bellied Sunbird *N. chloropygia* of second growth, this species occurs in better-developed secondary forest, or around large gaps in primary forest. Of four separate records in Gola East and North, one was of a male singing in the open canopy on a hill above Konella: the song, weak but musical, is a useful identification tool.

Western Black-headed Oriole *Oriolus brachyrhynchus*
The repertoire of this widespread and common forest species includes several song types, some so fluid as to be easily confused with those of Black-winged Oriole *O. nigripennis*. The latter was, however, found only in highly degraded forest (such as near Lalehun). More surprisingly, one of the songs of *O. brachyrhynchus* in Gola was a simple *fuuoh*, repeated, and very similar to the song of Many-coloured Bushshrike *Malaconotus multicolor* (present in Gola, especially primary forest in Gola North). Elsewhere in west-central Africa (at least from Ghana to Cameroon), it is *O. nigripennis* that includes the *fuuoh* song type in its repertoire, and it can be heard after two minutes and 18 seconds in Chappuis (2000) under *O. nigripennis*: in this species, at least, the *fuuoh* is usually preceded by a weaker *tchik* note (as *tchik-te-fuuoh*), absent from the shrike's song. Playback of the song of *M. multicolor* often attracts the orioles into view: in Ghana *O. nigripennis* (pers. obs.), and here *O. brachyrhynchus*!

Lagden's Bushshrike *Malaconotus lagdeni*
Near Threatened (BirdLife International 2004). We found it in the same area of primary forest as

Allport *et al.* (1989), between the Mogbai stream at Konella and Pandebu junction. At least three territories located. Singing may be at best sporadic: songs were heard once in a mixed-species flock (in mid afternoon), and also between two birds answering each other. One bird near our camp at Konella sang only twice (in five days). The repertoire of this species is somewhat variable geographically: in the easternmost population, in the Albertine Rift, song types are identical to those of Grey-headed Bushshrike *M. blanchoti*, including the broken whistle (Dowsett-Lemaire 1990, with sonograms, from a tape partly published by Chappuis 2000). In eastern Ghana, these shrikes give a series of 4–5 identical soft whistles at the rate of one per second, with each whistle slightly rising in pitch (Dowsett-Lemaire & Dowsett 2007a). In Gola the repertoire is more complex: one motif was a prolonged whistle preceded by a short, higher one (*fi, fûûûû*, second whistle 2.5 tones lower), as in a tape from Côte d'Ivoire (cuts one and two, Chappuis 2000); another was a series of soft, monotonous whistles *foo-foo-foo-* (also in Chappuis 2000, and fairly similar to that in Ghana, but notes not rising), and another produced the long whistles, including the broken whistles typical of *M. blanchoti*. The more modulated, oriole-type whistles tape-recorded in Côte d'Ivoire (in Chappuis 2000) were not heard here or in Ghana. It is curious that the *blanchoti*-type songs are heard in both the easternmost and westernmost populations of this species. However, A. Hester (pers. comm. 2008) thought he heard Lagden's in forest in central Ghana singing exactly like *M. blanchoti* (the bird was not seen for confirmation). This species readily reacts to playback, and to human imitation of its whistles: the initial reaction is for the bird to fall silent (if already singing) for several minutes, searching and giving some rattle calls; singing is usually resumed after 10–15 minutes (pers. obs. in Gola and in eastern Ghana).

Fiery-breasted Bushshrike *M. cruentus* also occcurs in the Gola region, but is apparently restricted to secondary forest (e.g. Lalehun) and may not come into contact with Lagden's.

Shining Drongo *Dicrurus atripennis*
This common, noisy drongo occasionally mimics other species in its song. Birds in mixed flocks were seen producing the alarm-call of Green-tailed Bristlebill (a motif also imitated in Ghana); early morning songs included clear notes of Brown Nightjar in two places, the drongo giving 2–3 notes of the nightjar before switching to another motif. It was also heard imitating the single notes (or start of the song) of Levaillant's Cuckoo *Clamator levaillantii*. This may seem surprising as the cuckoo does not breed in the forest region; birds spending the off-season in forest, however, occasionally give the full song or the single notes (pers. obs.). In Ghana, this drongo has also been heard imitating songs of Forest Wood-hoopoe *Phoeniculus castaneiceps* and Red-billed Helmetshrike *Prionops caniceps* (pers. obs.).

Maxwell's Black Weaver *Ploceus albinucha*
A species of the canopy or subcanopy, being particularly common in primary forest. Some groups were nest building and displaying in the canopy of large trees (one *Parinari excelsa*, one *Lophira alata*). In a third location (between Konella and Manyengema) birds were attending nests situated in a large *Terminalia superba* immediately below a nest of Crowned Eagle *Stephanoaetus coronatus*, with over 20 nests hanging in a large mass attached to a tree fork. Some birds were displaying, others entering nests and sitting (23 February). The grouping of nests in or close to a large raptor's nest had apparently not been documented in this species (Fry *et al.* 2004), but is known in some savanna weavers. In a marshy clearing near Sileti, a mixed colony of nests of Village *P. cucullatus* and Vieillot's Black Weavers *P. nigerrimus* was established in the fronds of an *Elaeis* palm, which in its centre had an occupied nest of an African Harrier Hawk *Polyboroides typus*, normally a predator of weavers' eggs or chicks!

Gola Malimbe *Malimbus ballmanni*
Endangered (BirdLife International 2004). Not reported for some 30 years, the species was relocated in primary, unlogged forest between Pandebu junction and Konella (Gola North). This was probably no more than a few km from where G. Field first found it. Although Field (1979) did not detail where he observed the species in 1971–76, in Allport *et al.* (1989: 61) he gave the location as some 9 km east of Lalehun, towards the end of a logging track. As this was through a plantation, he probably meant 9 km south-east, beyond the plantation at Lalehun DFO.

On 20 February three different pairs (the first with an independent immature) were located in three large mixed bird parties, between 09.40 and 14.00 hrs (FD-L and A. Siaka). The males of all three pairs were singing intermittently, a distinctive song of squeaky, discordant notes (on different pitches); the third male concluded its songs with a 'wheeze', something unique in West African malimbes. The song is well described in Gatter & Gardner (1993), as summarised in Borrow & Demey (2001). The only other malimbes with a wheeze are the Central African Rachel's Malimbe *M. racheliae* (a sibling species) and Red-crowned Malimbe *M. coronatus* (the latter has a longer wheeze).

The birds were feeding and moving unhurriedly in tangles of lianas and foliage of trees at mid levels (*c.*15 m), under a fairly closed canopy, often with Blue-billed *M. nitens* or Crested Malimbes *M. malimbicus*. The immature was feeding independently or with the male: the yellow extended to the chin and the bill was pale yellow. It had no yellow on the crown or nape (as shown in the immature male in Borrow & Demey 2001), being presumably an immature female (Gatter & Gardner 1993). The first two parties were contiguous, the third was *c.*1 km distant. When we recrossed the area on 23 and 27 February in mid morning, walking slowly, the forest was silent and the malimbes invisible. Otherwise a song of Gola Malimbe was heard briefly in a mixed flock on 26 February near Konella. A couple of very large mixed parties in forest with a more open canopy (including on a hill above Konella damaged by storms) contained no Gola Malimbes. Thus the species is probably restricted to primary, unlogged forest in Gola North.

Gola Malimbe was reported on a hill above Belebu (November 2006) by I. Sinclair (*cf. Bull. ABC* 14: 102) but the occurrence of the species has not been confirmed by further searches there and the habitat appears unsuitable. Ryan's (2005) comment that Gola Malimbe has been recorded near Belebu 'in the past' is incorrect, and his group (who, in Gola North, visited only the Belebu area) did not find the species. Two other birders informed by us of the relocation of the malimbe east of Lalehun have found it again in the same area (D. Hoddinott in November 2007, N. Borrow in February 2008), and D. Hoddinott (*in litt.* 2007) observed a pair finishing a nest on 26 November.

Further prospection is needed to estimate the population of this rare malimbe, including in unlogged sections of Gola East. Gola is at the western limit of a small range reaching the western edge of Côte d'Ivoire (where the type specimen was collected in 1972: Wolters 1974). Extensive surveys in Taï National Park to the south of the collecting locality have failed to find it (Gartshore *et al.* 1995). Its closest relative is undoubtedly Rachel's Malimbe of Central Africa, which occupies a similar niche in primary, undisturbed forest from south-eastern Nigeria to Gabon (Brosset & Erard 1986; pers. obs.); they were treated as a superspecies by Dowsett & Forbes-Watson (1993), followed by Fry & Keith (2004). The nests of Gola Malimbe are similar in shape and position to those of Rachel's, suspended from a vine in the mid stratum (Gatter & Gardner 1993). It is threatened through most of its small range, as the forests in western Côte d'Ivoire and eastern Liberia are unprotected and shrinking (Gatter & Gardner 1993); Gola Forest has been separated from the blocks of eastern Liberia by extensive deforestation, and the primary forest remaining in Gola is not large. R. Demey (*in litt.* 2006), however, saw the species on the Liberian side of Gola in 2005. Although Gatter & Gardner (1993) mention that the species appears to survive in logged forest, this may nevertheless mean that birds can hang on for a few years where the forest has been logged, but then fail to breed in marginal conditions and eventually die out.

Red-fronted Antpecker *Parmoptila rubrifrons*
A discreet species of the understorey of primary and secondary forest, which we mist-netted and saw near the Mahoi River and at Pandebu junction. The song remains undescribed, but a soft, high-pitched estrildid song, heard on the edge of the Mahoi River and near the Mahoi bridge possibly belongs to this species: it could be transcribed as *tututi, tuwi,* trill, *tituuu.* The trill consists of five high clear notes and the whole song lasts *c.*2 seconds. It was also heard in primary forest in Ghana, including at Atewa exactly where we mist-netted and saw the species (Dowsett-Lemaire & Dowsett 2005). Unfortunately we have to date failed to observe the bird in song. The songs of other forest Estrildidae (including negrofinches *Nigrita* spp.) are very different.

Pale-fronted Negrofinch *Nigrita luteifrons*
Seen once in secondary forest near Lalehun DFO (RJD), on 15 February. Unlike the vocal Grey-crowned Negrofinch *N. canicapilla*, this species almost never sings (e.g. its song, reproduced in Chappuis 2000, was heard only once in 13 months of field work in Odzala, Congo-Brazzaville, where it was common and breeding around the house: Dowsett-Lemaire 1997). The most characteristic call is a descending four-note whistle, but even this is not given frequently. Not reported by Allport *et al.* (1989), but listed by G. Field (p. 81).

Breeding seasonality

Nothing has been published on breeding seasons in Gola. Allport *et al.* (1989) included no information on breeding activity, and their moult data mentioned in the text were unfortunately omitted from their Appendix.

We obtained 66 breeding records for 42 species, details of which can be found in our report. The general impression from the present survey is that most birds started breeding at the end of the rains, in perhaps October, certainly by November–December, as some juveniles were already independent or still being fed but fully grown. But quite a few species were still egg laying (perhaps mainly repeat clutches) in January–February, and vocal activity overall was high. Species breeding in the dry season include Latham's Forest Francolin *Francolinus lathami*, Blue-throated Roller *Eurystomus gularis*, several doves, hornbills, bulbuls, warblers, flycatchers, sunbirds, drongos and weavers/malimbes; from the amount of vocalising, raptors such as Congo Serpent Eagle must also be breeding. Turdidae had apparently finished (many independent juvenile Forest Robins *Stiphrornis erythrothorax* and Fire-crested Alethes *Alethe diademata*), but as their main nest parasite the Red-chested Cuckoos *Cuculus solitarius* were singing, this may suggest that they were about to start again, with the early rains. Illadopses had largely finished: several groups of Pale-breasted Illadopsis had recently independent juveniles, five of seven Blackcap Illadopsis mist-netted were starting moult, only one pair of Rufous-winged Illadopsis had a dependent juvenile (others caught were sexually inactive and vocal output was reduced). Surprisingly Western Black-headed Orioles were apparently inactive (although vocal) with only one or two independent juveniles seen. Mist-netting confirmed that most Turdidae were in fresh plumage, having completed moult, while some bulbuls were in post-breeding moult (and others still breeding).

Conservation importance of Gola Forest

Logging is no longer an issue in Gola, which may acquire the status of national park in the near future. Hunting has been less intensive than in many forests in West Africa, even during the civil war; as a result the forest hosts important populations of endangered monkeys (including Diana Monkey *Cercopithecus diana* and Western Red Colobus *Procolobus badius*), and large frugivorous hornbills are not threatened. Both the Near-Threatened Brown-cheeked Hornbill *Bycanistes cylindricus* and especially Yellow-casqued Hornbill occur in good numbers. The forest is particularly important for the survival of the Endangered White-breasted Guineafowl and Rufous Fishing Owl, which appear widespread, the guineafowl even locally common. Of the two Vulnerable bulbuls, Green-tailed Bristlebill and Yellow-bearded Greenbul *Criniger olivaceus*, the former occurs in higher numbers than its discreet habits may suggest, whilst the *Criniger* is common in primary forest in Gola North; it is clearly uncommon in logged forest in Gola East or elsewhere, but numbers may recover slowly as the forest is allowed to regenerate. More research is needed to assess the size of the population of two discreet species, Gola Malimbe (Endangered) and Western Wattled Cuckooshrike (Vulnerable), and also of Nimba Flycatcher (Vulnerable), not found during this survey.

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The status of breeding seabirds and waterbirds on the Eritrean Red Sea islands

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Le statut des oiseaux de mer et des oiseaux d'eau nicheurs sur les îles éritréennes de la Mer Rouge. Nous évaluons le statut actuel des oiseaux de mer et des oiseaux d'eau nicheurs sur les îles éritréennes de la Mer Rouge, qui sont toujours pour la plupart inhabitées et dont beaucoup n'avaient jamais été visitées par des ornithologues auparavant. En 2001–07 nous avons inventorié 325 îles (93% du total), dont 210 hébergeaient 21 espèces nicheuses d'oiseaux de mer et d'oiseaux d'eau. Nous avons compté environ 150.000 couples nicheurs et estimons le nombre total à environ 175.000 couples. Les espèces ou sous-espèces suivantes avaient des populations nicheuses d'importance internationale, les îles éritréennes hébergeant plus de 1% de la population régionale: Drome ardéole *Dromas ardeola* (>8.000 couples), Goéland à iris blanc *Larus leucophthalmus* (5.900 couples), Sterne voyageuse *Sterna bengalensis par* (63.000 couples), Sterne huppée *S. bergii velox* (2.200 couples), Sterne bridée *S. anaethetus fuligula* (30.000–35.000 couples), Sterne à joues blanches *S. repressa* (18,000 couples), Noddi brun *Anous stolidus plumbeigularis* (11.000 couples), Fou brun *Sula leucogaster plotus* (10.000 couples) et Spatule blanche *Platalea leucorodia archeri* (environ 300 couples). Le Cormoran de Socotra *Phalacrocorax nigrogularis*, auparavant connu de la Mer Rouge comme un visiteur rare, a été observé en grand nombre et est soupçonné de nicher sur les îles méridionales. À présent, les menaces principales pesant sur les oiseaux de mer nicheurs sont la collecte des ufs par des pêcheurs de concombres de mer (locaux et étrangers), et l'introduction occasionelle de chats. Nous confirmons que les îles éritréennes méritent le statut de Zone d'Importance pour la Conservation des Oiseaux (ZICO) et nous identifions 50 îles qui ont besoin de protection spéciale.

Summary. We assess the current status of breeding seabirds and waterbirds on the still mostly unpopulated Eritrean islands, many of which had never previously been visited by ornithologists. In 2001–07 we surveyed 325 islands (93% of the total), of which 210 were found to harbour 21 breeding species of seabirds and waterbirds. We counted *c.*150,000 breeding pairs and estimate the total number at *c.*175,000 pairs. The following species or subspecies were found to have internationally important breeding populations, as the Eritrean islands support more than 1% of the regional population: Crab Plover *Dromas ardeola* (>8,000 pairs), White-eyed Gull *Larus leucophthalmus* (5,900 pairs), Greater Crested Tern *S. bergii velox* (2,200 pairs), Lesser Crested Tern *Sterna bengalensis par* (63,000 pairs), Bridled Tern *S. anaethetus fuligula* (30,000–35,000 pairs), White-cheeked Tern *S. repressa* (18,000 pairs), Brown Noddy *Anous stolidus plumbeigularis* (11,000 pairs), Brown Booby *Sula leucogaster plotus* (10,000 pairs) and Eurasian Spoonbill *Platalea leucorodia archeri* (*c.*300 pairs). Socotra Cormorant *Phalacrocorax nigrogularis*, previously reported in the Red Sea only as a rare vagrant, was observed in large numbers and is suspected to breed in the southern islands. Currently, the main threats to breeding seabirds are egg collection by local and foreign sea cucumber fishermen, and the occasional introduction of cats. We confirm that the Eritrean islands deserve the status of Important Bird Area and we identify 50 islands in need of special protection.

The Red Sea and its islands are well known for the high diversity of marine organisms and avifauna, particularly seabirds and waterbirds, as revealed by the recent PERSGA surveys made by the Regional Organization for the Conservation of the Environment of the Red Sea & Gulf of Aden (PERSGA/GEF 2003), which included all of the Red Sea, except the Eritrean part and its 350 islands (MLWE 1999). Marine ornithological studies in the Eritrean Red Sea commenced in the

1800s, with the visits of Heuglin to the Dahlak Islands in 1857 and 1861 (von Heuglin 1861, 1867, 1873). In the 20th century ornithological studies were conducted by Salvadori (1954), Smith (1951, 1955, 1957), Clapham (1964), Tornielli (1964) and Urban (1969). Incidental comments were also published by the Israel Red Sea Expeditions (Oren 1962, Lewinson & Fishelson 1967). A long period of war between Ethiopia and Eritrea practically closed the islands to subsequent research (MLWE 1999), but the islands were already known to be important for birds restricted to the Sahara-Sindian biome, and probably for seabirds and waterbirds, leading to the area being designated as an Important Bird Area (Coulthard 2001). However, only a relatively few islands had been surveyed prior to the present surveys, conducted by the ornithological team of Eritrea's Coastal Marine and Islands Biodiversity (ECMIB) Project, and by G. De Marchi and G. Chiozzi during searches for Crab Plover *Dromas ardeola* colonies (De Marchi *et al.* 2006). Our study includes all waterbirds and seabirds and two raptors, Osprey *Pandion haliaetus* and Sooty Falcon *Falco concolor*. Specific objectives included: (1) assessing their current breeding status; (2) identifying the current threats they face and (3) selecting priority areas for their conservation.

Methods

Study area

Eritrean waters harbour more than 350 islands (Fig. 1). Some are very large, such as Dahlak Kebir (*c.*644 km^2), whereas some sandy and coralline islands are tiny. Most islands are low and almost flat relicts of large Pleistocene reef platforms (Angelucci *et al.* 1981, Merla *et al.* 1981), but *c.*25 are of volcanic origin and five a continental one. Climate is hot and humid, with daily temperatures of 35–40°C in June–September, whilst it is cooler in October–May (18–32°C). Rain falls mainly in December–February, but precipitation is local and irregular, ranging from 44 mm (in Assab) to 180–250 mm (in Massawa: Hemming 1961, Nastasi 1994). Tides are semi-diurnal and range between 50 and 120 cm (Edward 1987). Vegetation is sparse (Coulthard 2001). Black Rats *Rattus rattus* are found on many islands, especially the larger and vegetated ones. Cats, introduced by fishermen or sea cucumber harvesters to control the rats, were noted on a few islands. Only eight islands possess a resident human population, totaling *c.*3,000, mostly fishermen and goat herders. Permanent sea cucumber processing camps were noted on many islands. Additionally, there are small numbers of shell and shark fin collectors on some islands. Development is low and only 21 islands are open for tourists (Ministry of Tourism list), whilst there are very small Eritrean navy stations on a few islands.

Survey methods

Between January 2005 and October 2007, 15 ornithological surveys were undertaken by the ECMIB Project Bird Team, 11 in the summers (June–August) of 2005, 2006 and 2007, and the other four in the winters (October–February) of 2005 and 2006. Moreover, some additional islands were visited by G. De Marchi and G. Chiozzi between 2001 and 2007. Landsat ETM satellite images and Garmin GPS were used for navigation and position fixing.

The number of breeding pairs was determined by individually counting occupied nests, whenever possible, even for very large colonies. The number of nests in some of the largest colonies of Lesser Crested *Sterna bengalensis* and Greater

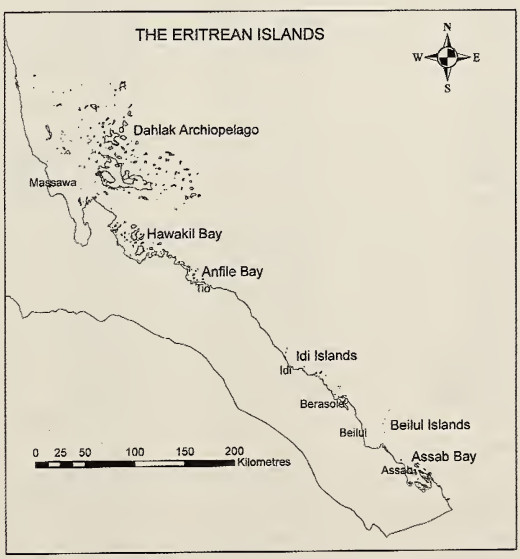

Figure 1. Map of Eritrean islands where the study of breeding seabirds and waterbirds was undertaken.

Carte des îles éritréennes où les oiseaux de mer et les oiseaux d'eau nicheurs ont été inventoriés.

Table 1. Important islands which support more than 1% of a biogeographical population (in bold: the island name, its important species, with the number of breeding birds in brackets) and the islands (roman) which support at least five different breeding species in significant numbers. Islands labelled NN (no name) are taken from a list of the Eritrean Ministry of Fisheries.

Tableau 1. Îles importantes qui hébergent plus de 1% d'une population biogéographique (en gras: le nom de l'île, ses espèces importantes, avec le nombre d'oiseaux nicheurs entre parenthèses) et les îles (en romain) qui hébergent au moins cinq espèces nicheuses différentes en nombre significatif. Les îles marquées NN (no name = sans nom) proviennent d'une liste du Ministère éritréen de la Pêche.

Species codes / Code des espèces: Red-billed Tropicbird *Phaethon aethereus* = RbT; Masked Booby *Sula dactylatra* = MB; Brown Booby *S. leucogaster* = BB; Green-backed Heron *Butorides striata* = GbH; Western Reef Heron *Egretta gularis* = WRH; Goliath Heron *Ardea goliath* = GH; Sacred Ibis *Threskiomis aethiopicus* = SI; Eurasian Spoonbill *Platalea leucorodia* = ES; Osprey *Pandion haliaetus* = O; Sooty Falcon *Falco concolor* = SF; Crab Plover *Dromas ardeola* = CP; Kentish Plover *Charadrius alexandrinus* = KP; Sooty Gull *Larus hemprichii* = SG; White-eyed Gull *L. leucophthalmus* = WeG; Caspian Tern *Sterna caspia* = CT; Greater Crested Tern *S. bergii* = GCT; Lesser Crested Tern *S. bengalensis* = LCT; White-cheeked Tern *S. repressa* = WcT; Bridled Tern *S. anaethetus* = BT; Brown Noddy *Anous stolidus* = BN.

Island	Coordinates	Area	Species breeding on the island
Abeilat	13.889N 41.974E	Idi Islands	O, SF, SG, **WeG (6,500)**, GCT, LCT
Abu Sherayu	16.068N 39.610E	Dahlak Archipelago	RbT, O, SF, WeG, WcT, BT
Adbara Kebir	15.999N 39.830E	Dahlak Archipelago	O, SG, **WeG (600)**, CT, **LCT (900)**, WcT, BT
Awali-Shaura	16.481N 39.669E	Dahlak Archipelago	O, SF, SG, WeG, CT, GCT, **LCT (7,000)**, WcT
Aucan	15.489N 40.759E	Dahlak Archipelago	**BB (2,400)**, SF, WcT
Cod Ali	13.877N 41.932E	Idi Islands	O, SF, SG, **WeG (3,200)**, **LCT (10,000)**
Dahara North	13.185N 42.575E	Assab Bay	WRH, **ES (100)**, O
Dahret	15.543N 39.344E	Dahlak Archipelago	O, CP, SG, CT, WcT, BT
Dalcus	15.541N 39.522E	Dahlak Archipelago	RbT, O, SF, SG, **WeG (1,600)**, CT
Delgus	12.983N 42.932E	Assab Bay	**ES (30)**, O, **CP (3,000)**, SG, WeG
Dohul Bahut	15.945N 39.535E	Dahlak Archipelago	WRH, ES, O, SG, WeG, CT, WcT, BT
Dhu-l-Kurush	15.459N 40.734E	Dahlak Archipelago	**BB (1,200)**, SF, SG, GCT, LCT, WcT, BT
Dur Ghella	15.775N 39.796E	Dahlak Archipelago	RbT, BB, O, SF, SG, **WeG (450)**
Entaasnu	16.332N 40.231E	Dahlak Archipelago	O, SF, SG, WeG, GCT, LCT, WcT, BT
Entaentor	16.131N 39.854E	Dahlak Archipelago	O, SF, SG, WeG, GCT, LCT **(6,000)**, BT
Enta-idell	16.125N 39.858E	Dahlak Archipelago	GH, O, SF, SG, WeG, CT, **GCT (250)**, **LCT (4,000)**, **WcT (6,000)**
Entesilla	16.504N 39.318E	Dahlak Archipelago	BB, O, SF, SG, WeG, **GCT (250)**, **LCT (2,500)**, WcT, BT, **BN (12,000)**
Fanaadir, NE	13.754N 42.163E	Barasole Islands	BB, BT, **BN (800)**
Flat	13.409N 42.551E	Beilul Islands	**BB (2,500)**, **LCT (5,000)**, BT, **BN (2,500)**
Galdina	15.049N 40.249E	Hawakil Bay	**CP (700)**, **LCT (2,500)**, WcT, BT
Gurna	12.974N 42.798E	Assab Bay	O, **BT (10,500)**
Harbi	13.355N 42.650E	Beilul Islands	**BB (1,500)**, MB, SG, BT, **BN (4,000)**
Isratu	16.200N 39.520E	Dahlak Archipelago	RbT, BB, O, SF, WcT
Laksu	15.209N 40.302E	Hawakil Bay	WRH, SF, SG, WeG, GCT, **LCT (4,000)**, WcT, BT
Madote	15.384N 39.457E	Dahlak Archipelago	O, CT, GCT, **LCT (2,000)**, WcT, BT
Mantola	14.441N 40.500E	Hawakil Bay	BB, WRH, **ES (95)**
Medecheri	15.423N 39.572E	Dahlak Archipelago	WRH, **ES (40)**, WeG,
Mojeidi	15.487N 40.861E	Dahlak Archipelago	BB, O, SF, KP, **LCT (12,000)**, WcT
Museri	15.489N 40.359E	Dahlak Archipelago	RbT, BB, O, SF, **CP (900)**
NN 043	14.985N 40.580E	Hawakil Bay	BB, WRH, GH, O, SF, SG, WeG, WcT, BT
NN 153	15.024N 40.374E	Hawakil Bay	O, **CP (700)**, WcT, BT
NN177	13.026N 42.892E	Assab Bay	**GCT (1,000)**, **LCT (17,000)**
NN 189	13.449N 42.566E	Beilul Islands	BB, SF, SG, WeG, GCT, **LCT (2,500)**, BT, **BN (1,000)**
NN 190	13.515N 42.613E	Beilul Islands	BB, MB, GbH, SG, SF
NN 198	15.168N 40.210E	Hawakil Bay	O, GCT, **LCT (6,000)**, WcT, BT
Om el Assela	12.934N 42.824E	Assab Bay	WRH, **ES (90)**, O, CP, SG, WeG, BT
Rakh Howtha	15.272N 40.102E	Hawakil Bay	RbT, GbH, WRH, GH, ES, O, SF, SG, WeG, WcT
Romiya	16.528N 40.042E	Dahlak Archipelago	O, **SF (60)**, **GCT (750)**, **LCT (4,000)**, WcT
Sadla	13.882N 41.939E	Idi Islands	BB, O, SF, SG, WeG, GCT, **LCT (1,400)**
Sayal	13.330N 42.567E	Beilul Islands	BB, BT, **BN (8,000)**
Sarad	15.819N 39.911E	Dahlak Archipelago	RbT, BB, O, SF, CP, SG, WeG
Scoglio Tauanich	15.081N 40.431E	Hawakil Bay	GbH, GH, **ES (60)**, O, SF, BT
Seil	14.840N 40.844E	Anfile Bay	RbT, **BB (5,000)**, GbH, O, SF, SG, WeG, **GCT (2,500)**, **LCT (18,000)**, BT
Sheikh el Abu	16.032N 39.437E	Dahlak Archipelago	O, SG, CT, **GCT (700)**, **LCT (12,000)**, WcT, BT
Umal Bager	12.868N 42.789E	Assab Bay	GbH, WRH, SI, ES, O, **CP (1,200)**, SG, WeG, GCT, LCT, WcT, BT
Umel Beger	12.982N 42.770E	Assab Bay	GbH, **ES (30)**, O, SG, WeG, BT
Umm en Nayim	15.068N 40.466E	Hawakil Bay	BB, GbH, O, SF, **CP (2,200)**, SG
Umm Namus	15.383N 40.049E	Hawakil Bay	GH, O, SG, WeG, GCT, LCT, WcT
Urubia	12.988N 42.836E	Assab Bay	ES, O, **CP (1,900)**, SG, WeG
Zauber	15.637N 40.785E	Dahlak Archipelago	O, **GCT (500)**, **LCT (2,600)**, WcT, BT

Crested Terns *S. bergii* were estimated by measuring first the density of nests within several 1 m × 1 m squares placed evenly throughout the colony and multiplying for the total area of the colony. Bridled Tern *S. anaethetus* nests are very difficult and time-consuming to locate, as they are generally concealed under low vegetation or in rock crevices. For this species, the number of adults was estimated by using flushing counts (Bibby *et al.* 1992). We roughly estimated the total number of breeding pairs by multiplying for 2/3, as in Bullock & Gomersall (1981). Taxonomy follows Wetlands International (2006), which gives also the 1% level of every biogeographical population.

Results

Three hundred and twenty-five islands (93% of the total) were visited and 21 species of breeding seabirds and waterbirds were recorded on 210 of them, with densities of 1–12 breeding species per island. We counted *c.*150,000 breeding pairs, but as some islands were not surveyed and others only in summer or in winter, and some nests might have been missed, we estimate that the actual number may be *c.*175,000 pairs.

Red-billed Tropicbird *Phaethon aethereus indicus*
One or two individuals were occasionally seen at sea. This species nests solitarily on cliffs, in caves or in holes perpendicular to the cliff. Breeding in the Dahlak Archipelago has been recorded in March (Salvadori 1954), June–July (Heuglin 1859), and August (Clapham 1962). In total we found 16 breeding pairs on 12 islands in both summer and winter. However, given the inaccessibility of their nests, the real number is certainly higher.

Masked Booby *Sula dactylatra melanops*
Considered a rare resident in the Red Sea, with *c.*48 breeding pairs on the Abu Ali Islands in Yemen (PERSGA/GEF 2003). In July 2007, we recorded 25 breeding pairs on three of the Beilul Islands within colonies of Brown Booby *Sula leucogaster* and Brown Noddy *Anous stolidus*. The breeding season is probably similar to that of the next species.

Brown Booby *Sula leucogaster plotus*
Abundant and breeds in scattered groups or semi-colonies on open bare ground or on cliffs. Clapham (1964) found 100 pairs on Isratu and 20 on Wusta (Dahlak Islands) in August 1956. We recorded 10,000 breeding pairs on 46 islands. The nesting season varies between the northern and southern islands. In the north breeding commences in late summer (August) and lasts until December. In the south, on the Beilul Islands, we observed both eggs and chicks in July 2006, suggesting that breeding starts in spring and continues well into summer. The highest number of breeding Brown Boobies in the Red Sea was recorded in Yemen, with 13,243 breeding pairs (PERSGA/GEF 2003).

Socotra Cormorant *Phalacrocorax nigrogularis*
Endemic to the continental shelf from the Arabian Gulf to the Gulf of Aden and considered Vulnerable (BirdLife International 2007). Previously, there were only two records of single individuals from Eritrea and the Red Sea, one near Assab in 1889–90 (Moltoni 1942) and one at the Eritrea–Djibouti border in 1987 (Welch *et al.* 1992). We found the species year-round at sea around Idi, Tio and Marsa Fatima. The highest counts were 3,000–4,000 in Howakil Bay in January 2004, 1,100 in November 2005 near Idi, more than 1,500 in July 2006 near Idi, and *c.*1,500 in Anfile Bay on July 2007. Local fishermen know the species, which they call *subbahi*, and report that the cormorants breed on the islands in the late summer.

Pink-backed Pelican *Pelecanus rufescens*
Common on the coasts and islands of Eritrea. Nesting was observed atop mangroves (*Avicenna marina*). We recorded 235 breeding pairs on nine islands. In the north, breeding starts in October and continues well into February, whereas in the south it lasts until July. Newton & Symens (1996) recorded breeding in the southern Saudi Arabian Red Sea, with major colonies in the Farasan Archipelago.

Green-backed Heron *Butorides striata brevipes*
One or two individuals usually present on islands with coral cliff and mangroves. A solitary breeder, nesting in holes and in crevices of coral cliffs, in mangrove and other tall vegetation. We recorded 32 breeding pairs on 20 islands, but probably many more pairs breed. Breeds in winter and early

summer. In Yemen, 65 nests were recorded on the Red Sea islands (PERSGA/GEF 2003).

Western Reef Heron *Egretta garzetta schistacea*
Two to four individuals were usually seen on the majority of the islands visited. Nests were found atop mangroves, in dense shrubs and tall halophytes. In total we recorded 150 breeding pairs on 20 islands. Breeding starts in March and lasts until July. The largest known colony on the Red Sea coast was recorded in Egypt, with 40–60 pairs in the mangrove of Manqata, north of Nabq (Goodman & Meininger 1989).

Goliath Heron *Ardea goliath*
One or two individuals were usually seen in shallow waters and coral cliffs of many islands. A solitary breeder. Nests were observed on mangrove trees, atop shrubs, on the ground on coral outcrops or amongst shrubby vegetation. We recorded 21 breeding pairs on 16 islands, a total that will almost certainly increase if the entire Eritrean islands are surveyed both in winter and summer. The breeding season is summer and winter. In Yemen ten pairs have been recorded (PERSGA/GEF 2003).

Abdim's Stork *Ciconia abdimii*
Usually seen in Eritrea's coastal towns and villages. Nests were found on Durgella Island in March 1953 (Salvadori 1954). We recorded three colonies on Dissie Island, one on nearby Seil Island close to the Buri Peninsula, and one on Andebar Island in the Dahlak Islands. In total, we found 63 breeding pairs. Breeding commences in October and continues well into March, whilst in the highlands the species breeds during summer.

Sacred Ibis *Threskiornis aethiopicus*
Usually seen foraging on mudflats in coastal cities. Large numbers were recorded breeding on the small island of Haramous and on a shipwreck south of Djibouti (PERSGA/GEF 2003). We recorded 52 breeding pairs in mangrove on Sheikh Said Island, near Massawa. Two pairs were seen on empty nests at Emal Bager Island (Assab Bay), within colonies of Eurasian Spoonbill *Platalea leucorodia* and Western Reef Heron *Egretta garzetta schistacea*. Breeds in winter.

Eurasian Spoonbill *Platalea leucorodia archeri*
Usually found on islands with mangrove forest. Nests were observed atop mangrove, dense shrubs and tall halophytes as well as on coral outcrops. On many occasions, Eurasian Spoonbills were observed breeding in association with Western Reef Heron *Egretta garzetta schistacea*. We recorded 284 breeding pairs on 18 islands. Breeding starts in March and lasts until July. The estimated breeding population of *P. leucorodia* in Sudan ranges from 200 to 500 pairs, whilst in Saudi Arabia a total of 22 colonies supports 103 pairs (PERSGA/GEF 2003).

Osprey *Pandion haliaetus*
Recorded on the majority of islands visited during our summer and winter surveys. A solitary breeder. Ospreys build a massive nest of twigs, dried sponges and seaweed, pieces of vegetation and various other flotsam. Nesting is usually on elevated ground and atop hills, cliffs and lighthouses. Clapham (1964) recorded more than 50 birds on 15 islands in the Dahlak Archipelago. We found 92 active nests on 57 islands during our winter surveys and 132 pairs on 86 additional islands during the summer surveys, bringing the estimated total breeding population to more than 220 pairs. Breeding occurs from October until March.

Sooty Falcon *Falco concolor*
This species appears in April or May on many coralline cliff islands in Eritrea. It nests in holes or crevices on coral cliffs and occasionally at the base of mangroves and *Euphorbia*. We recorded 230 breeding pairs on 90 islands, with the majority on the Dahlak Archipelago; Romiya Island hosts 20 breeding pairs. Breeding starts in late June and lasts until early October.

Crab Plover *Dromas ardeola*
Discovered to breed underground by Theodor Von Heuglin (1861, 1867, 1873), in 1858 on the Dahlak Islands. Excavates a burrow in flat or gently sloping sandbanks, often vegetated with low halophytes. A recent study in the central Eritrean Red Sea confirmed the existence of ten active colonies (De Marchi *et al.* 2006). During our study 21 active breeding colonies were found on 21 different islands. In total 8,661 fresh burrows were counted. The largest colony, with 1,600 bur-

rows, was on Delgus Island (Assab Bay). The breeding population of Crab Plover in the Eritrean Red Sea is thus probably the largest in the world. Breeding starts in early May and lasts until August or early September. The world population is estimated at 60,000–80,000 (Wetlands International 2006). Recent surveys in the Red Sea have revealed that this region supports probably 3,000–3,500 breeding pairs, excluding Eritrea (PERSGA/GEF 2003).

Kentish Plover *Charadrius alexandrinus*
Two to three individuals were recorded on many of the islands visited. During our study four nests were found on three islands. The broken-wing display was observed on an additional four islands. In total, we recorded 13 breeding pairs on seven islands. The difficulty in finding this species' nest means that this is almost certainly an underestimate. The breeding season is mainly from June to July. On the Yemeni Red Sea islands 40 pairs were recorded breeding in July 2002 (PERSGA/GEF 2003).

Sooty Gull *Larus hemprichii*
Low to moderate numbers were recorded on all islands visited. The species breeds solitarily or in loose colonies, and its breeding biology is similar to that of White-eyed Gull *L. leucophthalmus*. In total, we recorded 1,067 breeding pairs on 67 islands. Breeding starts in June and continues until August.

White-eyed Gull *Larus leucophthalmus*
Endemic to the Red Sea and Gulf of Aden and listed as Near Threatened (BirdLife International 2007), White-eyed Gull is a colonial or semi-colonial breeder, nesting below dense bushes, shrubs and halophytes, on open ground and occasionally in coral caves or in crevices. We recorded 5,900 breeding pairs on 49 islands, with Abeilat Island, near Idi, hosting *c.*3,000 pairs. Breeding commences in June and continues until August. The global population has been estimated at 37,000–44,000 (Wetlands International 2006). In the Red Sea and Gulf of Aden region, excluding Eritrea, 12,000–13,000 pairs are estimated to breed (PERSGA/GEF 2003).

Caspian Tern *Sterna caspia*
Small numbers were seen on many of the islands. Caspian Terns breed either alone or in small, loose colonies, numbering up to ten pairs, on bare sand, usually close to the beach. We found 103 breeding pairs on 45 islands of the Dahlak Archipelago and Hawakil Bay during our winter surveys. Probably many more breed there, as we surveyed only some of the islands at this season, when the species breeds. In the Saudi Arabian Red Sea, there are reports of 100–200 breeding pairs (PERSGA/GEF 2003).

Greater Crested Tern *Sterna bergii velox*
Small numbers were seen on many islands, where they nest in association with Lesser Crested Tern *S. bengalensis*. We recorded 2,200 breeding pairs on 26 islands.

Lesser Crested Tern *Sterna bengalensis par*
Common on many visited islands, forming large, dense colonies on bare sand close to the sea. We recorded 63,000 pairs in 40 colonies on 32 islands. The largest single colony was at Anfile Bay, Seil Island, with 8,500 breeding pairs, which is probably the largest colony in the Red Sea. Clapham (1964) found a large colony containing several thousand chicks on Seil Wusta, on 30 August 1962. Nests in summer. The total number of breeding pairs in the Red Sea is estimated at 13,000–15,000, excluding Eritrea (PERSGA/GEF 2003).

White-cheeked Tern *Sterna repressa*
Breeds widely on the Eritrean islands. Colonies were found on bare ground. Clapham (1964) observed flocks containing a large proportion of immatures in August 1962. We recorded 18,000 breeding pairs on 69 islands. Breeds in summer. The total number of breeding pairs in the Red Sea, excluding Eritrea, was estimated at 27,000–30,000 (PERSGA/GEF 2003).

Bridled Tern *Sterna anaethetus fuligula*
Breeds widely on the Eritrean islands. It nests below vegetation, in caves, in crevices and, surprisingly, in abandoned Crab Plover *Dromas ardeola* burrows. A breeding colony was found on Seil Adasi Island, in 1962, by Clapham (1964). In the Eritrean Red Sea we estimated 30,000–35,000


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breeding pairs on 66 islands. Gurna, a very small island in Assab Bay, held 5,000 pairs. Breeding commences in May and continues until August. In the Eastern Red Sea 130,000 breeding pairs were recorded (PERSGA/GEF 2003).

Saunders's Tern *Sterna saundersi*
In the Red Sea, breeds in Saudi Arabia, Yemen and along the Somali coast (PERSGA/GEF 2003). In March 2005, we observed more than 130 frenzied pairs landing on open ground and amongst low halophytes on Fatima Island (Assab Bay). In July 2005 we observed more than 70 juveniles in the same place, whilst fishermen claim to have seen this species breeding on Fatima Island. Twenty-four individuals were noted apparently breeding on Norah Island in May 2005. Breeding probably commences in April.

Brown Noddy *Anous stolidus plumbeigularis*
Common on the Beilul Islands and along the northern Eritrean coast. Nests in caves and crevices of rocky islands and atop tall halophytes. Smith (1951) observed hundreds in June 1940 on the Beilul Islands. We recorded breeding on five of the Beilul Islands and on Entesila Island in the Dahlak Archipelago, with an estimated 11,000 pairs. Breeds in summer. The total number estimated in the Red Sea and Gulf of Aden is >30,000 breeding pairs.

Discussion

Our surveys highlight that the Dahlak Archipelago and Offshore Islands IBA is important not only for the significant component of species restricted to the Sahara-Sindian biome, under criteria A3 (Coulthard 2001), but also under categories A1 and A4i, A4ii and A4iii.

Under category A1 White-eyed Gull is considered Near Threatened and is endemic to the Red Sea and Gulf of Aden. Its global population has been calculated, outside Eritrea, to be *c.*37,000–44,000 birds (Wetlands International 2006). We found *c.*6,000 breeding pairs, or almost one-third of the world's breeding population. Another species of global concern, the threatened Socotra Cormorant was considered a rare vagrant to the Red Sea, with only two published reports of single birds (Moltoni 1942, Welch *et al.* 1992), but we discovered that several thousand individuals are present in Eritrean waters, possibly year-round, and breeding is suspected. Additional surveys are needed to fully elucidate the status of this species.

Moreover, the IBA is important under category A4i because during the breeding season it holds on a regular basis more than 1% of the biogeographic population of the following species: Lesser Crested Tern *Sterna bengalensis par* (more than 70% of the world population), Brown Noddy *Anous stolidus plumbeigularis* (*c.*25%), Crab Plover *Dromas ardeola* (at least 20%), Eurasian Spoonbill *Platalea leucorodia archeri* (18%), Brown Booby *Sula leucogaster plotus* (almost 10% of the world population), Greater Crested Tern *Sterna bergii velox* (18%), White-cheeked Tern *S. repressa* (6%) and Bridled Tern *S. anaethetus fuligula* (3.0–3.5%). Under category A4ii (more than 1% of the population of a congregatory seabird) the area is important for the high number of breeding Brown Boobies. Under category A4iii the IBA is important because year-round it supports more than 20,000 waterbirds; we recorded more than 330,000 waterbirds and more than 10,000 pairs of seabirds.

Captions to photos on opposite page

Figure 2. Adult Brown Noddy *Anous stolidus* with chick, on the Beilul Islands (D. Semere)

Noddi brun *Anous stolidus*, adulte avec oisillon, îles Beilul (D. Semere)

Figure 3. Juvenile Socotra Cormorant *Phalacrocorax nigrogularis*, Idi, Danakil coast (D. Semere)

Cormoran de Socotra *Phalacrocorax nigrogularis* juvénile, Idi, côte Danakil (D. Semere)

Figure 4. In a Crab Plover *Dromas ardeola* colony, Dahret, Dahlak Islands (G. De Marchi)

Dans une colonie de Dromes ardéoles *Dromas ardeola*, Dahret, îles Dahlak (G. De Marchi)

Figure 5. Breeding colony of Lesser Crested Terns *Sterna bengalensis*, Dahret, Dahlak Islands (G. De Marchi)

Colonie de Sternes voyageuses *Sterna bengalensis*, Dahret, îles Dahlak (G. De Marchi)

Figure 6. Adult Sooty Falcon *Falco concolor* with chick, Seil Island, Buri Peninsula (G. De Marchi)

Faucon concolore *Falco concolor*, adulte avec oisillon, île de Seil, péninsule de Buri (G. De Marchi)

Figure 7. Adult Eurasian Spoonbill *Platalea leucorodia* with chick, Seil Island, Buri Peninsula (G. De Marchi)

Spatule blanche *Platalea leucorodia*, adulte avec oisillon, île de Seil, péninsule de Buri (G. De Marchi)

Forty islands meet individually the 1% criteria and three (Entesila, the Dahlak NN177 in Assab Bay and Seil in Anfile Bay) support more than 20,000 breeding waterbirds (Table 1). Ten additional islands support many breeding species and are therefore of particular value (Table 1). We consider that all of these 50 islands are in need of a special protection and the status of their breeding birds should be monitored regularly because of the presence of certain threats.

Black Rats *Rattus rattus* were observed on many islands (De Marchi *et al.* 2006; present surveys) and appear to affect colonial terns. Cats, introduced temporarily by local fishermen to control the rats, were seen on four uninhabited islands (pers. obs.) and could also represent a threat to larger bird species. The effect of rats and cats is potentially as severe in Eritrea as in other regions of the world (Atkinson 1984, Moors & Atkinson 1984, PERSGA/GEF 2003). Their introduction on the islands should be avoided and they should be eradicated where present. In addition, the introduction of grazing mammals, such as camels and goats, can disturb or destroy the nests or even entire colonies of ground-breeding birds.

However, the major threats for breeding seabirds on the islands come from direct human interference. At present many Eritrean islands support camps of local and foreign sea cucumber and shell collectors, fishermen and also navy personnel. They regularly collect eggs for consumption, affecting in particular Lesser Crested, Greater Crested and White-cheeked Terns, and Crab Plover. Moreover, they have cleared some areas of halophytes (affecting in particular nesting of Bridled Tern), to construct camps and racks for drying cooked sea cucumbers, and have cut mangrove for firewood and windbreaks. We propose that egg collection should be banned on all islands, as well as camping on those islands harbouring the most important breeding colonies of seabirds and waterbirds.

Overall, the threat represented by tourism appears low at present, as only 21 islands are open to tourists and only three of the important islands (Dahret, Madote and Durgella) are frequently visited by them. However, if tourism develops, uncontrolled visitors could have a much more considerable impact on breeding birds, as elsewhere in the world (Fowler 1999, Yorio *et al.* 2001). Therefore, we propose that the important breeding islands should be closed to tourism, at least during the main breeding season, or visited only under the supervision of an accredited guide.

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Chad Firefinch *Lagonosticta umbrinodorsalis* 'rediscovered' in northern Cameroon

Nigel Voaden

L'Amarante de Reichenow *Lagonosticta umbrinodorsalis* 'redécouvert' au nord du Cameroun. Une petite population de l'Amarante de Reichenow *Lagonosticta umbrinodorsalis* a été trouvée récemment au nord du Cameroun, près de la ville de Poli. L'espèce n'a apparemment pas été signalée depuis de nombreuses années et cette localité est probablement la seule qui soit actuellement connue pour cet amarante.

Summary. A small population of Chad Firefinch *Lagonosticta umbrinodorsalis* has recently been located in northern Cameroon adjacent to the town of Poli. The species has apparently not been reported for many years and this population probably represents the only currently known locality for the species.

Chad Firefinch *Lagonosticta umbrinodorsalis* was described in 1910, by Reichenow, from a single moulting juvenile male taken at Sakdje, North Cameroon (within the boundaries of modern-day Bénoué National Park). It has remained a poorly known and rarely recorded species ever since, and has at various times been 'lumped' with Jameson's Firefinch *L. rhodopareia* (e.g., Clement *et al.* 1993). In 1977, J. Brunel discovered a small population at Moundou, south-western Chad, which was tentatively described by Érard & Roche (1977) as a new subspecies of Jameson's Firefinch (*L. r. bruneli*), although this name was subsequently deemed a synonym of *umbrinodorsalis* (Fry & Keith 2004); five males and a single female were collected and currently reside in the Muséum National d'Histoire Naturelle, Paris. Given the apparent paucity of information concerning Chad Firefinch, it is not listed by BirdLife International on the IUCN 'Red List' as the organisation currently recognises the taxon as a subspecies of Jameson's Firefinch, although this treatment is currently being reviewed by the BirdLife Taxonomic Working Group (J. Bird *in litt.* 2007).

Whilst working in northern Cameroon, and based in the town of Poli, I conducted a number of birdwatching excursions and, on 19 August 2007, whilst searching an area where I had previously observed Emin's Shrike *Lanius gubernator*, I flushed a small group of firefinches *Lagonosticta* sp. My initial impression was that they were Blue-billed Firefinch *L. rubricata* but as this would have been at the northernmost limit of the species' range (Borrow & Demey 2004) I studied a male carefully and was immediately struck by the uniform pale grey tone to the crown and nape. At this point I decided to try to photograph the birds and, after careful stalking, was able to obtain a series of average images (Figs. 1–2). On reviewing these, and Borrow & Demey (2004), I became more convinced I had found Chad Firefinch, as the all-grey crown and nape is considered a key character in its separation from Blue-billed Firefinch.

I subsequently sent the photographs to R. Demey, who also forwarded them to N. Borrow, and both agreed with my identification. R. B. Payne later reviewed the same photographs and also concurred that the birds were Chad Firefinch. I returned to the site on 26 August 2007 and spent some time studying the birds, as well as securing good photographs of a female (Fig. 3). The latter was strikingly different to Blue-billed Firefinch and superficially resembled female Rock Firefinch *L. sanguinodorsalis*. The latter species can, however, be discounted based on the male's possession of an all-grey crown and nape (the latter is red in Rock Firefinch), and a warm brown mantle (red in Rock). The specific name of Rock Firefinch, *sanguinodorsalis*, was chosen by Payne to highlight this key identification feature from Chad Firefinch, *umbrinodorsalis*.

As already mentioned, separation from male Blue-billed Firefinch was based upon the completely uniform grey crown and nape, and the warm brown mantle coloration. The West African race (*congica*) of Blue-billed Firefinch is described in the literature as showing some warm reddish

Figures 1–2. Adult male Chad Firefinch *Lagonosticta umbrinodorsalis* in 'breeding' plumage, August 2007. Note the strong contrast between the pale grey crown and nape, and the warm brown mantle, as well as the relatively long, bicoloured bill (Nigel Voaden)

Amarante de Reichenow *Lagonosticta umbrinodorsalis*, mâle adulte en plumage 'nuptial', août 2007. Noter le contraste bien marqué entre la calotte et la nuque gris pâle et le manteau brun chaud, ainsi que le bec relativement long et bicolore (Nigel Voaden)

Figure 3. Adult female Chad Firefinch *Lagonosticta umbrinodorsalis*, August 2007. Note the large red loral spot, uniform pinkish-red underparts and warm brown mantle and wings. *Contra* literature descriptions, the female does not show a pinkish wash to the cheeks; the bicoloured bill is clearly visible (Nigel Voaden)

Amarante de Reichenow *Lagonosticta umbrinodorsalis*, femelle adulte, août 2007. Noter la grande tache lorale rouge, les parties inférieures uniformément rouge rosâtre et le manteau et les ailes brun chaud. *Contra* les descriptions dans la litérature, la femelle n'a pas les joues lavées de rose; le bec bicolore est bien visible (Nigel Voaden)

Figure 4. Adult male Chad Firefinch *Lagonosticta umbrinodorsalis* in 'non-breeding' plumage, February 2008. Superficially resembles the 'breeding' plumage but is duller and 'scruffier'; the eye-ring is quite prominent in this individual, but field observations suggest this feature is usually less obvious at this season (Nigel Voaden)

Amarante de Reichenow *Lagonosticta umbrinodorsalis*, mâle adulte en plumage 'inter-nuptial', février 2008. Ressemble au mâle en plumage 'nuptial' mais est plus terne' ; le cercle oculaire est assez prononcé chez cet individu, mais les observations sur le terrain indiquent que ce caractère est d'habitude moins visible en cette saison (Nigel Voaden)

Figure 5. Presumed immature male Chad Firefinch *Lagonosticta umbrinodorsalis*, March 2008. This individual resembles the adult female, having a very similar head pattern, but the breast and belly are warm brown (like the upperparts), strongly contrasting with the throat and vent (Nigel Voaden)

Amarante de Reichenow *Lagonosticta umbrinodorsalis*, présumé mâle immature, mars 2008. Cet individu ressemble à la femelle adulte, ayant le pattern de la tête similaire, mais la poitrine et le ventre sont brun chaud (comme les parties supérieures), contrastant fortement avec la gorge et le bas-ventre (Nigel Voaden)

brown in the crown and nape, and a colder more olive-brown mantle, which diagnosis is confirmed by photographs of specimens held at the Natural History Museum, Tring, taken by N. Borrow. Literature on the female plumage of Chad Firefinch is scarce, but female Blue-billed Firefinch has a red throat and brown belly, whereas the female Chad Firefinches I observed exhibited a pinkish-red belly and breast extending in a narrow strip onto the chin. The rest of the head was grey with a large red loral spot. This is slightly at odds with the descriptions in Érard & Roche (1977) and Fry & Keith (2004) (presumably made from the same specimen), which clearly state that the cheeks of female Chad Firefinch are washed pink, although this may be an overstated feature (R. B. Payne *in litt.* 2007). Chad Firefinch exhibits a two-toned bill, paler at the base, and similar to that of Rock and Kulikoro Firefinches *L. virata*, but dissimilar to the rather monotone bill of Blue-billed. The bill is also rather long and similar in shape to that of Rock and Kulikoro, but dissimilar again to Blue-billed, which tends to be shorter. What are inferred to be immature males (Fig. 5) were observed in early March 2008. Superficially these resembled females, but the breast and belly were concolorous with the wings and back (warm brown), and contrasted more sharply with the vinous throat and vent. They also lacked the white 'starring' on the breast-sides typical of most *Lagonosticta*, including Chad Firefinch. The birds were sound-recorded singing (see below) and thus identified as males. The possibility that these individuals might be adult males in heavy moult cannot be eliminated, but other males in 'non-breeding' plumage were observed at the same time, the plumage of which was essentially a duller version of the 'breeding' plumaged males observed in August–December. This plumage corresponds with that of the type specimen in Berlin (a moulting juvenile male), although the underparts of the specimen possess a distinct pinkish-red wash and it is thus inferred to be in more advanced plumage than that depicted in Fig. 5.

The birds call near-continuously, although the rattling alarm-call *pitpitpit* (Fry & Keith 2004) and a high-pitched *tsee*, most probably a contact call, are by far the most common vocalisations, and a range of further vocalisations very similar to that of Blue-billed Firefinch including songs have been noted. According to Chappuis (2000) and Borrow & Demey (2004) the calls of the two species are very similar. The birds are not especially responsive to playback but do occasionally exhibit 'interest' in the recording of Chad Firefinch (15:27 on Chappuis 2000; where it is listed as Jameson's Firefinch), made in south-west Chad in 1977 by J. Brunel, whilst never responding to playback of Blue-billed Firefinch. They are also often responsive to 'pishing' and poor imitations of the alarm-call. Sound-recordings of calling and singing immature males were made in March 2008 and sent to R. B. Payne, whose early analysis suggests at least six different song and call types can be identified.

The birds were initially found frequenting the environs of well-vegetated streams and rivers, set in a sparsely vegetated plain (at *c.*400 m), although some individuals were noted in dense vegetation at higher elevations (up to 1,250 m) on nearby granitic massifs. With the onset of the dry season sightings on the plain became fewer and by January they could only be found at higher elevations (above 800 m), where vegetation is denser and water more available. This localised altitudinal movement is inferred to be in response to annual habitat cycles on the plain, where watercourses are ephemeral and most vegetation is burnt. The birds can be expected to return to the plain with the onset of the wet season in May/June. Suitable habitat is abundant in the area and the species is inferred to be locally common. The males exhibit swollen eye-rings and brighter plumage during the wet season (August–November at least but probably also earlier); immatures were first noted in March, so the species presumably breeds at higher elevations. During the dry season they often form large feeding flocks (of up to 50 birds), feeding on steep, grassy, rocky slopes.

The area is easily accessible in the wet season when the firefinches are present on the plain, but during the dry season occur in a more remote area requiring a four-wheel-drive vehicle to visit. Additionally, uranium exploration is ongoing in the area and the author should be contacted for advice before visiting. Nonetheless, to visit would represent only a minor detour from the standard Cameroon birding itineraries, being, for instance, potentially easily incorporated as part of a travel day between Waza and Bénoué National Parks, and, indeed, a recent bird tour visited the site and were rewarded with excellent views.

Acknowledgements

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Seebohm's Wheatear *Oenanthe oenanthe seebohmi* in West Africa

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Le Traquet de Seebohm *Oenanthe oenanthe seebohmi* en Afrique de l'Ouest. Le Traquet de Seebohm *Oenanthe o. seebohmi*, généralement traité comme une sous-espèce du Traquet motteux *O. oenanthe* malgré ses traits morphologiques distinctifs, niche exclusivement dans les zones montagnardes du Maroc et de l'Algérie. Son aire d'hivernage est mal connue. En février–mars 2007, nous avons étudié la présence des espèces de traquet le long d'un transect est-ouest dans la zone sahélienne et avons rencontré le Traquet de Seebohm régulièrement et en bon nombre depuis le sud de la Mauritanie jusqu'à l'ouest du Mali, entre 09°W et 14°W. Nous soupçonnons qu'un pourcentage important de sa population hiverne dans cette zone et traverse le Sahara chaque année.

Northern Wheatear *Oenanthe oenanthe* has one of the largest ranges among passerines. It breeds from Europe to eastern Siberia and north-west Africa, and from Iceland, Greenland and north-east Canada to Alaska. All of these populations winter mainly in Africa, south of the Sahara (Keith *et al.* 1992). The subspecies *seebohmi* (Seebohm's Wheatear) breeds exclusively in the mountains of north-west Africa and differs considerably from the other forms in plumage, vocalisations and morphology (Cramp & Perrins 1988). In Morocco it is a common breeder throughout the Middle and High Atlas, above 1,500 m, and more rarely in the Rif and the hills of eastern Morocco (Thévenot *et al.* 2003). In Algeria it is known to breed in the Aurès at 1,700–2,320 m and in the Djurdjura at 1,500–2,100 m (Isenmann & Moali 2000). Breeding has not been observed in Tunisia (Isenmann *et al.* 2005). Male Seebohm's Wheatears possess a characteristic black throat and black underwing-coverts and axillaries, which separates them from other Northern Wheatear taxa (Cramp & Perrins 1988, Keith *et al.* 1992, Borrow & Demey 2001). The taxonomic status of Seebohm's Wheatear is unclear (Collar 2005).

Although *seebohmi* was previously thought to be a resident or only a partial migrant by some authors (e.g. Smith 1971, Hollom *et al.* 1988, Cramp & Perrins 1988), it is now considered a migrant, with the majority of the population leaving Morocco and Algeria in winter (Isenmann & Moali 2000, Thévenot *et al.* 2003). Browne (1982) found a major wintering area, roughly estimated to hold at least 50,000 individuals, in the eastern part of south-west Mauritania, between 16–19°N and 12–16°30'W. There are also three more southern records, from Djoudj National Park, in north-west Senegal (Rodwell *et al.* 1996). However, the winter distribution of Seebohm's

Table 1. Sympatric wheatear *Oenanthe* species observed and trapped in Mali and Mauritania at different locations in March 2007.

Tableau 1. Spécimens d'espèces de traquet *Oenanthe* sympatriques observés et capturés au Mali et en Mauritanie en différentes localités en mars 2007.

	Mali	Mauritania			
	NE of Nioro	W of Ayuen	Massif de Bellar	NE of Lac Aleg	Lac Aleg
	15°22.218'N 9°25.742'W	16°25.944'N 10°21.403'W	17°02.307'N 11°58.859'W	17°17.667'N 13°42.688'W	17°05.206'N 13°58.504'W
site number (see map)	**1**	**2**	**3**	**4**	**5**
Date	7–8 March	9–11 March	11–12 March	12–13 March	13–14 March
number of birds observed (trapped) / site					
Northern Wheatear *O. oenanthe*	24 (6)	15 (6)	19 (3)	17 (14)	10 (0)
Seebohm's Wheatear *O. o. seebohmi*	**3 (2)**	**4 (2)**	**3 (2)**	**5 (3)**	**2 (0)**
Black-eared Wheatear *O. h. hispanica / melanoleuca*	12 (5)	5 (4)	5 (3)	4 (3)	2 (1)
Isabelline Wheatear *O. isabellina*	2 (0)		4 (2)		
White-crowned Black Wheatear *O. leucopyga*		6 (2)	4 (2)		

Wheatear east of this area still is unknown, apart from a few observations in the Tombouctou/Gossi area, in Mali (Lamarche 1981).

In February–March 2007 we undertook field work in West Africa's Sahel zone, to investigate the occurrence of sympatric wheatear species, and here present our results at the five sites where we found Seebohm's Wheatear.

Methods

We followed an east–west transect from 08°E to 14°W from Zinder, Agadez and Niamey, Niger, to Gao, Mopti and Bamako, Mali, from where we drove north into Mauritania, then heading west to Lac Aleg. Along this route we checked 20 randomly selected waypoints (GPS) with high wheatear abundance, for the presence of Northern Wheatear, Seebohm's Wheatear and other wheatears (Isabelline Wheatear *O. isabellina*, Black-eared Wheatear *O.* (*h.*) *hispanica*/*melanoleuca*, White-crowned Black Wheatear *O. leucopyga*). Each study site covered *c.*10 ha, where we counted all wheatears present. Using clap traps baited with mealworms, we trapped birds within these areas for 1–2 days, between 06.00 and 11.00 hrs. Twenty traps per site were used.

Results

In total we observed 17 Seebohm's Wheatears at the five westernmost study sites, between 09°W and 14°W (Table 1; Fig. 1). Due to the difficulty of identifying females subspecifically in the field,

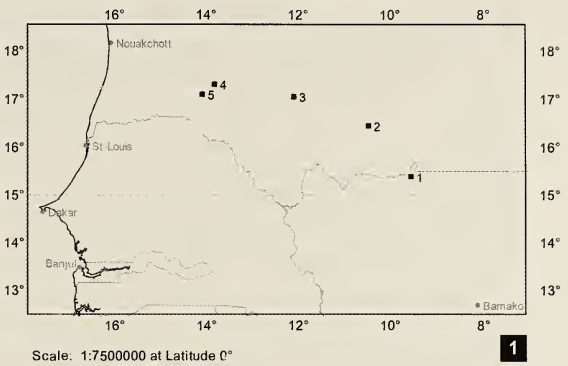

Figure 1. Trapping sites in Mali and Mauritania with *O. o. seebohmi* present.

Sites de capture au Mali et en Mauritanie où *O. o. seebohmi* était présent.

Figures 2–3. Male Seebohm's Wheatears *O. o. seebohmi*, north-east of Nioro, Mali, March 2007 (B. Metzger)

Traquet de Seebohm *O. o. seebohmi*, mâles, nord-est de Nioro, Mali, mars 2007 (B. Metzger)

Figure 4. Presumed female Seebohm's Wheatear *O. o. seebohmi* with typical blackish underwing-coverts and axillaries, Massif de Bellar, Mauritania, March 2007 (M. Förschler)

Traquet de Seebohm *O. o. seebohmi*, présumé femelle, avec les couvertures sous-alaires et les axillaires typiquement noirâtres, Massif de Bellar, Mauritanie, mars 2007 (M. Förschler)

all observed birds were males (Figs. 2–3). We captured seven males and two presumed *seebohmi* females, based on their remarkably dark underwing and axillaries (Fig. 4). Of the trapped individuals, five were adults and four second calendar-year birds. Approximately 12% of all wheatears observed and 18% of those captured at the sampling sites were of the race *seebohmi*. Captured birds had low to moderate subcutaneous fat deposits and five were moulting the body-feathers, indicating that they were still on their wintering grounds and not yet on spring migration. Apart from birds observed or trapped at the five study sites, we counted *c.*40 male Seebohm's Wheatears from the moving vehicle between study sites 1 and 5, which indicates a rather high abundance in this area.

Discussion

Our data on Seebohm's Wheatear, which we recorded regularly and in significant numbers in southern Mauritania and western Mali, between 13°58'W and 09°25'W, fill a gap in the knowledge of its winter distribution east of 12°W (see Browne 1982). The majority of this taxon's population appears to winter immediately south of the Sahara, in the Sahel zone of southern Mauritania, northern Senegal and north-west Mali between 15–18°N and 09–16°W, although its wintering grounds may range even further east, including parts of central Mali.

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Intermediate forms of Hairy-breasted Barbet *Tricholaema hirsuta* in the Lesio-Louna Reserve, Congo-Brazzaville

Tony King

Formes intermédiaires du Barbican hérissé *Tricholaema hirsuta* dans la Réserve de Lesio-Louna, Congo-Brazzaville. Des photos sont présentées d'un couple de Barbicans hérissés *Tricholaema hirsuta* dans la Réserve de Lesio-Louna, Congo-Brazzaville. Chez le premier oiseau la moustache est large et distincte, tandis que le sourcil ne comprend que quatre petits traits blancs. Chez le deuxième, le sourcil est beaucoup plus net, bien qu'il ne consiste également que de quatre traits, tandis que la moustache se limite à une grande tache au-dessous des parotiques, ne s'étendant par vers le bec. Les deux oiseaux sont densément tachetés de jaune sur le front, la nuque et le dos. Les parties supérieures du premier individu apparaissent plutôt brunes, contrastant peu avec les parties inférieures, tandis que le second est plus noir au-dessus et plus jaune en dessous. Les deux oiseaux ont la gorge blanchâtre mouchetée de noir. Les oiseaux présentent ainsi des caractéristiques intermédiaires entre la sous-espèce *ansorgii* et les formes *flavipunctata* ou *angolensis*.

The aim of this note is to discuss the subspecific identity of a pair of Hairy-breasted Barbets *Tricholaema hirsuta* present in the Lesio-Louna Reserve, 140 km north of Brazzaville, on the Bateke Plateau of Congo-Brazzaville (03°16'S 15°29'E). Between 2 and 5 December 2005 one of the pair was observed excavating a hole within a branch of a dead tree, in a narrow strip of degraded forest in wooded grassland between two gallery forest patches. On 13, 15 and 28 December, one of the pair was observed with its bill and forehead emerging from the hole. On the next visit, on 28 January 2006, none was seen, but another individual was observed singing 600 m north of this site on 15 February 2007, and its song was subsequently heard in the same area until at least April.

The racial identity of these birds is not obvious. *T. hirsuta* is the most morphologically variable of all Afrotropical barbets and, consequently, has caused much confusion amongst taxonomists. Four subspecies are generally recognised: *hirsuta* in the west, *ansorgii* in the east, *angolensis* in the south-west, and *flavipunctata* in the north-centre of the species' range (Short & Horne 1988, 2001, 2002, Fishpool 2005; see Fig. 1). Intergradation between the subspecies is well known (Short & Horne 1988, 2001, 2002), and photographs of an intermediate *hirsuta* / *flavipunctata* were published in Fishpool (2005).

Of the pair observed in 2005, both birds had black head-sides and white facial stripes, characteristic of *ansorgii*, although the facial stripes were significantly reduced. In one of the pair (Figs. 2–3), the moustachial stripe was rather broad and distinct, whilst the supercilium comprised just four small white streaks. In the other (Figs. 4–5), the supercilium was much more distinct, although still broken into four streaks, whilst the moustachial stripe was non-existent anteriorly, but is apparent as a large spot below the ear-coverts. Both birds possessed strong yellow spotting on the nape and back (Figs. 2 and 5), and on the forehead (Figs. 3 and 4), a feature characteristic of *flavipunctata* and *angolensis* rather than *ansorgii*. The upperparts of one bird appeared fairly brown, offering rather little contrast with the underparts (Figs. 2–3), in this being suggestive of *angolensis*, whilst the other individual appeared blacker above and yellower below (Figs. 4–5), thereby agreeing more closely with *flavipunctata* or *ansorgii*. Both had a whitish throat mottled black (Fig. 4), typical of all three races.

The single bird observed at some distance in 2007 appeared to have an overall black head, with only the suggestion of a white supercilium, some yellow speckling on the nape, a mottled whitish throat, a blackish-brown back and yellowish underparts. Again, these characters suggest an intermediate form.

It seems probable that the grassland-dominated Bateke Plateau separates the two subspecies generally regarded as occurring in Congo-Brazzaville, namely *ansorgii* to the north and *angolensis* to the south-west. However, west of

the Bateke Plateau lie the forests of central Gabon, where the transition occurs from *flavipunctata* in the north to *angolensis* in the south (see Fig. 1). Rand *et al.* (1959) believed this transition to be abrupt, and to be located at *c.*02°S. It is conceivable that *flavipunctata* extends from the forests of central Gabon, south-east through the gallery forests of the Bateke Plateau. I tentatively suggest that the Lesio-Louna birds reported here are principally of *ansorgii* / *flavipunctata* origin, although the possible influence of *angolensis* cannot be discounted.

Whilst most recent texts claim yellow spotting on the forehead to be absent (Short & Horne 2002, Fishpool 2005), or only occasional (Short & Horne 1988), in *T. h. ansorgii*, examination of 69 specimens of this taxon at the Royal Museum for Central Africa at Tervuren, from three regions

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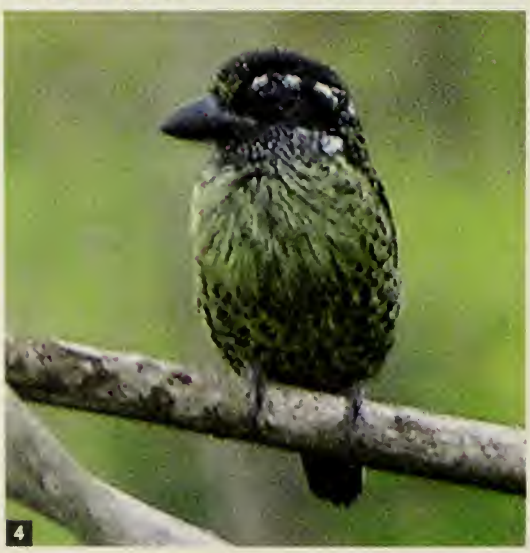
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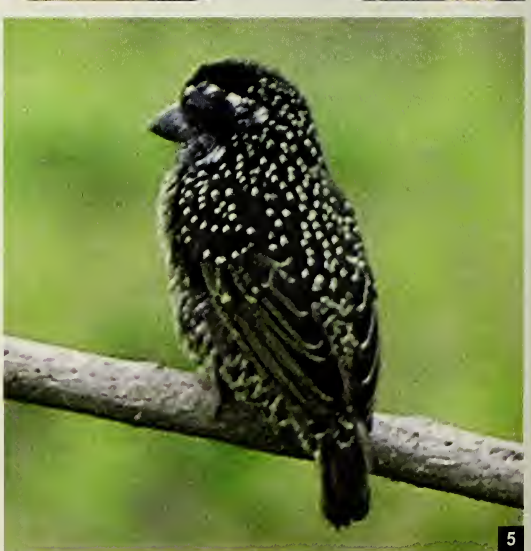
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of Congo-Kinshasa, revealed that 15 (22%) had yellow spots on the forehead. There appeared to be regional differences, with 45% (five of 11) from the Ubangi region exhibiting yellow spots on the forehead, 29% (5 of 17) from the Kunungu region, and only 12% (5 of 41) from the Equateur region. Two (3%) of the 69 specimens examined appeared to have slightly reduced facial stripes. Again, cases of partial or reduced facial stripes are not generally discussed in recent texts. Interestingly, whilst the intermediate bird photographed in Fishpool (2005) possessed a conspicuous white supercilium, on closer inspection this appears to comprise four separate streaks, rather than a single continuous one, in a similar if less obvious pattern to the two Lesio-Louna birds illustrated here.

Captions to figure and photos on opposite page

Figure 1. Approximate distributions of the four races of Hairy-breasted Barbet *Tricholaema hirsuta*, with the Bateke Plateau region delineated in red.

Aires de distribution approximatives des quatre sous-espèces du Barbican hérissé *Tricholaema hirsuta*, avec le Plateau des Batéké délimité en rouge.

Figures 2–3. One of a pair of Hairy-breasted Barbet *Tricholaema hirsuta*, Lesio-Louna Reserve, Congo-Brazzaville, December 2005 (Tony King)

Un membre d'un couple de Barbicans hérissés *Tricholaema hirsuta*, Réserve de Lesio-Louna, Congo-Brazzaville, décembre 2005 (Tony King)

Figures 4–5. The second of a pair of Hairy-breasted Barbet *Tricholaema hirsuta*, excavating a hole in a dead tree, Lesio-Louna Reserve, Congo-Brazzaville, December 2005 (Tony King)

L'autre membre d'un couple de Barbicans hérissés *Tricholaema hirsuta*, creusant un trou dans un arbre mort, Réserve de Lesio-Louna, Congo-Brazzaville, décembre 2005 (Tony King)

Acknowledgements

I thank the Ministère de l'Economie Forestière et de l'Environnement of the Republic of Congo, and The Aspinall Foundation of UK, for their continued commitment to the joint management project for the Lesio-Louna Reserve; Michel Louette and the staff of the Royal Museum for Central Africa at Tervuren, Belgium, for access to their specimen collection; Robert Prŷs-Jones and the staff of the Natural History Museum (Tring) for providing access to their library; Richard & Phyllis King for their help with literature; Françoise Dowsett-Lemaire, Robert Dowsett and Hugo Rainey for providing useful background information and advice; and Lincoln Fishpool and Ron Demey for constructive comments on the manuscript.

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A nest record of Oberländer's Ground Thrush *Zoothera oberlaenderi*

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Observation d'un nid de la Grive d'Oberlaender *Zoothera oberlaenderi*. Le 1 mars 2007, un nid de la Grive d'Oberlaender *Zoothera oberlaenderi* a été découvert dans la partie sud de la forêt de Bwindi, au sud-ouest de l'Ouganda. Le nid, placé sur une branche à 5 m de hauteur, contenait trois oisillons. Les premières photographies du nid, de la nichée, et d'un adulte de cette espèce menacée sont présentées.

Oberländer's Ground Thrush *Zoothera oberlaenderi* occurs in north-east Congo-Kinshasa and in western Uganda, and is known solely from a few sites in the former country (Ituri Forest, Bondo-Mabe, Kamituga area, southern Kivu and Semliki Valley) and two in Uganda (Semliki/Bwamba Forest and Bwindi Impenetrable Forest: Clement & Hathway 2000). The species inhabits primary lowland and transitional forest at 700–1,620 m (Urban *et al.* 1997), but is unknown from secondary forests (Collar 2005). In Bwamba (Uganda), this thrush is known from tall stands of ironwood trees, *Cynometra alexandri*, with a fairly open understorey, and avoids areas with dense undergrowth (Urban *et al.* 1997). The species' current status is unclear, e.g., only seven dated records have been published from Uganda since the 1960s (Carswell *et al.* 2005) including a female collected in the Itama area of Bwindi Impenetrable Forest, at 1,616 m, by A. Williams, on 18 June 1969 (Keith & Garrett 1994). However, the IUCN / BirdLife International (2007) currently treats *Z. oberlaenderi* as Near Threatened, despite the lack of recent published records, e.g., from the Semliki Valley (Carswell *et al.* 2005). Urban *et al.* (1997) suggested that the species may no longer be extant in the Bwamba Forest of the Semliki Valley, owing to habitat degradation. Habitat loss may have also caused its local extinction at Beni and Kamituga (Ituri, Congo-Kinshasa: Collar & Stuart 1985), as the species appears sensitive to forest degradation (Plumptre 1997), which is extensive within its small range (Collar 2005). Moreover, conservation efforts are impeded by the fact that Oberländer's Ground Thrush remains one of the least-studied African birds, due to its elusive behaviour and tiny range; the species' breeding habits are largely unknown, and the eggs and nestlings undescribed (Urban *et al.* 1997, Collar 2005). A nest of *Z. oberlaenderi*, found in Bwindi by A. Twinomujuni in May–June 1998 (Clement & Hathway 2000), was constructed of 'dry grasses, vegetation strips and plant fibres', but was later destroyed by squirrels.

In the afternoon of 1 March 2007, in the western sector of Bwindi Impenetrable Forest 2.5 km south of Buhoma, SA heard a ground thrush singing in dense forest 12 m away beside a stream (01°01'S 29°37'E; 1,492 m). Arriving in the area from where the song emanated we observed the ground thrush in flight. Initially we were unable to obtain good views, but after a while the bird flew to a tree, where we observed that it was sitting on a nest, 5 m up in a *Carapa glandiflora*, and whereupon we were able to identify the bird as an Oberländer's Ground Thrush. Using a telescope we saw the distinctive broken white eye-ring and the rufous-brown head (Figs. 1–2). The dark vertical line through the eye was seen well on several occasions. Both adults were bringing food to the nest, suggesting that it contained nestlings. As with Black-eared Ground Thrush *Zoothera cameronensis*, which appears very shy at the nest (Lindsell 2002), the Oberländer's Ground Thrushes departed the nest whenever we approached to within 25 m. After *c.*1 hour observing and photographing the birds, TG climbed the tree to photograph the nest, which was well concealed on a small, wet branch covered by liverworts and ferns. The open-cup nest was constructed mainly of liverwort, *Plagiochila*, with a few fern stems visible inside the nest (Fig. 3). Dry grasses, which were mentioned from the first recorded nest in Bwindi Forest (Clement & Hathway 2000), were not apparent. The nest structure and its location resembled that of a nest of Abyssinian Ground Thrush *Zoothera piaggae*

Figure 1. Adult Oberländer's Ground Thrush *Zoothera oberlaenderi* just prior to leaving the nest, Bwindi Impenetrable Forest, Uganda, 1 March 2007 (Thomas Gottschalk)

Grive d'Oberlaender *Zoothera oberlaenderi* adulte juste avant de s'envoler du nid, Forêt de Bwindi, Ouganda, 1 mars 2007 (Thomas Gottschalk)

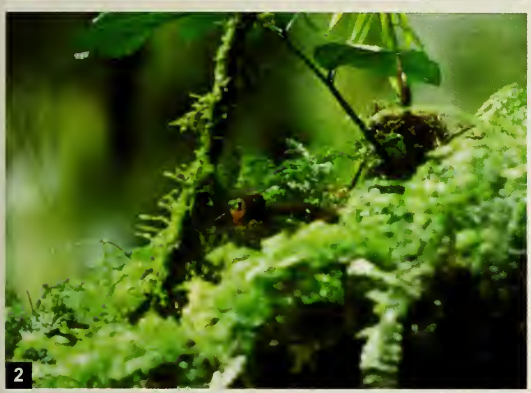

Figure 2. Adult Oberländer's Ground Thrush *Zoothera oberlaenderi* on the nest, Bwindi Impenetrable Forest, Uganda, 1 March 2007 (Thomas Gottschalk)

Grive d'Oberlaender *Zoothera oberlaenderi* adulte dans son nid, Forêt de Bwindi, Ouganda, 1 mars 2007 (Thomas Gottschalk)

Figure 3. Nest and nestling of Oberländer's Ground Thrush *Zoothera oberlaenderi*, Bwindi Impenetrable Forest, Uganda, 1 March 2007 (Thomas Gottschalk)

Nid avec oisillon de la Grive d'Oberlaender *Zoothera oberlaenderi*, Forêt de Bwindi, Ouganda, 1 mars 2007 (Thomas Gottschalk)

found in Uganda, which was built of loose green moss and well concealed in dense foliage 5 m above ground (T. Butynski *et al. in* Urban *et al.* 1997). The nests of Black-eared Ground Thrush and Grey Ground Thrush *Z. princei* are somewhat different, as they are constructed of dead leaves, some twigs and dry bark (Brosset & Érard 1976, Lindsell 2002, Collar 2005). The nest held three unfeathered chicks with closed eyes. To our knowledge, the photographs of the adult and the nest are the first ever published of the species (Figs. 1–3).

On 10 February 2008 the same place was visited again. The one-year old *Z. oberlaenderi* nest was still on the tree and in good condition. After removing it from the small, unstable branch, the following measurements were taken: external diameter 140 mm, internal diameter 60 mm, internal depth 40 mm. The area of ground shaded by trees and shrubs at midday was estimated to be 10 m around the nest. Canopy closure was *c.*75% and included trees up to 26 m high. The understorey layer (trees lower than 3 m) covered 40%, the upper field layer (trees and shrubs <2–3 m) 50% and the lower field layer (shrubs >3 m) 50%.

Further data are required to elucidate the current status of Oberländer's Ground Thrush. Such data are particularly important given that Oberländer's Ground Thrush is an Albertine Rift endemic and is confined to the few remnants of primary forest in this part of East Africa.

Acknowledgements

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First records of Dimorphic Egrets *Egretta dimorpha* for Uganda and Rwanda

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Premières mentions de l'Aigrette dimorphe *Egretta dimorpha* pour l'Ouganda et le Rwanda. Une Aigrette dimorphe *Egretta dimorpha* a été photographiée sur l'île Samuka, Lac Victoria, Ouganda (00°24'N 33°16'E), le 17 avril 2005. Sur le même site, 50 nids de l'espèce ont été trouvés dans une colonie d'Aigrettes garzettes *E. garzetta* le 23 avril. Il s'agit des premières mentions pour l'Ouganda. Par après, l'espèce a été observée à plusieurs reprises en d'autres endroits du lac Victoria. Le 6 novembre 2006, une aigrette, photographiée au Lac Hago, au Parc National de l'Akagera, Rwanda, a été identifiée comme la première Aigrette dimorphe pour le Rwanda.

On 17 April 2005, KO photographed an unfamiliar egret with reddish/pinkish feet and lores, on Samuka Island, Lake Victoria, Uganda (00°24'N 33°16'E). This small island of 5 ha is covered by grass and shrubs, and has a rocky shoreline and 5–10 m-tall trees. It is a tourist site with a guesthouse and a campsite, c.1 hour from Jinja by boat. On 23 April, we organised a second visit and identified over 100 white-morph Dimorphic Egrets *Egretta dimorpha* (Fig. 1), of which we also found 50 nests. The latter might represent an underestimate as the birds were nesting in the same trees as Little Egrets, and only nests on which Dimorphic Egrets were observed were attributed to this species. Moreover, the count was made at 13.30 hrs, when most birds were foraging away from the area. The attendant of the guesthouse reported that many more birds arrive in the evening. This is the first record of Dimorphic Egret for Uganda—the species is not mentioned in Carswell *et al.* (2005) and it is considered a marine bird in East Africa (Zimmerman *et al.* 1996). Stevenson & Fanshawe (2002) map only one inland record, in Kenya.

Other species nesting on the island included Little Egret *Egretta garzetta* (650 nests; the second breeding site known in Uganda after the Musambwa Islands), Cattle Egret *Bubulcus ibis* (100 nests; a new breeding site for the species) and Long-tailed Cormorant *Phalacrocorax africanus* (200 nests; the second known breeding site in Uganda). We also counted 58 Great White Egrets *Egretta alba* and 15 Intermediate Egrets *E. intermedia* (both not breeding). The island represents a large mixed roost site for egrets and Long-tailed Cormorants.

Subsequent observations of Dimorphic Egrets, made during waterbird counts organised by NatureUganda, are as follows: five on the Mgamba Islands, near Entebbe, and four at Port Bell, near Kampala, both in the first week of May 2005; five on the Musambwa Islands, on the west side of Lake Victoria, on 13 June 2005, with one there on 31 January 2006; 18 on Samuka, on 8 February 2006; 60 on Kitobo Island, 15 on Nsherewe Island and 23 on Banda Island, all part of the Ssese Islands, on 12 February 2006; and 11 in Nakiwogo Bay, on Info Island near Entebbe International Airport, on 16 February 2006.

The Dimorphic Egrets appeared similar to Little Egrets but differed in breeding plumage by their reddish-pink lores and bright red feet (Zimmerman *et al.* 1996, Stevenson & Fanshawe 2002). Some did not exhibit breeding condition, although they were carrying nesting material. Non-breeders were identified by the yellow feet colour extending up the black legs (the feet are more sharply defined in Little Egret: Zimmerman *et al.* 1996, Stevenson & Fanshawe 2002).

These records indicate that Dimorphic Egret is now widespread on the shores of Lake Victoria and has probably been overlooked previously. They also reveal how much of the lake is unexplored ornithologically.

On 6 November 2006, Manfred Wichmann, who visited Samuka Island in April 2005 with AB & KO, photographed an *Egretta* sp. at Lake Hago, in Akagera National Park, Rwanda, which, based on the yellow-greyish colour of the feet extending up the black legs, he identified as a white-morph Dimorphic Egret in non-breeding plumage

Figure 1. Dimorphic Egrets / Aigrettes dimorphes *Egretta dimorpha*, Samuka Island, Lake Victoria, Uganda, 23 April 2005 (Kaj Østergaard)

Figure 2. Dimorphic Egret / Aigrette dimorphe *Egretta dimorpha*, Lake Hago, Akagera National Park, Rwanda, 6 November 2006 (Manfred Wichmann)

(Fig. 2). This appears to be the first record for Rwanda (Stevenson & Fanshawe (2002).

Acknowledgements

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Photospot:

'Splitting hairs'?: the Blue Tits of the Canary Islands

Guy M. Kirwan

'Couper les cheveux en quatre? : les Mésanges bleues des Îles Canaries. La Mésange bleue *Parus* (*Cyanistes*) *caeruleus* est largement distribuée dans le Paléarctique occidental. Des données génétiques récentes appuyent fortement la proposition qu'il s'agit en fait de plus d'une espèce, les 15 taxons pouvant en tout cas être subdivisés en deux groupes assez distincts, *teneriffae* et *caeruleus*. Le premier se trouve dans les Îles Canaries et, probablement, en Afrique du Nord, tandis que *caeruleus* occupe le reste de l'aire de distribution continentale. Ce 'photospot' analyse et illustre les variations à l'intérieur du groupe *teneriffae*, qui comprend cinq sous-espèces dans les Îles Canaries et une ou deux en Afrique du Nord. Des preuves fournies par l'étude des vocalisations, des différences de plumage plus limitées (mais néanmoins apparemment constantes), ainsi qu'une différenciation génétique, incitent certaines autorités à traiter les taxons suivants comme espèces: *teneriffae* (sur les îles de La Gomera et Tenerife), *palmensis* (La Palma), *ombriosus* (El Hierro), *hedwigii* (Gran Canaria) et *ultramarinus* (en Afrique du Nord et dans les Îles Canaries orientales de Lanzarote et Fuerteventura). Des études supplémentaires devraient tenter d'élucider si le taxon *degener*, décrit de Lanzarote et Fuerteventura, est valable ou devrait être considéré comme un synonyme de *ultramarinus*, et si tous ces différents taxons méritent réellement d'être traités commes des espèces à part entière sous l'application moderne du Concept Biologique des Espèces.

The 'humble' Blue Tit *Parus caeruleus*, a familiar bird to European readers, has proved, but recently, to be rather more enigmatic in its taxonomy than was long presumed to be the case. Indeed, one might casually, but correctly, state its taxonomy to be in positive turmoil, given that its proposed return to the genus *Cyanistes* Kaup, 1829 (following the results of the molecular study of Gill *et al.* 2005), is already accruing wide support (Collinson 2007, Gosler & Clement 2007), whilst debate over whether to recognise one, two, or as many as five species has been ongoing for more than a decade. Some 15 taxa are nowadays recognised for this complex (Dickinson 2003, Gosler & Clement 2007), which subdivide rather neatly into two groups, as noted, for instance, by Vaurie (1957), although some debate persists concerning the most appropriate 'home' for the North African races *ultramarinus* (Morocco to northern Tunisia) and *cyrenaicae* (of north-east Libya); see below. Variation amidst the rather larger group of continental races, the nominate *caeruleus*-group, is generally rather slight and frequently clinal (see, for example, Harrap & Quinn 1996), but the *teneriffae*-group, as already noted by Vaurie (*op. cit.*), who preferred to clump the African forms within it, represents a quite different and, in the majority of cases, readily diagnosable assortment of taxa.

This Photospot focuses on the four, or (as only very recently proposed) five, taxa occurring in the Canary Islands, off north-west Africa, which are as follows: *Parus caeruleus teneriffae* Lesson, 1831, from La Gomera and Tenerife, *P. c. palmensis* Meade-Waldo, 1899, of La Palma, *P. c. ombriosus* Meade-Waldo, 1890, confined to El Hierro, *P. c. degener* E. J. O. Hartert, 1901, of Lanzarote and Fuerteventura (though see below), and *P. c. hedwigii* Dietzen, Garcia-del-Rey, Delgado Castro & Wink, 2007, on Gran Canaria (from where birds had previously been assigned to *teneriffae*). From Eurasian races, they (and the North African birds) collectively differ in their blackish crown, blue-grey to slate-grey upperparts (with the exception of *ombriosus*, and to a lesser extent *palmensis*, which show some green on the upper mantle), longer bill, and territorial songs, which are characterised by rapid changes in frequency.

The vocal work undertaken by Becker *et al.* (1980), Schottler (1993, 1995) and Schottler & Martens (1991, 1992) on these Canarian Blue Tits, as well as the morphological differences reiterated by Grant (1979), and the proposal by Martin (1991) to 'split' the *teneriffae*-group from the *caeruleus*-group, prompted a review paper by Sangster (1996). Sangster made the bold recommendation to recognise not two, but five species

within the complex, namely European Blue Tit *P. caeruleus*, North African Blue Tit *P. ultramarinus* (including *cyrenaicae*), Tenerife Blue Tit *P. teneriffae*, Fuerteventura Blue Tit *P. degener*, Hierro Blue Tit *P. ombriosus* and Palma Blue Tit *P. palmensis*.

Outside the Netherlands, this proposal attracted little, if any, published support but undoubtedly pricked the interest of travelling birders. Although Harrap & Quinn (1996) had also noted the possibility that more than one species might be involved, the relevant volume (6) of *Birds of Africa* (Fry & Keith 2000) continued to treat the two mainland taxa as part of a single widespread species (Macaronesia, although deemed part of the ABC region, was not included within that of *BoA*), just one of many taxonomic decisions the editors might be tended to reverse with the benefit of hindsight (Fry *et al.* 2004). Indeed, since the publications of Salzburger *et al.* (2002) and Kvist *et al.* (2004), both of whom uncovered significant levels of genetic divergence between the *caeruleus*- and *teneriffae*-groups, there has been growing support for the recognition of two (European and African) species, although Gosler & Clement (2007), who also favoured the dual species approach, will have surprised many by including the two North African taxa within *P. caeruleus*, rather than *P. teneriffae* (Canary Blue Tit therein).

Even more recently, another genetic (and morphometric) study, by Dietzen *et al.* (2007), has led to the description of a new taxon from the Canaries, the above-mentioned *hedwigii*, from Gran Canaria. (Earlier, Kvist *et al.* 2005 had also uncovered genetic evidence that the population on Gran Canaria appeared distinct from *teneriffae*.) Dietzen *et al.* (*op. cit.*) elected to treat the *teneriffae*-group, including *ultramarinus*, as a single species, but took the, at first sight, radical step of synonymizing *degener* with *ultramarinus*, based on their near-identical mtDNA (just 0.2–0.3% difference).

Given that *degener* occurs on the two easternmost islands of the Canaries group, this is a less surprising proposition than it might initially appear. (As yet, the origin and colonisation history of the Canaries by *Parus caeruleus* is unclear, but the available evidence provides support for a multi-event colonisation theory: Kvist *et al.* 2005, Dietzen *et al.* 2007.) More than 50 years ago, Vaurie (1957) had already pointed out that '*degener* . . . approaches the coloration of *ultramarinus*', but had persisted in maintaining the former name because 'the two can nevertheless be differentiated without difficulty, *degener* being paler above and below and showing more white on the center of the abdomen.'

Because the Dietzen *et al.* (*op. cit.*) study uncovered differences of 2.1% to 4.8% in mtDNA between the different named populations, which might be considered rather high between subspecies, the Dutch Birding Association (DBA) currently recognises *teneriffae*, *palmensis*, *ombriosus*, *hedwigii* and *ultramarinus* all as species (van den Berg 2008). Nonetheless, with regard to both the DBA decision and the proposal by Dietzen *et al.* (*op. cit.*) to regard *degener* as a synonym of *ultramarinus*, it merits reiteration that very little, if any, consensus exists concerning the levels of genetic differentiation required to support or deny different taxonomic status, much less to meaningfully interpret such differences within insular or continental contexts, which it might to some extent be admitted present different playing fields. Furthermore, it is known that, at least in some cases, levels of variation between avian taxa

Captions to photos on opposite page

Figure 1. Tenerife Blue Tit / Mésange bleue de Tenerife *Parus caeruleus teneriffae*, Las Lajas, Tenerife, July 2006 (Andrew Grieve)

Figure 2. Tenerife Blue Tit / Mésange bleue de Tenerife *Parus caeruleus teneriffae*, Las Lajas, Tenerife, December 2006 (Cyril Schönbächler)

Figure 3. Palma Blue Tit / Mésange bleue de La Palma *Parus caeruleus palmensis*, May 2005, La Palma, Los Tilos (Domingo Trujillo González)

Figure 4. Hierro Blue Tit / Mésange bleue de Hierro *Parus caeruleus ombriosus*, east of Frontera, El Hierro, July 2006 (Andrew Grieve)

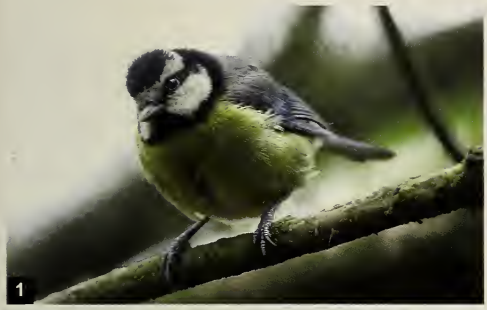
Figure 5. Gran Canaria Blue Tit / Mésange bleue de Gran Canaria *Parus caeruleus hedwigii*, Ayacata, Gran Canaria, January 2007 (Cyril Schönbächler)

Figure 6. Juvenile Gran Canaria Blue Tit / Mésange bleue de Gran Canaria *Parus caeruleus hedwigii*, Inagua, Gran Canaria, June 2007 (Domingo Trujillo González)

Figure 7. Fuerteventura Blue Tit / Mésange bleue de Fuerteventura *Parus caeruleus degener*, Lanzarote, May (© *Taxonomy of Birds of the World: A Photographic Handbook*, in prep., by Jornvall & Shirihai, publisher A. & C. Black)

Figure 8. African Blue Tit / Mésange bleue africaine *Parus caeruleus ultramarinus*, Zida, Morocco, January 2006 (Augusto Faustino)

Figure 9. African Blue Tit / Mésange bleue africaine *Parus caeruleus ultramarinus*, Dayet Aoua, Ifrane, Morocco, January 2006 (Augusto Faustino)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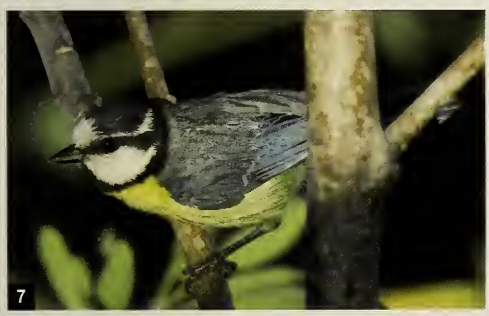
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may differ quite strikingly depending on whether nuclear or mitochondrial DNA is sampled (Brawn *et al.* 1996), and some authors (e.g. Zink & Barrowclough 2008) have voiced the proposition that inferences concerning species limits based upon mtDNA are potentially unreliable unless corroborated by nuclear gene data.

Given that all five forms occurring in the Canaries are endemic to single, or in two cases two, islands, their in-the-field separation should, in theory, require little more than the ability to remember on which island you are standing. (Instances of vagrancy are apparently unknown, for now.) Leaving aside the issue of whether *degener* really is a synonym of *ultramarinus*, succinct and accurate summaries of the morphological (and vocal) differences separating the different taxa, other than the more recently described *hedwigii*, can be found in Gosler & Clement (2007) and Clarke (2006), the latter guide likely to be that of choice amongst birders visiting the islands, as well as, of course, Harrap & Quinn (1996) and Snow & Perrins (1998). Nominate *teneriffae* (Figs. 1–2) is rather obviously different to the other taxa by virtue of its lacking a wingbar and any obvious paler fringes to the tertials, whereas birds on El Hierro (*ombriosus*) possess only a very indistinct greyish-white wingbar (on the greater coverts), but also show traces of greenish on the mantle (Fig. 4), and are slightly larger. Those (Fig. 3) on La Palma (*palmensis*) may also show (much less) of a greenish tone to the upperparts but, unlike *ombriosus*, the whiter wingbar, secondary and tertial fringes, are usually rather obvious, at least in fresh plumage, whilst the underparts are considerably paler, due in particular to the belly being more extensively white. Compared to *teneriffae*, La Palma birds are overall duller, with a less glossy cap, a broader supercilium and more prominent eyestripe. Dietzen *et al.* (2007) suggest that *hedwigii* (Figs. 5–6) differs only marginally from the preceding taxa (especially *teneriffae*), but that its slightly paler, greyish-tinged upperparts, broader black throat patch, and narrower white nape line might prove to be consistent differences; they also provide data on voice and mensural characters. Finally, *degener* (or *ultramarinus*) is, compared to all of the other taxa on the Canaries, predominantly pale yellow below, with only a small whitish belly-patch but long blackish ventral line, obviously paler and greyer upperparts, a narrow white supercilium and narrower dark nuchal band, as well as a relatively striking white wingbar and tertial fringes (Fig. 7; see Figs. 8–9 for comparison with North African birds).

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Recent Reports

These are largely unconfirmed records published for interest only; **records are mostly from late 2007 and early 2008, with a few from earlier dates.** We thank all birders who have sent in their records and urge them to submit full details to the relevant national or regional organisations. It is suggested that observations of each species be compared with relevant literature to set new data in context and that observers who are unfamiliar with the status of birds in a particular country refer to R. J. Dowsett's (1993) Afrotropical avifaunas: annotated country checklists (in R. J. Dowsett & F. Dowsett-Lemaire. *A Contribution to the Distribution and Taxonomy of Afrotropical and Malagasy Birds*. Tauraco Res. Rep. 5. Liège: Tauraco Press) or more recent or appropriate sources before submitting records.

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Les observations ci-après sont en majeure partie non confirmées et sont publiées uniquement dans le but d'informer. **La plupart des données sont de fin 2007 et début 2008 ; quelques-unes sont plus anciennes.** Nous remercions tous les ornithologues qui ont pris la peine de nous faire parvenir leurs données et nous recommandons de les envoyer, dûment documentées, aux organisations nationales ou régionales concernées. Il est conseillé de vérifier le statut des espèces observées dans la littérature appropriée, afin de mettre les nouvelles données en perspective, et de consulter notamment R. J. Dowsett (1993) Afrotropical avifaunas: annotated country checklists (in R. J. Dowsett & F. Dowsett-Lemaire. *A Contribution to the Distribution and Taxonomy of Afrotropical and Malagasy Birds*. Tauraco Res. Rep. 5. Liège : Tauraco Press) ou des sources plus récentes ou appropriées.

Ascension

A field trip to Ascension on 7–20 February 2008 coincided with the **Common Myna** *Acridotheres tristis* breeding season. Since their introduction in 1879 mynas have adapted to the barren island and to shortages of invertebrates and fruit, and the lack of nest holes in trees and buildings. In addition to scavenging deserted eggs, they predated many hundreds of eggs of **Sooty Terns** *Sterna fuscata*. At the rubbish dump mynas were nesting communally and more than 20 nests, two containing chicks close to fledging, were discovered at the end of *c.*70 cm-long tunnels excavated (presumably by the mynas themselves) *c.*20 cm below a shallow lava crust. The ability to adapt to harsh conditions makes this aggressive species a serious threat to the island's native avifauna (*JH*).

Azores

The following records are from September 2007–May 2008. On 11 December, 574 **Cory's Shearwaters** *Calonectris diomedea* few past Praia islet. Up to three juvenile **Great Northern Divers** *Gavia immer* were off Praia da Vitoria, Terceira, on 7–15 December. Juvenile **White-tailed Tropicbirds** *Phaethon lepturus* were photographed 303 nautical miles west of Flores on 18 October and 200 nautical miles west of Flores on 20 October. A **Least Bittern** *Ixobrychus exilis* was trapped and photographed at Hotel Colombo on Santa Maria on 28 September. In February–May, **Cattle Egrets** *Bubulcus ibis* were found at Fajã de Cima, São Miguel (up to 28), on Santa Maria (*c.*40 on 6 February), and at Feteira, Faial (six on 6 April). A **Snowy Egret** *Egretta thula* was observed at Lagoa Azul, São Miguel, on 27 January. An **American Great Egret** *E. alba egretta* was still on Santa Maria in mid-February, with two until at least 31 March; one was at Lagoa do Ginjal, Terceira, on 1 April. A **Great Blue Heron** *Ardea herodias* was on Corvo in mid-February and a first-winter **Eurasian Spoonbill** *Platalea leucorodia* at Paul da Praia, Terceira, on 7–15 December.

A **Pink-footed Goose** *Anser brachyrhynchus* wintered on São Miguel from 27 January to late February. Duck species included, on Terceira, a female **American Wigeon** *Anas americana* at Paul da Praia on 7–15 December and a female **Ring-necked Duck** *Aythya collaris* there in February; on Pico, a male **Blue-winged Teal** *Anas discors* in February; on São Miguel, an **American Wigeon** at Lagoa das Furnas on 1 December, four **Blue-winged Teals** at Lagoa dos Espraiados, Achada das Furnas, on 16 December (two of these were shot), a female **Lesser Scaup** *Aythya affinis* still at Lagoa Verde on 24 February, and up to 11 **Ring-necked Ducks** also there in November–February, with ten at Lagoa das Sete Cidades on 6–9 December. A female **Goosander** *Mergus merganser* was at Santa Cruz, Graciosa, on 22–25 February. The fourth **Hooded Merganser** *Lophodytes cucullatus* for the Azores, a first-winter/female, remained on São Miguel from 27 February to 22 March at least (the first was in February 2001). On 2 May, a weakened female **Red-footed Falcon** *Falco vespertinus* was picked

up on Faial but died a few hours later.

Nearctic waders at Cabo da Praia, Terceira, in December–May, included up to five **Semipalmated Plovers** *Charadrius semipalmatus*, a **Pacific Golden Plover** *Pluvialis dominica* (present from 24 October to April), up to four **Semipalmated Sandpipers** *Calidris pusilla*, a **White-rumped Sandpiper** *C. fuscicollis* (in December), up to two **Pectoral Sandpipers** *C. melanotos* (late April–early May), and up to two **Least Sandpipers** *C. minutilla* (with one also at Lajes do Pico, Pico, on 1 February). During that period, single **Spotted Sandpipers** *Actitis macularius* were observed on Terceira, Pico, São Miguel, Graciosa and Faial. At least two **Purple Sandpipers** *Calidris maritima* were present on Terceira from 2 to 20 April at least. A few **Wilson's Snipes** *Gallinago delicata* were shot on São Miguel, including four on 25 November, one on 9 December, two on 16 December (all juveniles), and one on 13 January (an adult female).

Ten **Long-tailed Skuas** *Stercorarius longicaudus* were seen 20 miles south-west of Lajes do Pico on 23 April. **Ring-billed Gulls** *Larus delawarensis* occurred on São Miguel, Faial and Terceira throughout the period, with a maximum count of 19 (two adults, 15 second-winters and two first-winters) at Praia da Vitoria, Terceira, on 27 March. On São Miguel, a first-winter **Bonaparte's Gull** *L. philadelphia* was seen on 5–9 December and 25 February, an adult **Laughing Gull** *L. atricilla* on 15 April (also recorded at Cabo da Praia, Terceira, on 26–27 March, 19–23 April and 17 May), and two **American Herring Gulls** *L. (argentatus) smithsonianus* on 15–17 February. A **Whiskered Tern** *Chlidonias hybrida* was at Fajã de Cima, São Miguel, on 11 April.

Up to three **Alpine Swifts** *Tachymarptis melba* at Nordeste, São Miguel, on 12 April were the first for the Azores. Another first was a **Tawny Pipit** *Anthus campestris* photographed at Ponta Delgada, São Miguel, on 11 April. The second **Red-rumped Swallow** *Cecropis daurica* for the archipelago was photographed at Fajã dos Cubres, São Jorge, on 16 April. A first-winter **Dusky Thrush** *Turdus eunomus*, discovered on São Miguel on 16 January, will be the first for the Azores, if accepted. Two **Red (Common) Crossbills** *Loxia curvirostra* were still on São Miguel on 21 February (per *Dutch Birding* 30: 41–48, 125–132, 188–199; *Birding World* 20: 496, 21: 12, 62, 106, 151–152, 198).

Alpine Swift / Martinet à ventre blanc *Tachymarptis melba* (Pete Leonard)

Botswana

The following records are from the period November 2007–April 2008. Three **South African Shelducks** *Tadorna cana* at Lake Ngami on 3 February were the first at this site since the 1970s, and well north of the species' usual range in south-east Botswana. **Maccoa Duck** *Oxyura maccoa* also occurs mainly in the south-east where 56 were seen in January at various sites; of note were 51 at Jwaneng sewage ponds (*HH, MG, DG*), one at Sojwe Pan on 15 January and another in the Moshaweng Valley near Kotoloname on 18 January (*CBr, ST*). **White-backed Ducks** *Thallasornis leuconotus* bred at Lake Ngami, with numerous broods seen in late January (*PH, KO, ST, LT*); this species was also seen on the northern arm of Ntwetwe Pan in the Makgadikgadi on 30 January.

A flock of 17 **Grey Crowned Cranes** *Balearica regulorum* was seen at Nata Sanctuary in Sua Pan in the Makgadikgadi system on 13 March (*CL, GMc*). Other noteworthy records included a **Black Stork** *Ciconia nigra* south of Kasane (*BR*), a male **Pallid Harrier** *Circus macrourus* at Nata Sanctuary on 3 January, a **Denham's Bustard** *Neotis denhami* at Tale Pans, south-west of Lake Ngami, on 4–5 February (*ST, LT*), a **Whimbrel** *Numenius phaeopus* and a **Eurasian Curlew** *N. arquata* at the Botsash site on Sua Pan in early January and a **Grey Plover** *Pluvialis squatarola* in the Linyanti on 24–26 November (*BRo*). **Black-winged Pratincoles** *Glareola nordmanni* were recorded at Thagale Dam, 50 km north of Gaborone, on 15 January (one; *ST*), at Sojwe Pan on 13 January (four; *CBr*) and flocks of up to 500 at Lake Ngami on 31 January–4 February and at Masalanyane Pan, near Sehitwa, on 16 February (*LT, ST*).

Along the Namibian border, between Mohembo and the Linyanti, an **African Hobby** *Falco cuvierii*, a pair of **Grey-headed Parrots** *Poicephalus fuscicollis*, a **Shelley's Sunbird** *Cinnyris shelleyi* and four flocks of **Sharp-tailed Starlings** *Lamprotornis acuticaudus* were recorded on 9–14 February (*LT, ST*). **Shelley's Sunbirds** continue to be reported from the Chobe area.

A **Yellow Wagtail** *Motacilla flava* was at Thagale Dam, on 15 January (*ST*). In the southern Kalahari, between Tsetseng and Dutlwe, **Buffy** *Anthus vaalensis*, **Plain-backed** *A. leucophrys* and **Long-tailed Pipits** *A. longicaudatus* were identified on 21–23 April (*CBr*).

Cameroon

Records from the period January–May 2008 include the following. In Faro National Park, a single **Egyptian Goose** *Alopochen aegyptiaca* was seen on 27 January and an **African Swallow-tailed Kite** *Chelictinia riocourii* *c.*60 km south of Garoua on 4 May. An adult **European Roller** *Coracias garrulus* was found *c.*50 km south of Garoua on 21 January; this is a rare Palearctic visitor in Cameroon, with most

Figure 1. Black-backed Cisticola / Cisticole à dos noir *Cisticola eximius*, Poli, North Province, Cameroon, 11 March 2008 (Nigel Voaden)

Figure 2. Speckle-breasted Woodpecker / Pic à poitrine tachetée *Dendropicos poecilolaemus*, Yaounde, Cameroon, 17 March 2008 (Nigel Voaden)

Figure 3. Yellow-browed Warbler / Pouillot à grands sourcils *Phylloscopus inornatus*, Igueste de San Andrés, Tenerife, Canary Islands, 15 December 2007 (Ingeborg van Leeuwen)

records from the coast. The rarely recorded **Wahlberg's Honeybird** *Prodotiscus regulus* was identified at Babu II, Bamenda, on 18 March (*NV*). At Yaounde, two **Speckle-breasted Woodpeckers** *Dendropicos poecilolaemus* (Fig. 2) and two **Violet-backed Hyliotas** *Hyliota violacea* were observed on 17 March, whilst at least four **Southern Hyliotas** *H. australis* were seen once again on Mt. Kupe on 28 March–1 April. A **Little Grey Flycatcher** *Muscicapa epulata* was found *c.*40 km west of Yaounde on 18 March (*NB*). In Mefue National Park, near Yaounde, three **Cassin's Malimbes** *Malimbus cassini* were observed on 13 April (*NV*). At least six **Rock Firefinches** *Lagonosticta sanguinodorsalis* were at Maroua on 6–8 March (*NB*).

Species observed in the immediate vicinity of Poli, North Province, include **Ayres's Hawk Eagle** *Hieraaetus ayresii* (a juvenile on 27 January), **Willcocks's Honeyguide** *Indicator willcocksi* (at least two, 23 February–2 March), **Golden-tailed Woodpecker** *Campethera abingoni* (at least three, 24 Febraury–2 March), **Black-backed Cisticola** *Cisticola eximius* (one, 11 March; Fig. 1), **Collared Flycatcher** *Ficedula albicollis* (a male, 2 March), **Emin's Shrike** *Lanius gubernator* (at least two, 17 February–11 March), **Dybowski's Twinspot** *Euschistospiza dybowskii* (10+, 24 February–27 April) and **Chad Firefinch** *Lagonosticta umbrinodorsalis* (40+, 24 February–3 May) (*NV*).

Canary Islands

Records from December 2007–May 2008 include the following. After staying at Playa de las Canteras, Gran Canaria, from 15 November to 2 December 2007, the first **Tricoloured Heron** *Egretta tricolor* for the islands, a first-winter (see photo *Bull. ABC* 15: 129), moved to Tenerife, where it remained at Playa de las Americas and Los Cristianos harbour until at least 15 May (per *Dutch Birding* 30: 40–41, 127, 188; *Birding World* 21: 67–70, 199). The long-staying male **Ring-necked Duck** *Aythya collaris* at Catalina García, Fuerteventura, was still present on 20 February (per *Birding World* 21: 62). A **Turkey Vulture** *Cathartes aura* 'of unknown origin' was photographed on Fuerteventura on 8 December (per *Dutch Birding* 30: 41). A first-winter **Pallid Harrier** *Circus macrourus* was at Los Ancones, Lanzarote, on 3 March (per *Birding World* 21: 108) and a pale-morph **Booted Eagle** *Hieraaetus pennatus* on Fuerteventura on 7 February (per *Birding World* 21: 62). A first-winter **Allen's Gallinule** *Porphyrio alleni* was found exhausted at Santa Cruz, Tenerife, on 19 February; it was taken into care but died two days later (per *Dutch Birding* 30: 127). A **Corncrake** *Crex crex* was at Caleta de Fuste golf course, Fuerteventura, on 15 May (per *Birding World* 21: 199). On 3 February, a **Dunlin** *Calidris alpina* presumed to be of the race *hudsonia* was photographed at El Fraile reservoir, Tenerife (per *Dutch Birding* 30: 130). An **Arctic Skua** *Stercorarius parasiticus* was seen off La Palma on 24 May (per *Birding World* 21: 199). Three adult **Audouin's Gulls** *Larus audouinii* were at Salinas del Carmen, Fuerteventura, on 5 February (per *Birding World* 21: 62).

A **Red-rumped Swallow** *Cecropis daurica* was observed at Jandía, Fuerteventura, on 3 February (per *Birding World* 21: 62) and an adult male **Citrine Wagtail** *Motacilla citreola* at Famara, Lanzarote, on 19 March (per *Birding World* 21: 108). An **African Desert Warbler** *Sylvia* (*nana*) *deserti* was at Maspalomas, Gran Canaria, on 24 February (per *Dutch Birding* 30: 131). Single **Yellow-browed Warblers** *Phylloscopus inornatus* were reported at Igueste de San Andrés, Tenerife, on 15 December (*IL*; Fig. 3), Puerto del Carmen, Lanzarote, on 5–12 February (per *Dutch Birding* 30: 131), and Jandía, Fuerteventura, on 9 February (per *Birding World* 21: 62). A **Common Reed Bunting** *Emberiza schoeniclus*, found at Catalina García,

Fuerteventura, on 1–2 February, could be the first for the Canary Islands, if accepted (per *Dutch Birding* 30: 132).

Cape Verde Islands

The following records are from December 2007–March 2008. Two male **Magnificent Frigatebirds** *Fregata magnificens* were present at Curral Velho, Boavista, on 2 March. A **Glossy Ibis** *Plegadis falcinellus* was seen at Barragem de Poilão, Santiago, on 25–26 February (per *Dutch Birding* 30: 188). Records from Barragem da Seca, Santiago, on 15–17 December, include seven **Black-crowned Night Herons** *Nycticorax nycticorax*, seven **Eurasian Spoonbills** *Platalea leucorodia*, five **Common** *Anas crecca* or **Green-winged Teals** *A.* (*crecca*) *carolinensis* (fewer than ten records of either species), a **Blue-winged Teal** *A. discors* (second record), and a female **Northern Shoveler** *A. clypeata* (apparently the first for the islands). Another six **Northern Shovelers** were found at Mindelo sewage farm, São Vicente, in December, with two **Ring-necked Ducks** *Aythya collaris* also there on 18–20 December (per *Birding World* 21: 12). If accepted, an immature **American Purple Gallinule** *Porphyrio martinica* at Barragem de Poilão, Santiago, from 26 February into March will be the first for the Cape Verdes (per *Dutch Birding* 30: 127).

Interesting waders included a **Little Ringed Plover** *Charadrius dubius* at Mindelo sewage farm, São Vicente, on 18 December, with two adults at Barragem de Poilão, Santiago, on 26 February; a **Temminck's Stint** *Calidris temminckii* at Rabil lagoon, Boavista, on 2–3 March; a **White-rumped Sandpiper** *C. fuscicollis* at Mindelo, São Vicente, in December; a **Jack Snipe** *Lymnocryptes minimus* at Barragem da Seca, Santiago, on 15–17 December, with a **Lesser Yellowlegs** *Tringa flavipes* also there on 16–17 December, and others at Mindelo sewage farm, São Vicente, in December, at Barragem de Poilão, Santiago, on 25–26 February, and on

Song Thrush / Grive musicienne *Turdus philomelos* (Pete Leonard)

Sal on 24–26 February (per *Dutch Birding* 30: 193; *Birding World* 21: 12, 106). A third-winter **Audouin's Gull** *Larus audouinii*, observed on 5 January past Juncalinho, São Nicolau, may be the first for the islands (per *Birding World* 21: 12).

On Sal, a **Citrine Wagtail** *Motacilla citreola* seen at Santa Maria, on 7–10 January, was presumed to be the bird first seen in late October, the second for the archipelago (per *Birding World* 21: 12); a male was found at the same locality on 1 March, with a female reported there a week previously (per *Dutch Birding* 30: 199, *Birding World* 21: 106–108). **Red-throated Pipits** *Anthus cervinus* were reported from Mindelo sewage farm, São Vicente, from 18 December until 2 January (one), and from Santa Maria, Sal, on 7–10 January (two) and 1 March (two) (per *Birding World* 21: 12, 108). A **Rock Martin** *Ptyonoprogne fuligula* observed at the Fontana Oasis, Sal, on 8 January, was apparently the first for the islands. At Mindelo sewage farm, São Vicente, two **Red-rumped Swallows** *Cecropis daurica* were found on 19 December, and a **Common Starling** *Sturnus vulgaris* on 31 December (per *Birding World* 21: 12). A **Song Thrush** *Turdus philomelos* was discovered at Espargos, Sal, on 24 February (per *Dutch Birding* 30: 199).

Egypt

In July 2007–April 2008 the following were reported. A **Brown Booby** *Sula leucogaster* flew past Ras Mohammed on 3 November (per *Sandgrouse* 30: 15) and two were at Hamata Pier on 21 January, with one at Wadi Gimal on the same day (per *Birding World* 21: 62). Seven **Striated Herons** *Butorides striata* seen at the First Cataract Island, Aswan, on 5 December, is a relatively high number (per *Birding World* 20: 496). At a roost at Abassa 4,557 **Cattle Egrets** *Bubulcus ibis* were counted on 20 July. A **Goliath Heron** *Ardea goliath* was seen in Wadi Lahami on 30 October (per *Sandgrouse* 30: 15), with two there on 22 January (per *Birding World* 21: 62). Three immature **White-fronted Geese** *Anser albifrons* arrived at Nabq Bay, south Sinai, from the north-east on 17 January and were still present on 27 January (*AV*). A **Bonelli's Eagle** *Hieraaetus fasciatus* was found in mountains by the Qena–Safaga road on 26 July (per *Sandgrouse* 30: 15) and another near Dudaim on 17 January (*JM*). An adult **Verreaux's Eagle** *Aquila verreauxii* flew over Na'ama Bay water treatment ponds on 3 December (per *Birding World* 20: 496).

Purple Swamphens *Porphyrio porphyrio* were seen at Ain Sukhna, Suez, on 17 March (per *Dutch Birding* 30: 192). Two **Three-banded Plovers** *Charadrius tricollaris* stayed near Tut Amon resort village at Lake Nasser from 24 February (per *Dutch Birding* 30: 127–131). On 17 January, 138 **Eurasian Dotterels** *C. morinellus* were found near Dudaim (*JM*) and a **White-tailed Plover** *Vanellus leucurus* south of Edfu on 28 February (per *Birding World* 21: 108). On the Qu'lan Islands, *c.*500 pairs of **White-cheeked Terns** *Sterna repressa* and 42 pairs of **Bridled Terns** *S. anaethetus* were counted on 22 July. On 24 July,

Bridled Tern / Sterne bride *Sterna anaethetus* (Pete Leonard)

a flock of 69 **African Skimmers** *Rynchops flavirostris* was observed on the Nile Islands (per *Sandgrouse* 30: 15).

A pair of **African Collared Doves** *Streptopelia roseogrisea* with seven **Eurasian Collared Doves** *S. decaocto* was seen at Wadi Lahami on 23 July. A pair was also at Abu Ghusan on the same date (per *Sandgrouse* 30: 15); the species appears well established in desert fringes and mangroves in south Sinai, with, e.g., up to seven at Nabq Bay golf course, two in the Nabq Protected Area on 21 January, and at least ten around St. Catherine's Monastery on 25 January (*AT*). A pair of **Namaqua Doves** *Oena capensis* was in the Abu Simbel area on 25 July and a female was seen 15 km north of Safaga, at Soma Bay, on 13 October (per *Sandgrouse* 30: 15); the species was common at Nabq Bay, where a nestling fledged on 24 January, and several were seen around St Catherine's Monastery on 25 January (*AT*). In southern Egypt, several were observed during April (per *Dutch Birding* 30: 195). On 24 October, a **Ring-necked Parakeet** *Psittacula krameri* was seen briefly at Hurghada. A **Pallid Scops Owl** *Otus brucei* photographed on Philae Island on 6 December was the fourth record for Egypt of this probably under-recorded species. Four **Egyptian Nightjars** *Caprimulgus aegyptius* were at the water purification works in Abu Simbel at dusk on 23 July (per *Sandgrouse* 30: 15).

An **Oriental Skylark** *Alauda gulgula* was claimed from Nabq Bay golf course, south Sinai, on 15 January (*AT*). At least nine **African Pied Wagtails** *Motacilla aguimp* were recorded in the Abu Simbel area on 24 July (per *Sandgrouse* 30: 15). A **Richard's Pipit** *Anthus richardi* was photographed at El Gouna on 3 October (per *Dutch Birding* 30: 45). **Hypocolius** *Hypocolius ampelinus* occurred at Mövenpick Resort Hotel, El Quseir, on 14 February (two) and near Tut Amon resort village on 16 February (three). On 4 February and 14 March, **Black Scrub Robins** *Cercotrichas podobe* were seen at El Gouna (per *Dutch Birding* 30: 127–131, 199). Two **Fieldfares** *Turdus pilaris* perched in palm trees must have made an incongruous sight at the Nabq Bay golf course on 26 January (*AT*). An **Upcher's Warbler** *Hippolais languida* was seen in the gardens of the Albatross Resort Hotel in Hurghada on 13 August (per *Sandgrouse* 30: 15). On 8 March, a female **Cyprus Warbler** *Sylvia melanothorax* was trapped at the Hurghada sewage works and two were seen in Nabq (per *Dutch Birding* 30: 199). An **African Desert Warbler** *S. (nana) deserti* was identified north of Hamata Pier on 22 January (per *Birding World* 21: 62). On 21 July, 3,811 **House Crows** *Corvus splendens* were counted leaving a roost in Suez town. Two **Cape Crows** *C. capensis* were reported at Shalateen, southern Red Sea, with **Brown-necked Ravens** *C. ruficollis* on 29 November. On the same day, 66 **Brown-necked Ravens** were found at Ras Garib checkpoint (per *Sandgrouse* 30: 15).

Ethiopia

A male **Ferruginous Duck** *Aythya nyroca* was seen on Lake Cheleleke on 11 January 2008. At Lake Abiata, a flock of *c.*25 **Stone-curlews** *Burhinus oedicnemus*, a **Kentish Plover** *Charadrius alexandrinus* and four **Grey Plovers** *Pluvialis squatarola* were found on 31 December 2007 (*NB*).

The Gambia

Records from December 2007–May 2008 include the following. A dying third calender-year **Northern Gannet** *Morus bassanus* was found in Banjul harbour on 16 May (*FM, CB*). Two **Ferruginous Ducks** *Aythya nyroca* were photographed at Sapu, Central River Division (CRD), on 12 January; this appears to be only the second report since 1983, the other being from Kaur, CRD, in November 2005. At Kuntair, North Bank Division (NBD), a road-killed **Beaudouin's Snake Eagle** *Circaetus beaudouini* was collected and a melanistic **Montagu's Harrier** *Circus pygargus* photographed on 14 January. An adult male **Pallid Harrier** *C. macrourus* and a **Swallow-tailed**

Grasshopper Warbler / Locustelle tachetée *Locustella naevia* (Claudia Donati)

Kite *Chelictinia riocourii* were foraging over grassland near Kaur, CRD, on 14 January (*CB, JW, NH-B*), whilst a pale-morph **Booted Eagle** *Hieraaetus pennatus* was seen over Brufut Woods, Western Division (WD), on 23 April (*CB*). At Jambur Woods, an **Ayres's Hawk Eagle** *Hieraaetus ayresii* was observed on 16 January (*NB*). A male **Red-footed Falcon** *Falco vespertinus* at Kunkilling Forest Park, CRD, on 11 January is the fourth record and the first to be documented photographically.

A **Little** (Kurrichane) **Buttonquail** *Turnix sylvaticus* found dead on the road near degraded agricultural land at Fass, CRD, north of the river, on 12 January appears to be the first record for this division (*CB, JW, NH-B*). A pair of **Bronze-winged Coursers** *Rhinoptilus chalcopterus* was on burnt ground near Tanji Bird Reserve, WD, on 5 January; this species has been only rarely seen at the coast in recent years. A total of 475 **Black-tailed Godwits** *Limosa limosa* feeding in a brackish lake at Bao-Bolon wetland, NBD, on 14 January is a large congregation for the country (*CB, JW, NH-B*). Record numbers of 7,000 **Lesser Black-backed Gulls** *Larus fuscus* and 500 **Audouin's Gulls** *L. audouinii* were counted on the Bijol Islands, Tanji Bird Reserve (*CB, JW, NH-B, DPWM*). On 24 May, 15,000 pairs of **Royal Terns** *Sterna maxima* with eggs or young were found at the same locality (*DPWM*). A **European Roller** *Coracias garrulus*, a very scarce species in The Gambia, was observed south of Georgetown, CRD, on 23 April (*SD*).

A **European Robin** *Erithacus rubecula* in the Atlantic Bird Garden on 10 March is a first for Senegambia; however, ship assistance must be considered, as the site is close to Banjul harbour (*DB*). A female **Blue Rock Thrush** *Monticola solitarius*, first seen on 6 March next to a busy road at Brusubi-Brufut, WD, remained there for three weeks (*CB*, *KR*). A **Grasshopper Warbler** *Locustella naevia* in Tanji Bird Reserve, WD, on 13 February was a rare find (*CB*). A **Southern Grey Shrike** *Lanius meridionalis* was at Tujering, WD, on 20 December (*KR*); this is a rare winter visitor. **Barbreasted Firefinches** *Lagonosticta rufopicta* were found at Georgetown, CRD, on 22 April (*SD*).

Ghana

From six weeks of field work in the centre and south-east of the country in late February–early April 2008, the following records can be selected. A **Spot-breasted Ibis** *Bostrychia rara* was heard on the Sene River at Seneso (07°30'N) on 5 and 13 March, the northernmost record in Ghana. **Yellow-throated Cuckoos** *Chrysococcyx flavigularis* and **Spotted Honeyguides** *Indicator maculatus* appeared particularly common in Kalakpa Reserve, in dry semi-evergreen forest, on 22–31 March, with four and seven singing birds respectively. On 2 April, **African Black Swifts** *Apus barbatus* (new for Ghana) were seen at two localities, including Aduadu Mountain near Afadjato on the Togo border, where the species could breed. **Black-headed Bee-eaters** *Merops breweri* were found breeding in small numbers in a narrow riparian forest at Apapasu, in the west of Digya National Park, with pairs feeding nestlings or females brooding, on 7–12 March; this species was reported only once before in Ghana, in 1952, from the 'Afram River'. A **Yellow-footed Honeyguide** *Melignomon eisentrauti* was watched for a prolonged period feeding on scale insects in a tall *Ceiba* tree in degraded semi-evergreen forest near Begoro (06°26'N 00°27'W) on 17 March. Also noteworthy are further range extensions of **Baumann's Greenbul** *Phyllastrephus baumanni*, which was found commonly in low thickets in the coastal plain of Kalakpa Reserve and throughout the eastern highlands of Afadjato and Amedzofe. Several **Brown Sunbirds** *Anthreptes gabonicus* were feeding on *Quisqualis* flowers on the Pru River (07°45'N 01°09'W) on 14 March, a range extension. Of Palearctic migrants, **Common Chiffchaffs** *Phylloscopus collybita* were last seen on 4 March, at Dome, Digya National Park, with **European Bee-eaters** *Merops apiaster* and **Melodious Warblers** *Hippolais polyglotta* passing commonly in Kalakpa until the end of March. A **Eurasian Wryneck** *Jynx torquilla* was seen in woodland at Kalakpa on 24 March and a male **Eurasian Golden Oriole** *Oriolus oriolus* at Apapasu, Digya National Park, on 8 March. **Tree Pipits** *Anthus trivialis*, **Willow Warblers** *Phylloscopus trochilus*, **Wood Warblers** *P. sibilatrix*, **Spotted Flycatchers** *Muscicapa striata* and **Pied Flycatchers** *Ficedula hypoleuca* were still common until the first week of April in the eastern highlands (*FD-L*, *RJD*).

Noteworthy records from the period November 2007–April 2008 include the following. A male **Northern Shoveler** *Anas clypeata* was seen in the Sakumo/Prampram area, near Accra, on 25 January (*MF*). Of up to four **American Golden Plovers** *Pluvialis dominica* at the same site since 3 November (*AH*; Fig. 4, p. 269), one was digiscoped on 24 January (*GR*) and two were last seen on 28 February (*RJD*, *TTE*). Also there were a **Pectoral Sandpiper** *Calidris melanotos* on 28 February and 1 March (*RJD*, *AH*) and a **Buff-breasted Sandpiper** *Tryngites subruficollis* on 24 January (digiscoped; *GR*, *KA*; Fig. 5, p. 269). A **Thick-billed Cuckoo** *Pachycoccyx audeberti* was seen in flight at Atewa on 1 April and heard there the next day. A few **Pallid Swifts** *Apus pallidus* were identified at Kakum on 26 March and at Aboabo Camp, near Assin Faso, on 30 March. At the latter locality, a group of eight **Rosy Bee-eaters** *Merops malimbicus* was briefly observed on the same day (*J-MD, CG*).

Guinea

During survey work in April–May 2008, the first **Sooty Tern** *Sterna fuscata* for the country was found on a sandbank at sea off Yélitono Island, close to the Sierra Leone border. A sooty-black *Sarothrura* rail flushed from tall grass next to the Sassina River, south-west of Faranah, may well have been a juvenile **Red-chested Flufftail** *S. rufa*, a species not previously recorded in Guinea, but known to occur in nearby Sierra Leone. **Baumann's Greenbul** *Phyllastrephus baumanni* was found at two new sites: on the slopes of Kounounkan Forest Reserve, near Moussaya, and at the edge of the Fouta Djalon just south of Mamou. Range extensions were noted for several species including, among others, **Ahanta Francolin** *Francolinus ahantensis* (observed south of Haut Niger National Park [=HNNP] and south of Mamou), **Latham's Forest Francolin** *F. lathami* (found at Kounounkan, a westward extension and the species' westernmost site), **White-spotted Flufftail** *Sarothrura pulchra* (south of HNNP; not previously known from the park area), **Thick-billed Cuckoo** *Pachycoccyx audeberti* (south of Mamou; westernmost record), **Chocolate-backed Kingfisher** *Halcyon badia* (Kounounkan; westernmost record), **Yellow-billed Barbet** *Trachylaemus purpuratus* (Mamou; westernmost record), **Cassin's Honeybird** *Prodotiscus insignis* (Mamou), **Little Grey Greenbul** *Andropadus gracilis* (Mamou), **Icterine Warbler** *Hippolais icterina* (Mamou; third record for Guinea), **Winding Cisticola** *Cisticola galactotes* (south of HNNP) and **Lavender Waxbill** *Estrilda caerulescens* (Mamou). **Black-faced Firefinch** *Lagonosticta larvata* was found at two sites south of HNNP, west of Tokounou and east of Douako; there is only one previous record of this species in Guinea, from February 2002, when it was discovered at the confluence of the Bafing and Balé

Figure 4. American Golden Plover / Pluvier bronzé *Pluvialis dominica*, Sakumo / Prampram area, near Accra, Ghana, 24 January 2008 (Gerd Rotzoll)

Figure 5. Buff-breasted Sandpiper / Bécasseau roussâtre *Tryngites subruficollis*, Sakumo / Prampram area, near Accra, Ghana, 24 January 2008 (Gerd Rotzoll)

Figure 6. White-tailed Tropicbird / Phaéton à bec jaune *Phaethon lepturus*, Black River Gorge, Mauritius, January 2008 (Dave Deighton)

Figures 7. Atlas Flycatcher / Gobemouche de l'Atlas *Ficedula* (*hypoleuca*) *speculigera*, Tizguite Valley, Ifrane, Morocco, 15 May 2008 and 18 May 2008, respectively (Georges Olioso)

Figure 8. Slaty Egret / Aigrette vineuse *Egretta vinaceigula*, Daan Viljoen Game Park, Namibia, 10 February 2008 (Leoni Joubert)

Rivers, in the north-east, on the border with Mali (see *Bull. ABC* 10: 59) (*RD*, *KS*, *MBC*).

Kenya

The following records are from June 2007–May 2008 unless otherwise stated. At Samburu–Buffalo Springs, a dozen **Great White Pelicans** *Pelecanus onocrotalus* flew over the Ewaso Nyiro River on 4 November, with a **Pink-backed Pelican** *P. rufescens* there three days later; these species are uncommon in this arid part of Kenya. A female **Common Teal** *Anas crecca* was at Thika settlement ponds on 9 February. A belated record of a **Ferruginous Duck** *Aythya nyroca* at Lake Oloidien, Naivasha, on 20 November 2005 is noteworthy—this is a rare duck in Kenya. An **African Cuckoo Hawk** *Aviceda cuculoides* was seen at Mountain Lodge, Nanyuki, on 19 November. Single **African Swallow-tailed Kites** *Chelictinia riocourii* were reported from the Ewaso Nyiro River, Laikipia, on 7 October, and Taita Hills Park, on 2 March; this species is rare in the south-east. A **European Honey Buzzard** *Pernis apivorus* was at Nyaharuru on 21 November. A **Shikra** *Accipiter badius* seen at Kasarani in October is possibly the first record for Nairobi since 1972. A pair of **Ovampo Sparrowhawks** *A. ovampensis* was hunting at Kichwa Tembo, Masai Mara, on 10–12 November, whilst a **Eurasian Sparrowhawk** *A. nisus*, a rarely recorded Palearctic raptor, was at Samburu–Buffalo Springs on 6 November. A **Palm-nut Vulture** *Gypohierax angolensis* at the Sio River, Busia, is an unusual record for western Kenya. About ten **Lesser Spotted Eagles** *Aquila pomarina* were reported from the Masai Mara on 10–12 November, a single adult from Naivasha on 20 December, and an adult **Greater Spotted Eagle** *A. clanga* and a third-year **Eastern Imperial Eagle** *A. heliaca* over Sopa road, Samburu–Buffalo Springs, on 4 November. An immature **African Hawk Eagle** *Hieraaetus spilogaster* was in Nairobi National Park (=NP) on 17 April; this species has become much less common in recent years. A dark-morph **Booted Eagle** *H. pennatus* at Ahero, Kisumu, was seen on the unusual date of 22 August (possibly a southern African bird?). More than 200 **Lesser Kestrels** *Falco naumanni* with at least 12 Amur Falcons *F. amurensis* went to roost at Solio Ranch, Laikipia, on 20 November. The 513th species for Nairobi NP was an **African Hobby** *F. cuvierii* on 13 January. A pair of **Peregrine Falcons** *F. peregrinus* successfully raised two young in Nairobi city centre in January–February.

A **Corncrake** *Crex crex* was ringed at Ngulia, Tsavo West NP, on 10 December. Adult **Allen's Gallinules**

Porphyrio alleni with juveniles were seen at Dunga Swamp, Lake Victoria, on 20 June, and in Nguuni Nature Reserve, Mombasa, on 21 January; there are relatively few breeding records in recent years. Two **Common Cranes** *Grus grus* at Marula Estate, Naivasha, from 29 December to at least 19 January constitute the second record for Kenya and apparently the first for the Southern Hemisphere. More than 60 **Grey Crowned Cranes** *Balearica regulorum* foraging along the Thika road, Nairobi, on 19 September is a large congregation of this bird. A pair of **Lesser Jacanas** *Microparra capensis* was seen mating at Ainabkoi swamp, western Kenya, on 20 July. On 27 January, **Eurasian Oystercatchers** *Haematopus ostralegus* were observed at Sabaki River mouth (three) and Malindi harbour (two). A **Chestnut-banded Plover** *Charadrius pallidus* at Nairobi NP on 14 November is the first for the Nairobi area. Three flocks of **Pacific Golden Plovers** *Pluvialis fulva*, totalling 182 birds, were seen in the Tana River delta on 5–6 February; this species was thought to occur in ones or twos each year in Kenya, an older record of 50 in the delta being considered exceptional. Also there on the same dates, 225 **Long-toed Plovers** *Vanellus crassirostris* and 1,565 **Spur-winged Plovers** *V. spinosus* were counted. A **Great Snipe** *Gallinago media* was flushed from a small wet pan in an otherwise very dry area along Magadi road, in the southern Rift Valley, on 14 January. A **Common Redshank** *Tringa totanus* was at Lake Oloidien, Naivasha, on 7–9 January. A **Black-headed Gull** *Larus ridibundus* in full breeding plumage—a rare sight in Kenya—was found on 30 March. A **Lesser Crested Tern** *Sterna bengalensis* was at Lake Elementaita on 9 January; this species is rare inland. Single **Sandwich Terns** *S. sandvicensis* were reported from Lake Nakuru on 20 November and the Tana River delta on 6 February. In August–October, **Roseate Terns** *S. dougallii* had an estimated 1,350 nests on Whale Island, Watamu, but breeding success was poor due to predation by rats. Also there were *c.*40 pairs of **Sooty Terns** *S. fuscata* and *c.*1,000 **Brown Noddies** *Anous stolidus*; no nest of the latter was found although the birds behaved as if breeding. A pair of **African Skimmers** *Rynchops flavirostris* in Nairobi NP on 27 July was new for Nairobi District.

A **Black Cuckoo** *Cuculus clamosus* in the Nairobi suburbs on 10 May was only the fifth record for Nairobi since 1972. At Samburu–Buffalo Springs, two **African Cuckoos** *C. gularis* were on territory on 2–7 November. A **Black Coucal** *Centropus grillii* was seen in Nairobi NP on 26 July. An adult **Eurasian Scops Owl** *Otus scops* rescued at sea *c.*3 km off Watamu on 30 October, recovered, and was ringed and released near Arabuko-Sokoke; how this bird found itself 3 km offshore is a mystery. A **Swamp Nightjar** *Caprimulgus natalensis* at Kichwa Tembo in early January is the first record for Masai Mara, whilst a **Narina's Trogon** *Apaloderma narina* at Ngulia, Tsavo West NP, on 17 December is only the second for this well-watched site. A single **Madagascar Bee-eater** *Merops superciliosus* on a power line at Isiolo on 20 January is a rare record this far north-west. Also unusual was a **Northern Carmine Bee-eater** *M. nubicus* over Buffalo Springs on 2 November with another at Naivasha on 19 January. In Nairobi NP, a **Broad-billed Roller** *Eurystomus glaucurus* was seen on 12 April and a **Red-and-yellow Barbet** *Trachyphonus erythrocephalus* in late March; both are uncommon in the area. A **White-headed Barbet** *Lybius leucocephalus* of the nominate race was found in the Eremit Valley, Magadi road, on 19 December; this race is normally restricted to westernmost Kenya. Single **Pallid Honeyguides** *Indicator meliphilus* were recorded at the Karen Golf Club, Nairobi, on 25 July, and at Kichwa Tembo, Masai Mara, on 11 November.

Two male **Friedmann's Larks** *Mirafra pulpa* on territories in Buffalo Springs on 7 November is one of the few records for this site, although the species occurs in neighbouring Shaba. A pair of **Grey-rumped Swallows** *Pseudhirundo griseopyga* in the Masai Mara on 10 July is one of the few records of this species for the area. A **Sombre Greenbul** *Andropadus importunis* at Elangata Wuas, Kajiado, on 23 March is a very easterly record, whilst two records of **Northern Brownbul** *Phyllastrephus strepitans*, one from Magadi road, in the southern Rift Valley, on 19 December, and another from Nairobi NP on 20 January, are far west for this species; the latter is also a new record for the Nairobi region. Four **Grey-olive Greenbuls** *P. cerviniventris* were observed near Kimana Gate, Amboseli NP, on 17 November. A female **Common Redstart** *Phoenicurus phoenicurus* at Sopa Lodge, Samburu, on 19 January is only the second reported in Kenya for a number of years. In July, a **Karamoja Apalis** *Apalis karamojae* was found at Kicheche Bush Camp, Masai Mara; this is a new location in different habitat for a species that was only recently added to the Kenya list. A **Gambaga Flycatcher** *Muscicapa gambagae* was mobbing a Pearl-spotted Owlet *Glaucidium perlatum* at Ol Tukai, Amboseli NP, on 18 November. A pair of **African Blue Flycatchers** *Elminia longicauda* at Kericho Arboretum on 25 November and a **Green-headed Sunbird** *Cyanomitra verticalis* in the Masai Mara on 9 July are unusual records for these sites. On 11 August, an adult and an immature male **Violet-breasted Sunbird** *Cinnyris pembae* were seen at Sabaki River mouth; this is a rare visitor from further north. A **Taita Fiscal** *Lanius dorsalis* at Nairobi NP on 4 April is rather unusual. Single **Lesser Grey Shrikes** *Lanius*

Magpie Mannikin / Capucin pie *Lonchura fringilloides* (Pete Leonard)

minor were reported from Solio Ranch, Laikipia, on 22 November and Vipingo Golf Course, Mombasa, on 28 January; this species is rare on its southward migration. A pair of **Pied Crows** *Corvus albus* at Samburu–Buffalo Springs on 4–7 November was an unusual record north of Mt. Kenya. Single **Magpie Starlings** *Speculipastor bicolor* were at Lake Baringo on 6 June and Samburu–Buffalo Springs on 6 November. A flock of six **Rufous-tailed Weavers** *Histurgops ruficaudus* was observed in Masai Mara on 2 May; this species is not on the Kenya list yet, though there was apparently a first record in Masai Mara in 2000. Nine **Magpie Mannikins** *Spermestes fringilloides* were along the Adungosi River, western Kenya, on 22 July; there are only 4–5 records of this species in Kenya. A record of **Cut-throat Finch** *Amadina fasciata* at Splash, Langata, on 26 March is the first for Nairobi since at least 1972. **Steel-blue Whydah** *Vidua hypocherina*, seen at Ngulia, Tsavo West NP, on 3 December is new for the site. At Samburu–Buffalo Springs, an adult male **Northern Grosbeak Canary** *Serinus donaldsoni* was observed in mid-January (*CJ*).

Madeira

Records from December 2007–May 2008 include the following. The long-staying first **Green-winged Teal** *Anas* (*crecca*) *carolinensis* for the islands was still at Seixal at the end of April, whilst the second **Greater Scaup** *Aythya marila* remained at Lugar de Baixo until the end of February at least (from 24 November). The second **Tufted Duck** *A. fuligula* for Madeira was at Fanal on 21–22 February (the first was in 1906).

A **Black Kite** *Milvus migrans* was observed at Caniçal on 17 March and at Porto Santo in late April, a **Long-legged Buzzard** *Buteo rufinus* at Paul da Serra on 3 April and 1 May, and a **Booted Eagle** *Hieraaetus pennatus* in January and, presumably the same bird, at Caniçal in March, April and May, with two at Santo da Serra on 24 April. Also at Caniçal, a **Montagu's Harrier** *Circus pygargus* was found on 26 April, with two at Paul da Serra on 1–22 May, whilst a juvenile **Pallid Harrier** *C. macrourus* was at Porto Santo. Four **Red-footed Falcons** *Falco vespertinus* were photographed at Ponta do Pargo on 1 May and remained there until 22nd. A **Barbary Falcon** *F. pelegrinoides* was reported from Caniçal on 17–27 January. At Lugar de Baixo, a **Black-winged Stilt** *Himantopus himantopus* and a **Marsh Sandpiper** *Tringa stagnatilis* were observed on 15 April. A first-winter **Laughing Gull** *Larus atricilla*, photographed at Funchal on 29 December, remained until 22 February at least. Two **Black Terns** *Chlidonias niger* flew west along the coast on 30 April.

Further records from Caniçal include two **Blue-cheeked Bee-eaters** *Merops persicus* on 26 April, a **Meadow Pipit** *Anthus pratensis* on 26 February, and four **Red-rumped Swallows** *Cecropis daurica* from 15 February to 27 March at least. The first **Yellow-browed Warbler** *Phylloscopus inornatus* for the islands stayed at Santo da Serra from 17 November until 12 January at least. A **Wood Warbler** *P. sibilatrix* was found at Seixal on 27 April. A **Greater Blue-eared Starling** *Lamprotornis chalybaeus* of unknown origin was in Caniçal on 18 March (per *Dutch Birding* 30: 43, 192; *Birding World* 21: 12, 62, 108, 152, 198–199).

Mali

During a waterbird census of the Inner Niger Delta using a light aircraft, on 6–21 January 2008, counts included 3,275 **Long-tailed Cormorants** *Phalacrocorax africanus*, 10,570 **Squacco Herons** *Ardeola ralloides* (against maxima of 13,700 in 2007 and 12,532 in 2006: *Bull. ABC* 14: 223), 98,960 **Cattle Egrets** *Bubulcus ibis* (121,100 in 2007; 69,690 in 2006), 3,780 **Little Egrets** *Egretta garzetta* (a record 19,133 in 2007), 10,945 **Intermediate Egrets** *E. intermedia* and **Great Egrets** *E. alba* (11,445 in 2007; 6,500 in 2006), 2,605 **Purple Herons** *Ardea purpurea* (2,856 in 2007), 11,800

Intermediate Egret / Héron intermédiaire *Egretta intermedia* (Pete Leonard)

Grey Herons *A. cinerea* (against previous record numbers of 9,831 in 2007 and 8,145 in 2006), eight **Black Storks** *Ciconia nigra*, 3,644 **White Storks** *C. ciconia* (the second highest number since at least 1991; only 507 in 2007), 2,707 **Glossy Ibises** *Plegadis falcinellus* (2,338 in 2007), 331 **Sacred Ibises** *Threskiornis aethiopica*, 5,815 **Fulvous Whistling Ducks** *Dendrocygna bicolor*, 64,804 **White-faced Whistling Ducks** *D. viduata* (the second-highest number since at least 1991), nine **Egyptian Geese** *Alopochen aegyptiaca*, 5,854 **Spur-winged Geese** *Plectropterus gambensis* (6,450 in 2007), 1,902 **Knob-billed Ducks** *Sarkidiornis melanotos*, 213,355 **Northern Pintails** *Anas acuta* (the highest number since at least 1991; only 10,612 in 2007), 540,865 **Garganey** *A. querquedula* (226,250 in 2007, but 815,800 in 2006), 9,595 **Northern Shovelers** *A. clypeata* (the second-highest number since at least 1991), 25,365 **Ferruginous Ducks** *Aythya nyroca* (against previous records of 15,066 in 2007 and 13,590 in 2006), 34,712 **Black-tailed Godwits** *Limosa limosa* (only 5,990 in 2007), 40 **Pied Avocets** *Recurvirostra avosetta*, 177,435 **Ruff** *Philomachus pugnax*









Figure 9. Great Snipe / Bécassine double *Gallinago media*, Mont Fleuri, Mahé, Seychelles, 16–17 January 2008 (Adrian Skerrett)

Figure 10. European Nightjar / Engoulevent d'Europe *Caprimulgus europaeus*, Aride Island, Seychelles, 20 January 2008 (Adrian Skerrett)

Figure 11. Wire-tailed Swallow / Hirondelle à longs brins *Hirundo smithii*, Picard, Aldabra, Seychelles, 8 February 2008 (Catherine Onezia)

Figure 12. Rockhopper Penguin / Gorfou sauteur *Eudyptes chrysocome*, near Llandudno, off Cape Town, on 2 February (Peter Krige)

Figure 13. Red-tailed Tropicbird / Phaéton à brins rouges *Phaethon rubricauda*, St Francis Bay, Eastern Cape, South Africa, 4 March 2008 (Martin Potgieter)

Figure 14. Lesser Frigatebird / Frégate ariel *Fregata ariel*, Illovo River mouth, near Durban, KwaZulu-Natal, South Africa, 6 March 2008 (Noray Babcock)

Figure 15. Buff-breasted Sandpiper / Bécasseau roussâtre *Tryngites subruficollis*, Krugersdrift Dam, near Bloemfontein, Free State, South Africa, 19 February 2008 (Derrick Wilby)

Figure 16. Franklin's Gull / Mouette de Franklin *Larus pipixcan*, Rooiels, Overstrand, South Africa, 1 April 2008 (Andre Nel)

Figure 17. Golden Pipit / Pipit doré *Tmetothylacus tenellus*, Pafuri, Kruger National Park, South Africa, 20 December 2007 (Albert Froneman)

(98,265 in 2007), and 10,900 **Black-winged Stilts** *Himantopus himantopus* (11,775 in 2007); 40,980 egrets *Egretta* ssp. and herons *Ardea* ssp. were too distant to be specifically identified.

Other January records include a **Long-legged Buzzard** *Buteo rufinus* north of Sévaré on 17th, two **Arabian Bustards** *Otis arabs* on 13th (seen from the aircraft), and 23 **Greater Painted-snipe** *Rostratula benghalensis* at a waterhole near Sandou on 19th. **European Turtle Doves** *Streptopelia turtur* were well represented this year with flocks numbering tens or hundreds of individuals observed in the Inner Niger Delta, and the species was also encountered near Konna and in

south Gourma. **House Buntings** *Emberiza striolata* were found in the hills south-east and east of Sévaré on 16th and 19th (*OG*).

Mauritania

The long-staying **Kelp Gull** *Larus dominicanus vetula* at the Banc d'Arguin was still present at Iwik in December 2007. Other December records from the north-west include an **Abyssinian Roller** *Coracias abyssinicus* at Nouadhibou on 16–17th (there are few records this far north), four **Eurasian Skylarks** *Alauda arvensis* also there on 16th, and an adult **Sudan Golden Sparrow** *Passer luteus* at Cansado on 15th. Also in December, a warden of Banc d'Arguin National Park claimed that he had seen 4–5 **Ostriches** *Struthio camelus* in the park in 2006 and 2007 (per *Dutch Birding* 30: 43–45, *Birding World* 21: 12).

Mauritius

During a cruise from Durban, South Africa, to Mauritius and back, from 29 December 2007 to 7 January 2008, the following were recorded in the seas of Réunion and Mauritius: six **Mascarene Black Petrels** *Pterodroma aterrima*, ten **Trindade Petrels** *P. arminjoniana* (both light and dark forms), 20 **Barau's Petrels** *P. baraui*, hundreds of **Wedge-tailed Shearwaters** *Puffinus pacificus*, 20 **White-tailed Tropicbirds** *Phaethon lepturus* at Black River Gorge, Mauritius (Fig. 6, p. 269), a **Subantarctic Skua** *Catharacta antarctica* in a large mixed flock comprising mainly Sooty Terns *Sterna fuscata*, a **Roseate Tern** *S. dougallii* in Port Louis harbour with a few Common Terns *S. hirundo*, hundreds of **Lesser Noddies** *Anous tenuirostris* at sea and at l'Île aux Cerfs, and 40–50 **Brown Noddies** *A. stolidus* (*DD*).

Morocco

Records from November 2007–April 2008 include the following. A **Black Kite** *Milvus migrans* with a yellow bill was photographed at Tizi-n-Tichka in the High Atlas on 8 April; there is one only previous claim of a 'bird with a yellow bill', near Tinerhir on 5 April 1978 (per *Dutch Birding* 30: 188). Possibly the southernmost **Purple Sandpiper** *Calidris maritima* in the country was photographed near Essaouira on 2 March; there is at least one previous record of two individuals wintering at this site in 1999. The fourth **Iceland Gull** *Larus glaucoides* for Morocco was photographed at Essaouira on 2 March (per *Dutch Birding* 30: 193–195). Four adult **Kelp Gulls** *L. dominicanus vetula* were reported from Khnifiss lagoon, south-western Morocco, on 19 February (*TP, KM & PW*), with one still there on 24th (per *Dutch Birding* 30: 195). A **Eurasian Wryneck** *Jynx torquilla* singing near Ifrane on 16 May was a late date (*GO*).

Two **Pale Crag** (Rock) **Martins** *Ptyonoprogne fuligula obsoleta* were seen at El Argoub, Western Sahara, on 27 February (per *Dutch Birding* 30: 199). On 8–9 November, an **Olive-backed Pipit** *Anthus hodsoni* was photographed at Agadir. A pair of **Cricket Warblers** *Spiloptila clamans* was collecting nesting material west of Awserd, Western Sahara, on 17–18 February (per *Dutch Birding* 30: 130–131). A **Wood Warbler** *Phylloscopus sibilatrix* was observed at Ifrane on the late date of 19 May (*GO*). In south-eastern Morocco, several singing **Western Olivaceous Warblers** *Hippolais pallida reiseri* were found near Rissani and Merzouga, Tafilalt, on 27 March and 12 April. A calling second-year male **Moltoni's Subalpine Warbler** *Sylvia cantillans moltonii* photographed in a wadi near Taouz, Tafilalt, is probably the first to be documented for Morocco (per *Dutch Birding* 30: 199). Along 10 km of the Tizguite Valley, Ifrane, *c.*50–60 pairs of **Atlas Flycatchers** *Ficedula* (*hypoleuca*) *speculigera* were counted (*GO*; Figs. 7, p. 269). An adult male **Red-backed Shrike** *Lanius collurio* was in the Ourika Valley, Marrakech, on 31 December (per *Birding World* 21: 12). The numbers of **Desert Sparrows** *Passer simplex* in Tafilalt, south-eastern Morocco, appear to be decreasing with only two pairs found east of Merzouga in March–April; however, the species was still numerous along the Aoussert road in Western Sahara in February (per *Dutch Birding* 30: 199).

Mozambique

During a two-week survey of Mt. Namuli, in northern Mozambique, in November 2007, some species of conservation interest were found at this site for the first time: **Spotted Ground Thrush** *Zoothera guttata* was observed in the two main forest patches, Manho and Ukalini—this is the first indication that the species might breed in the country, whilst **White-winged Apalis** *Apalis chariessa* was seen once in riparian forest at low altitude (1,200 m), a forest type greatly threatened at Namuli. **Eastern Green Tinkerbird** *Pogoniulus simplex* was identified at 1,350 and 1,700 m; Namuli is only the second locality for this species in Mozambique. **Red-chested Flufftail** *Sarothrura rufa*, the only flufftail species encountered on the high plateau, was common in wet, peaty grassland at 1,850–1,900 m. Numbers of **Cholo Alethe** *Alethe choloensis* and **Green Barbet** *Stactolaema olivacea* of the race *belcheri* were found to be far lower than previously suggested by Ryan *et al.* (1999, *Bird Conserv. Intern.* 9: 138–143) as they were very scarce in the large, cool forest block of Manho, and common only in the small Ukalini forest. **African Black Swift** *Apus barbatus* was the most numerous swift on the mountain and was found breeding (feeding nestlings), whilst **Scarce Swift** *Schoutedenapus myoptilus* occurred in small numbers;

Spot-throat / Modulatrice à lunettes *Modulatrix stictigula* (Pete Leonard)

observed aerial mating suggests they breed later. **Spot-throat** *Modulatrix orostruthus* and **Namuli Apalis** *Apalis thoracica lynesi* were both common, with 300–500 pairs estimated for the former, and more for the latter (*FD-L*).

Records from December 2007–April 2008 include the following. About 200 **Crab-plovers** *Dromas ardeola* were counted at Ponta da Barra, Inhambane, on 20 January; large numbers remained throughout February and 186 were counted on 11 March (*MBo*); 36 were reported on 25 April (per *TH*). A **Pacific Golden Plover** *Pluvialis fulva* was found at the Zambezi River mouth on 9 December (*PC, GG, JG, NdP*), with another at Ponta da Barra on 20 January; the latter remained there until 18 April at least (*MBo*). A **Common Redshank** *Tringa totanus* was also at Ponta da Barra on 18 April (*MBo*). A **Black-naped Tern** *Sterna sumatrana* was observed at Praia do Bilene on 6 April (*CP*).

Namibia

Records from December 2007–February 2008 include the following. A **Slaty Egret** *Egretta vinaceigula* was found in Daan Viljoen Game Park on 10 February (*LJ*, Fig. 8, p. 269). In the Caprivi Strip, an adult **Egyptian Vulture** *Neophron percnopterus* was seen at the Kwando River on 4 January and a **Lesser Black-backed Gull** *Larus fuscus* in Mahango Game Reserve on 15 December (*JE*) and 2 January (*ES, FG*).

Waders at Mile 4 Salt Works, Swakopmund, included an **American Golden Plover** *Pluvialis dominica* on 15–17 December (*MB*), with two there on 7 January, a **Pectoral Sandpiper** *Calidris melanotos* also on 7th (*MB, MH, TH, SS, TS*), and a **Common Redshank** *Tringa totanus* on 17 December (*MB*) and 7 January (*MB, MH, TH, SS, TS*). All these species were still present at the end of February (per *TH*). Also there were six **Red-necked Phalaropes** *Phalaropus lobatus* from 9 February (*MB*).

In Walvis Bay, southern Africa's 15th **White-rumped Sandpiper** *Calidris fuscicollis* was observed on 19 January; this was presumably the same individual that was reported at this site at the end of 2007. Also there on the same day was a **Common Redshank** (per *TH*). **Red-necked Phalaropes** were seen there on 7 January (*MB, MH, TH, SS, TS*) and remained until the end of February at least, with up to 28 counted (per *TH*). A **Red Phalarope** *P. fulicarius* was found on 9 February (*ED*).

Niger

Records from November 2007–March 2008 include the following. In November, several **Rüppell's** *Sylvia rueppelli* and **Sardinian Warblers** *S. melanocephala* were observed at Termit; both are under-reported species that winter in the drier parts of Niger (*TW*).

During an ornithological training course for park guides in W International Park (Bénin, Burkina Faso, Niger) in February, 14 **Black Storks** *Ciconia nigra* were seen in the Niger part of the park. Two **Red-winged Warblers** *Heliolais erythropterus* were identified at Tapoa; this is only the second record for the country. A pair of **Coqui Francolins** *Francolinus coqui* was seen outside the park north of Tapoa. **African Finfoot** *Podica senegalensis*, **Violet Turaco** *Musophaga violacea*, **Grey-rumped Swallow** *Pseudhirundo griseopyga* (second record for Niger) and **White-crowned Robin Chat** *Cossypha albicapilla* were recorded near Point Triple. **Oriole Warblers** *Hypergerus atriceps* were also there and at the campsite on the Niger River (two duetting adults in a group of five). At Pérélégou, **Red-winged Pytilias** *Pytilia phoenicoptera* and associated **Exclamatory Paradise Whydahs** *Vidua interjecta* were observed (*GB, JB*).

A visit to Kokoro Wetland north-east of Tahoua produced a **Lesser Jacana** *Microparra capensis* on 23 February—which was unusually far north (*JB & UL*). Also quite far north was a juvenile **Greater Honeyguide** *Indicator indicator* near Niamey in March (*UL*). Further noteworthy sightings from the Niamey area in February–March included **Yellow-breasted Barbet** *Trachyphonus margaritatus*, **Eurasian Wryneck** *Jynx torquilla*, **Desert Lark** *Ammomanes deserti* with young and **Blue Rock Thrush** *Monticola solitarius* (few records in Niger) (*UL*).

Lesser Jacana / Jacana nain *Microparra capensis* (Pete Leonard)

Rwanda

An **African Pitta** *Pitta angolensis* was seen in Buhanga Forest, on the outskirts of Musanze, Ruhengeri, Northern Province, on 17–18 May 2008. Interestingly, single African Pittas were reported around the same dates in 2006, in Buhanga Forest and in a garden in Musanze (*Bull. ABC* 13: 228), and also elsewhere in Rwanda/south-west Uganda (*MC, CN, LS*).

São Tomé & Príncipe

On Príncipe, a juvenile **Jacobin Cuckoo** *Clamator jacobinus* was observed for several minutes being mobbed by Príncipe Golden Weavers *Ploceus princeps* in an area of plantations in the north of the island on 16 December 2007. There is only one previous record of this species on Príncipe, also of a juvenile, in January (*MD, MM*).

Senegal

Noteworthy records from a visit to Djoudj National Park on 23–25 January 2008 include four **Marbled Ducks** *Marmaronetta angustirostris*, two adult males and one immature **Pallid Harrier** *Circus macrourus*, a

juvenile **Martial Eagle** *Polemaetus bellicosus* (rare in the park), a **Jack Snipe** *Lymnocryptes minimus* and an **Egyptian Nightjar** *Caprimulgus aegyptius* (seen at close range during daylight and photographed) (*NB*).

Seychelles

Reports received by Seychelles Bird Records Committee (SBRC) for December 2007–May 2008 include the following. A juvenile **Madagascar Pond Heron** *Ardeola idae* on Assumption Island was the first record from any of the outer islands other than Aldabra, where it breeds. A female **Northern Pintail** *Anas acuta* at Roche Caiman, Mahé, on 5 December was joined by another female and a male in early January, which remained until at least 19 January (there are eight previous records). A **Black Kite** *Milvus migrans* on Alphonse Island on 26–27 March was the second report for Seychelles. Three **Amur Falcons** *Falco amurensis* were reported from North Island on 9 December and two from Alphonse on 26 December–5 January (27 previous records). A **Great Snipe** *Gallinago media* at Mont Fleuri, Mahé, on 16–17 January (Fig. 9, p. 272) and a **European Nightjar** *Caprimulgus europaeus* on Aride Island on 10–29 January (Fig. 10, p. 272) have both been accepted by SBRC as the third records for Seychelles. A **Lesser Cuckoo** *Cuculus poliocephalus* was on Alphonse on 4 January (11 previous records).

The first **Wire-tailed Swallow** *Hirundo smithii* for the islands was a male at Picard, Aldabra, on 8 February (Fig. 11, p. 272). It has been accepted as the first record for the archipelago and is considered to pertain to the nominate race. Other sightings of interest include three **Common House Martins** *Delichon urbicum* on Alphonse Island on 16–18 May (seven previous records), a **Yellow Wagtail** *Motacilla flava* (27 previous records) and single **Northern Wheatears** *Oenanthe oenanthe* on Aride on 18–20 December and Alphonse on 12 February (43 previous records) (*AS*).

Sierra Leone

Records from February–June 2008 include the following. In ricefields at Kenema, a **Lesser Jacana** *Microparra capensis* was found on 7 June (*ASi*); there is apparently only one previous record for Sierra Leone. Also there, on 12–13 March, were two **Great Snipes** *Gallinago media*. A **Rufous Fishing Owl** *Scotopelia ussheri* was flushed at very close range from dense shrubbery on Tiwai Island on 10 March (*RD*, *ASi*). Also at Tiwai, two singing **Brown Nightjars** *Veles binotatus* were seen in flight on 13–14 February (*NB*); the species was also heard there on 9 March (*RD*, *ASi*); these records constitute the first for Tiwai and the westernmost to date. The species was only recently discovered in Sierra Leone, in Gola Forest (*Bull. ABC* 15: 82–84). A **European Nightjar** *Caprimulgus europaeus* was photographed at Tiwai on 15 February. Records of **Dusky Crested Flycatcher** *Elminia nigromitrata* and **Superb Sunbird** *Cinnyris superbus* at Guma Dam, on the Freetown peninsula, on 10 February, appear to be new for the area and represent westward range extensions (*NB*).

During a survey of the Loma Mountains, from 14 February to 2 March 2008, 257 bird species were recorded, which brings the total number known from the site to 332, i.e. more than 50% of the species recorded in the whole of Sierra Leone. **Yellow-casqued Hornbill** *Ceratogymna elata* was still relatively common at low and mid-altitudes and **Baumann's Greenbul** *Phyllastrephus baumanni* was found both at high (1,300–1,400 m) and low altitudes. Several **Black-headed Rufous Warblers** *Bathmocercus cerviniventris* were singing. Three family parties of **Sierra Leone Prinias** *Schistolais leontica* were encountered in bracken and shrubbery at forest edge at 1,300–1,400 m. **White-necked Picathartes** *Picathartes gymnocephalus* and **Emerald Starling** *Lamprotornis iris* were also observed and excellent views were obtained of the shy and little-known **Grey Ground Thrush** *Zoothera princei* (*RD*, *AK*, *AO-W*, *ASi*).

Socotra

In addition to the four species mentioned in the previous 'Recent Reports' (*Bull. ABC* 15: 136), another 13 species were added to the Socotra list in 2007. A pair of **Harlequin Quails** *Coturnix delegorguei* was found on the Ma'alih Plateau, in the west, in February. On 25–27 September, pelagic trips off the north coast yielded **Black-bellied Storm Petrel** *Fregetta tropica*, **Lesser Noddy** *Anous tenuirostris* and **Greater Frigatebird** *Fregata minor*, whilst a juvenile **Red-backed Shrike** *Lanius collurio* was found on the island. Eight more firsts, discovered during the week of 12–19 October, included a **Corncrake** *Crex crex* at Wadi Zirage on 17th, a **Little Crake** *Porzana parva* at Khor Sirhan on 19th, three **Common Nightingales** *Luscinia megarhynchos* in the Haggier on 17th, three **Rufous-tailed** (Common) **Rock Thrushes** *Monticola saxatilis* at two localities on 12–16th, a **Sedge Warbler** *Acrocephalus schoenobaenus* at Wadi Zirage on 17th, a **Willow Warbler** *Phylloscopus trochilus* in mangroves in the west on 15th, a **Desert Lesser Whitethroat** *Sylvia* (*curruca*) *minula* at Sirhan on 18th, and single **Ortolan Buntings** *Emberiza hortulana* on the north

Black-bellied Storm Petrel / Océanite à ventre noir *Fregetta tropica* (Pete Leonard)

coast on 12th and 16th (per *Sandgrouse* 30: 21).

South Africa

The following records are from November 2007–April 2008. The most remarkable sighting of the period was probably that of a **Rockhopper Penguin** *Eudyptes chrysocome* photographed along the coast near Llandudno, off Cape Town, on 2 February (*PK*; Figs. 12, p. 272). A **Northern Royal Albatross** *Diomedea (epomophora) sanfordi* was observed south-west of Danger Point, Western Cape, during a pelagic on 17 April (*BW*). A **Red-tailed Tropicbird** *Phaethon rubricauda* was at Wemmershoek Dam, near Paarl, Western Cape, on 19 November (*JD*) and one remained in St Francis Bay, Eastern Cape, from 4 March (*MP*; Figs. 13, p. 272) until at least 26 April (per *TH*). Single **White-tailed Tropicbirds** *P. lepturus* were seen off Sodwana Bay, KwaZulu-Natal, on 15 November (*BM*) and flying over Modderfontein, Gauteng, on 6 April (*AKi*). An **Australian Gannet** *Morus serrator* was found amongst Cape Gannets *M. capensis* on Bird Island, Algoa Bay, Western Cape, on 11 March, with a second one there the next day (*BD*). A **Red-footed Booby** *Sula sula* was spotted on a cruise out of Durban on 2 January (*DD*). Single **Lesser Frigatebirds** *Fregata ariel* were reported from the Illovo River mouth, near Durban, KwaZulu-Natal, on 6 March (*NBa*; Fig. 14, p. 272) and the Berg River mouth, near Velddrif, Western Cape, on 14 April (*NM*).

The long-staying **Little Blue Heron** *Egretta caerulea* was still at Papendorp, Western Cape, on 24 November (per *TH*). **Slaty Egrets** *E. vinaceigula* were recorded at Ndumo Game Reserve, KwaZulu-Natal, on 3 January (*GCl, MCl*); at Nylsvley, Limpopo, on 12 January (*RC*); at Kgomo-Kgomo, North West Province, on 2 February (*EE, CW*); at Marievale Bird Sanctuary, Gauteng, where still present on 1 March (*DD*); and at Germiston Golf Course, Gauteng, on 8–28 April (two; per *TH*). **Western Marsh Harriers** *Circus aeruginosus* were reported from Marievale Bird Sanctuary, Gauteng, in November (one), January (up to two; per *TH*); and on 13 April (one; *GE, RE*).

In KwaZulu-Natal, the **Crab-plover** *Dromas ardeola* first seen in Richards Bay on 8 December was still there on 17th (per *TH*); one was reported on 28 January (*MBl*) and subsequently well into February; one found at Catalina Bay on 23 January (*PL*) was last reported on 12 April (per *TH*). A **Eurasian Oystercatcher** *Haematopus ostralegus* was seen at St Lucia, KwaZulu-Natal, on 22 November (*DDe*). An **American Golden Plover** *Pluvialis dominica* was at Gamtoos River mouth, Eastern Cape, on 25 March (*PP*) and a **Pacific Golden Plover** *P. fulva* at Muzi Pan, KwaZulu-Natal, on 25 January (*EM*); a group of at least four was subsequently recorded, at least some of which remained until the end of February, with one still present on 20 March (per *TH*). **Pectoral Sandpipers** *Calidris melanotos* were found on a pan at Rooipoort, near Kimberley, on 25 January (two; *ASt*); at Rooikoppies Dam, near Brits, North West Province, from 21 February (*MBo*) until 15 March (one); in East London, Eastern Cape, from 5 April (*PWh*) until 11 April at least (two). A **Broad-billed Sandpiper** *Limicola falcinellus* was at Geelbek, West Coast National Park, Western Cape, on 12 January (*JG*). Southern Africa's ninth **Buff-breasted Sandpiper** *Tryngites subruficollis* discovered at Krugersdrift Dam, near Bloemfontein, Free State, on 19 February (*DW*; Fig. 15, p. 272) was still there at the end of the month. **Black-tailed Godwits** *Limosa limosa* were reported from West Coast National Park, Western Cape, on 20 November (one; *JC*) and 15 December (one; *FE*), and from Spitskop Dam, north of Kimberley, Northern Cape, on 25 November (four; *ASt*) and 10 February (at least 13; *MA*), with at least ten still there on 22 March (*ASt*). A **Common Redshank** *Tringa totanus* first reported on 29 October at Strandfontain sewage works, Western Cape, remained there until 13 November at least (per *TH*). **Green Sandpipers** *T. ochropus* were seen in the Kgomo-Kgomo area, North West Province, from 5 November (*EM*) until 23 November (one) and from 13 January (*LH*) until at least 7 February (up to two), and singles were also at Pafuri, Kruger National Park, on 16 December (*GL*), 3 January (*MK*) and 22 March (*DM*). Three **Red-necked Phalaropes** *Phalaropus lobatus* were at Velddrif, Western Cape, on 16 February (*IF*). **Red Phalaropes** *P. fulicarius* were reported from a farm dam near Ventersdorp, North West Province, on 27 January (one; *TA*), a pelagic out of Cape Town on 15–16 February (two; per *TH*) and a farm dam in the KwaZulu-Natal Midlands on 3 March (one; *ANi*). In the Western Cape, single **Franklin's Gulls** *Larus pipixcan* were observed at Strandfontein sewage works on 1 January (*JS, SS*), Nature's Valley on 17 January (*GH*), Rooiels, in the Overstrand, on 1 April (one in breeding plumage; *AN*; Fig. 16; p. 272) and off Danger Point on 16 April (*BW*). A **Gull-billed Tern** *Sterna nilotica* was at Richards Bay, KwaZulu-Natal, on 24 November (*PO*).

For the fourth consecutive season a **Madagascar Cuckoo** *Cuculus rochii* was found at Phinda Game Reserve, KwaZulu-Natal, on 23 November (*DDe*). A **Grey Wagtail** *Motacilla cinerea* first seen at Debegeni Falls in Magoebaskloof, Limpopo, on 2 February (*PZ*) was still present on 2 March (per *TH*). A **Golden Pipit** *Tmetothylacus tenellus* was photographed on 20 December 2007 at Pafuri in the Kruger National Park (*AF*; Fig. 17, p. 272). Southern Africa's ninth **Basra Reed Warbler** *Acrocephalus griseldis* was claimed from Mapungubwe National Park, Limpopo, on 19 February (*ASu*), whilst a male **Collared Flycatcher** *Ficedula albicollis* was identified at Phinda Game Reserve, KwaZulu-Natal, on 2 February (*DDe*).

Tunisia
A **Red Phalarope** *Phalaropus fulicarius* photographed at Thyna on 10 February was the third for Tunisia (per *Dutch Birding* 30: 130); previous records were in April 1976, at the same site, and December 1981, near Nefta/Tozeur.

Uganda
Four **Lesser Jacanas** *Microparra capensis* were seen at Mabamba Swamp on 18 February. Two **White-headed Lapwings** *Vanellus albiceps* were with two **Little Ringed Plovers** *Charadrius dubius* on the north bank of the Nile in Murchison Falls National Park on 20 February. Another two **Little Ringed Plovers** were found along the Kazinga Channel in Queen Elizabeth National Park on 24th (*JT*).

Zimbabwe
A male **Blackcap** *Sylvia atricapilla* was observed at Seldomseen in the Bvumba on 23–24 March (*JBr*).

Records were collated by Ron Demey from contributions supplied by Kalu Afasi (KA), Mark Anderson (MA), Tony Archer (TA), Noray Babcock (NBa), Gilles Balança (GB), Clive Barlow (CB), Michael Blose (MBl), Dodou Bojang (DB), Mark Boorman (MB), Maans Booysen (MBo), Nik Borrow / Birdquest (NB), John Bradshaw (JBr), Chris Brewster (CBr), Joost Brouwer (JB), Marcell Claassen (MC), Gordon Clarence (GCl), Margie Clarence (MCl), Rynetta Coetzee (RC), Philip Collins (PC), Mohamed Balla Condé (MCo), Jill Crosher (JC), Martin Dallimer (MD), Sandy Darling (SD), Jean-Marie Daulne (J-MD), John Davids (JD), Dave Deighton (DD), Daryl Dell (DDe), Eckhart Demasius (ED), Ron Demey (RD), Robert J. Dowsett (RJD), Françoise Dowsett-Lemaire (FD-L), Bruce Dyer (BD), Glenice Ebedes (GE), Ryan Ebedes (RE), Ehren Eksteen (EE), Felicity Ellmore (FE), Josh Engel (JE), Mark Finn / Birdwatching Breaks (MF), Ian Foulis (IF), Albert Froneman (AF), Olivier Girard (OG), Christian Goblet (CG), Daphne Goldsworthy (DG), Mike Goldsworthy (MG), Greta Graham (GG), John Graham (JG), Felicity Grundlingh (FG), Pete Hancock (PH), Nigel Harcourt-Brown (NH-B), Margaret Hardaker (MH), Trevor Hardaker (TH), Andrew Hester (AH), Harold Hester (HH), Louis Heyns (LH), Gerrie Horn (GH), John Hughes (JH), Colin Jackson (CJ), Leoni Joubert (LJ), Alhajie Kamara (AK), Alexandra King (AKi), Mark Kirk (MK), Peter Krige (PK), Peter Lawson (PL), Ingeborg van Leeuwen (IL), Ulf Liedén (UL), Geoff Lockwood (GL), Chris Lotz (CL), Bruce Macdonald (BM), Nina MacKenzie (NM), Etienne Marais (EM), Graham McCulloch (GMc), Duncan McKenzie (DM), Martim Melo (MM), Francis Mendy (FM), Jonathan Meyrav (JM), Krister Mild (KM), André Nel (AN), André Niemand (ANi), Claudien Nsabagasani (CN), Ken Oake (KO), Arnold Okoni-Williams (AO-W), Georges Olioso (GO), Pete Outhwaite (PO), Phil Penlington (PP), Thomas Pettersson (TP), Martin Potgieter (MP), Naas du Preez (NdP), Cilliers Pretorius (CP), Brent Reed (BR), B. Rode (BRo), Gerd Rotzoll (GR), Kev Roy (KR), Leonard Seburanga (LS), Alhaji Siaka (ASi), Adrian Skerrett (AS), Kadiatou Soumah (KS), Edward Smith (ES), Sion Stanton (SS), Tiana Stanton (TS), Andrew Stainthorpe (ASt), Andrew Sutherland (ASu), Jack de Swardt (JS), Sandra de Swardt (SS), June Taylor / Avian Adventures (JT), T. Traub-Evans (TT-E), Steph Tyler (ST), Lindsay Tyler (LT), Alan Vittery (AV), Nigel Voaden (NV), Tim Wacher (TW), Peder Waern (PW), Jason Waine (JW), Barry Watkins (BW), Charl Weitz (CW), Phil Whittington (PWh), Derrick Wilby (DW), Paul Zaayman (PZ), the Department of Parks and Wildlife Management, The Gambia (DPWM) and from Africa—Birds & Birding, Birding World, Dutch Birding, Sandgrouse, capebirdnet, SARareBirdAlert, *and* www.zestforbirds.co.za.

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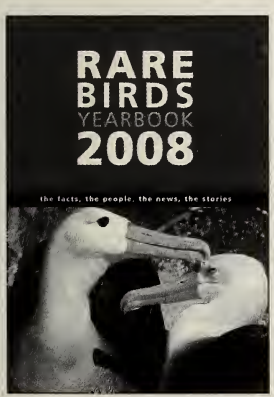
Reviews

Rare Birds Yearbook 2008: The World's 189 Most Threatened Birds

Erik Hirschfeld (editor), 2007. Shrewsbury: Magdig Media. 273 pp, 299 colour photos, 55 colour illustrations, 189 maps. Softback. ISBN 978–0-9552607–3-5. UK£18.95 (UK£4 goes directly to conservation).

Erik Hirschfeld's own brainchild, this is the first edition of what is planned to be an annual publication on the status of the world's rarest birds, produced in conjunction with BirdLife International. Introductory chapters cover a range of subjects including projects in place to study and/or protect endangered species, species champions, a global directory of BirdLife partners, interesting accounts of four (new) 'species-finders', an account of the recent rediscovery of Madagascar Pochard *Aythya innotata* (see *Bull. ABC* 14: 171–174), the impact of climate change, migration studies, an overview of the status of Balearic Shearwater *Puffinus mauretanicus* (a recently 'split' form which is already considered to be Critically Endangered), and the role of eco-tourism in conserving threatened birds. All of the opening chapters are well written and provide considerable food for thought in respect of the threats and opportunities facing everyone working to save endangered birds.



The bulk of the book, 164 pages, comprises a directory of the 189 Critically Endangered species, the basis for their classification (e.g. small population, reduction in population size, limited geographical range etc.) being clearly outlined in the introduction to the section. The accounts vary in length according to the knowledge available, but all species receive at least half a page and longer accounts extend to two pages. Most are accompanied by a map showing the species' range and one or more, often excellent, colour photographs—a competition was run to encourage photographers to submit material for inclusion. Where photographs were unavailable, a colour illustration is included instead. Species accounts cover a range of subjects including range and population, threats, conservation actions to date, conservation actions required and, in the longer accounts, a species 'history'. The accounts provide much useful information, but I found myself wanting more and was disappointed at the lack of a bibliography or further reading section either within the accounts or at the end of the book.

From an ABC perspective, it is pleasing to report that only 29 of the 189 Critically Endangered species occur in 'our' region, although I suspect that this partially reflects our poor knowledge of the distribution and population of some scarcer African species, rather than being a true reflection of the number of so-threatened species within the ABC region. Of the species covered, nine are presumed breeders in continental Africa, 15 (including three scops owls *Otus* spp.) occur on offshore islands and five are winter visitors, migrants or vagrants.

Additional chapters cover species considered to have become extinct since 1500, a directory of tour operators offering trips to see endangered species in 2008 (although I was disappointed to see a number of the ABC's corporate sponsors missing from this list, despite them offering specific tours to search for these threatened birds), a summary of the threats to Critically Endangered species, a list of Critically Endangered species by country, a summary of the last dates on which some of these species were recorded, a species index, a checklist of Critically Endangered species, stop press (a summary of exciting discoveries/developments in 2007), and an invitation to register interest in the next edition due to be published in October 2008. Again these chapters are a rich source of information, although I would question whether there is really a market for an annual publication of this kind, or whether it should be updated every 2–4 years instead.

Overall this is an excellent publication and, given the amount of information it contains and the number of photographs included, is excellent value for money. It should be bought by anyone interested in the conservation of these birds, which hopefully includes all ABC members. If every ABC member bought a copy we would immediately generate another UK£5,000 for conservation.

Richard Webb

Bird Sounds of Madagascar. An Audio Guide to the Island's Unique Birds.

Frank Hawkins and Richard Ranft, 2007. One audio CD. London, UK: British Library. Available from WildSounds. Price UK£9.99.

This is the second major sound collection dealing with the Malagasy region, following the four-CD set published by Huguet & Chappuis in 2003 (and reviewed by Dowsett-Lemaire 2004). But the scope of this single CD is rather different as, unlike the very broad coverage of Huguet & Chappuis' collection, it focuses on species endemic to Madagascar (and some neighbouring islands), and includes 127 of the birds of the island most interesting to visitors.

As the first author has studied the birds of Madagascar for nearly 20 years one can expect and indeed welcome the result to be error-free. A number of unfortunate misidentifications had occurred in Huguet & Chappuis (*cf.* Dowsett-Lemaire 2004) but none appears here as far as I can judge, and indeed this collection includes the first (correct) commercial recordings of Rand's Warbler *Randia pseudozosterops*, Green Jery *Neomixis viridis*, Red-tailed Newtonia *Newtonia fanovanae*, Red-shouldered Vanga *Calicalicus rufocarpalis*, Spectacled Tetraka *Xanthomixis* (*Bernieria*) *zosterops*, Dusky Tetraka *X.* (*B.*) *tenebrosa* and Yellow-bellied Sunbird-Asity *Neodrepanis hypoxantha*. Other endemics that appear here for the first time are Madagascar Serpent Eagle *Eutriorchis astur*, Banded Kestrel *Falco zoniventris*, Slender-billed Flufftail *Sarothrura watersi*, Sakalava Rail *Amaurornis oliveri* (the contact calls only, a recording of its song is still eagerly awaited, especially to help unravel its relationship with its close congener on the African continent, the Black Crake *A. flavirostra*), Madagascar Spinetail *Zoonavena grandidieri* and Bernier's Vanga *Oriolia bernieri*. Also included are some endemic races, e.g. Common Moorhen *Gallinula chloropus pyrrhorhoa* and Namaqua Dove *Oena capensis aliena*, albeit the recording of the first is too incomplete to permit comparison with other races; the latter does not sound different from continental birds. Of special interest is a song of an unidentified nightjar (a soft churring, almost trilled song) recorded by J. Roché, but as is typical with this recordist's material there is no locality, thus we have no idea whether this might apply to Collared Nightjar *Caprimulgus enarratus* of the forests of the north and east, whose song remains undescribed. But it is well worth presenting to draw attention to the problem. Also included are rock thrushes *Monticola* from the Isalo and Bemaraha massifs, the former previously known as Benson's Rock Thrush *M. bensoni* but later shown to be conspecific with Forest Rock Thrush *M. sharpei* (Goodman & Weigt 2002); the Bemaraha birds are perhaps of uncertain taxonomic status. The songs of rock thrushes of wet or dry forest are not unfortunately of much help in a taxonomic context: they all sound to me as if they could fall into dialectal variations of a single taxon, including that in the far north (Montagne d'Ambre). Only the Littoral Rock Thrush *M. imerinus* has a voice clearly distinct from the others, being rather scratchy and less melodious. Other additions are various vocalisations not presented by Huguet & Chappuis, such as the stunning mewing growl of Giant Coua *Coua gigas*. Only one recording comes from outside Madagascar, that of Thick-billed Cuckoo *Pachycoccyx audeberti* (represented in Madagascar by the nominate race), as the song of the local taxon has still not been tape-recorded.

A few endemic species are not presented, including the ducks (for which voice is not an essential identification tool), but one may regret the exclusion of Madagascar Plover *Charadrius thoracicus* and Madagascar Fish Eagle *Haliaeetus vociferoides*, which can, however, be found in Huguet & Chappuis (2003).

Although F. Hawkins writes in a preface that the vocalisations of Madagascar Cuckoo-Falcon *Aviceda madagascariensis* and of the nominate race of Red-capped Coua *Coua ruficeps* remain undocumented, both were in fact presented by Huguet & Chappuis. Whilst the discreet calls of the cuckoo-falcon are nothing to get excited about, the song of the coua is so distinctive and different from that of the race *olicaveiceps* as probably to warrant a taxonomic split.

The CD lasts 77 minutes, and different species are separated by silences of *c.*2 seconds. This means an average of 34 seconds per species, which may be considered by some as on the short side. For instance some of the ground rollers could have been given more space: in my review of Huguet & Chappuis I pointed out that Short-legged Ground Roller *Brachypteracias leptosomus* sounded rather unmotivated, with an untypical short series of three or four notes only (the song normally consists of a very long series of notes repeated at intervals of about one second). The song presented here consists of just ten notes, with some irregular spacing between them (was this perhaps the result of the bird reacting to playback?). This is better than the first published recording, but still does not give quite the right impression of this long, monotonous series of popping notes, which is such a characteristic sound of some eastern forests in the early morning mist. The necessity of keeping to one CD for the editors also means that there are just 99 numbered tracks, thus 28 species are grouped by two or three under the same number. To hear the

last species under such groupings one has to wait 20–55 seconds, and anyone wishing to use this material in the field will have to make his (her) own copy with proper species identification marks. It is a pity that the lengths of recordings of 'species one' are not indicated in such cases, as inexperienced listeners may become confused, especially when more than one cut is presented for some species (also with a short break between them). Of course producing two CDs instead of one to solve this problem would have caused other drawbacks (more time and material needed to fill the second CD) and further delays in the production of this essential series. The quality of recordings is variable, sometimes excellent but usually good enough for identification or use in the field. A few contain fairly loud calls of other species, and it might have been useful to mention these in the accompanying text, to avoid confusion.

Some taxonomic problems have been highlighted using bioacoustical evidence. One is that of the two forms of Madagascar Scops Owl *Otus rutilus*, the western form having been recently split (as Torotoroka Scops Owl *O. madagascariensis*) on account of its different song, with a series of trembled rather than pure notes, at a lower pitch. However, the situation is rather more complex than illustrated here (with just one or two song types of each form): there is already great variation in pitch between birds within each biome, and in addition some song types in the east are of trembled, rather than pure notes. I heard at least two examples of this in the forests of Masoala and of Périnet (the latter tape-recorded), and the second song type of *O. rutilus* published by Huguet & Chappuis is of slightly trembled notes (my tape from Périnet being of a song even more noticeably trembled). More material would be desirable.

One striking peculiarity of many Malagasy birds is their extremely high-pitched vocalisations, even in forest species. The list is rather long as this comment applies to several unrelated families such as *Accipiter* hawks (the thin high calls of Madagascar Sparrowhawk *A. madagascariensis* being especially curious), Velvet Asity *Philepitta castanea*, sunbird-asitys *Neodrepanis* spp., several species of tetraka of the genus *Xanthomixis*, several warblers (especially *Neomixis*), babblers of the genera *Oxylabes* and *Crossleyia*, and the two fodies *Foudia* spp. There is no equivalent in Africa among species of forest understorey. Chappuis (1971) discussed the low-pitched voices of forest birds in Africa in relation to physical constraints (e.g., the fairly long, low-pitched whistles of *Illadopsis* babblers and *Alethe* thrushes are thought to penetrate forest understorey better), but this argument breaks down completely here, as tetrakas, oxylabes and others (living in dense forest at ground level) do exactly the opposite!

To conclude, anyone interested in the Malagasy avifauna should get both Huguet & Chappuis (for its wider coverage) and this new collection, but for those visiting only Madagascar the present collection will be the more useful of the two. It can be considered essential as a sound field guide for anyone who intends to seek the island's endemic birds.

Françoise Dowsett-Lemaire

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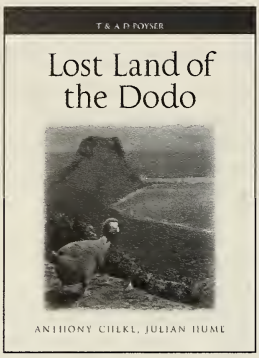
Lost Land of the Dodo

A. S. Cheke & J. P. Hume, 2008. London, UK: T. & A. D. Poyser. 464 pp, 40 colour plates, many colour maps and figures. Hardback. ISBN 978–01736–6544–4. UK£45.

This book presents a detailed ecological history of the Mascarene Islands, an archipelago in the tropical southwest Indian Ocean comprising Mauritius, Réunion, Rodrigues and their associated islets. The islands are famous for their extraordinary but devastated native fauna, including of course the Dodo *Raphus cucullatus*, but also many other endemic species, genera and even a family (the bolyeriid snakes). Human activity has left only a fraction of this, but the survivors include several very special animals and plants, some of which are among the most endangered species in the world, and some of which have been pulled back from the brink of extinction by intensive and highly innovative conservation action.

Anthony Cheke, the main author of the text, carried out field work in the Mascarenes in the 1970s and has made several shorter visits since. He has remained in contact with ongoing work through most of this period, all the while maintaining a deep interest in the earlier history of the islands. As a result, he produced the standard ecological history of the islands, and pioneering accounts of the native landbirds, all published in Diamond (1987). Julian Hume has been a leading light in recent palaeontological research in the Mascarenes, providing crucial parts of the jigsaw that this book puts together. He has also produced 40 wonderful plates especially for the book. These show the native wildlife,



packed with carefully crafted detail and supported by solid science; they add tremendously, although with a certain poignancy, as we can begin to appreciate in more than words what has been lost.

The text is rich in detail, using all available sources including an exhaustive review of old texts (many unpublished) in various languages, as well as the more recent published literature. Early chapters provide essential background information on the islands and how fauna (especially non-flying species) and flora reach volcanic islands that have never been connected to a mainland. Cheke then presents a detailed account of the circumstances of the islands' discovery, a description of the islands before they were colonised, and a thorough account of the likely origins of the Mascarene vertebrate land fauna. (He could not include invertebrates or flora in this analysis: the former, and probably also the latter, would be almost impossible tasks because of the paucity of research on their origins.) Five chapters then deal with the history since colonisation. Four correspond (each) roughly to a century since the first accounts of Mauritius in *c.*1600, whilst the last covers the very remarkable islets off northern Mauritius, the isolation of which has led to a history very different from that of the rest of Mauritius and Rodrigues.

The Mascarenes can seem a cushy place to work these days, although the (at times) prodigious rainfall, cyclones, mosquitoes and superabundant rats can be a nuisance. However, this is nothing to what the early explorers had to put up with. Julien Tafforet was 'accidentally stranded' on Rodrigues for nine months in 1725 when a storm drove his ship back to Réunion after the advance party alone had disembarked. Others were stuck for much longer. François Leguat, in a long stint also on Rodrigues, described the Solitaire *Pezophaps solitarius* in 'one of the first coherent observational accounts of animal behaviour in the wild ever published', but grew 'a little nostalgic about claimed breast-like tufts of feathers on the hens' thorax'. Such tales are brought to life by Cheke's wonderfully fluent, varied and readable writing style.

Back to the modern era, there follows a 'guest' chapter on the conservation efforts made on Mauritius and Rodrigues since the 1970s, by Carl Jones, who has led those efforts. Réunion is not treated in this way, but is covered well enough by the 20th-century chapter of Cheke and Hume's text. Conservation progress there has been remarkable as well, but has been missing several ingredients, especially the salvation of charismatic vertebrate species on the brink of extinction, which give the Mauritius/Rodrigues story a wider appeal. Jones' chapter summarises for the first time all the recent conservation work on these two islands and their associated islets, and is extremely instructive.

The final chapter claims to draw lessons from the foregoing text. It is the weakest part of the book. Rather few lessons are in fact drawn (especially compared to Jones' chapter) and these include simplistic and clichéd views of academics (or 'heavyweight theoreticians') and international conservation organisations. It includes an interesting section on the suggested use of introduced ecological analogues to fill vacant niches whose original occupant is extinct, but why does this have to be presented initially as an attack on (unnamed) opponents of the idea rather than a straight discussion of the pros and cons?

The production of the book is excellent, as expected from this publisher. It is hefty. The main text (273 pages) is followed by extraordinarily detailed endnotes, some in the form of long paragraphs; they amount to 92 pages at reduced font size, and, for example, chapter 8 has 498 endnotes. Fifteen appendices summarise as much information as can be tabulated, the checklists being especially useful, and unsurprisingly the 48-page bibliography is vast.

There are very few minor slips and typographical errors. The interesting map of the spread of the Red-whiskered Bulbul *Pycnonotus jocosus* on Réunion has been 'garbled' in production; a corrected version, and a few other corrrigenda, are available directly from Cheke (anthony@innerbookshop.com). The only interpretation that I question concerns the *mordoré*, a mysterious, uniform dull red seedeater from 18th-century Réunion, here identified as an aberrant Madagascar Fody *Foudia madagascariensis* (Cheke's 'Cardinal Fody', normally vivid red and black) similar to variants seen by other authors. However, I have never seen or heard of such a bird, and the authors cited refer only to the well-known 'flavistic' form of Madagascar Fody, in which the red is replaced by yellow, the dark markings variable but never apparently absent. This leaves the *mordoré* unexplained—I agree that probably it should not be taken at face value (as another lost Réunion endemic), but perhaps it is either a correct illustration of a variant not seen since, or just a bad picture of a normal fody.

This is an extraordinary book: a rare combination of true scholarship, popular science and a labour of love, beautifully written and illustrated, and well produced. As birds are the best known and most conspicuous element of the native fauna, it will fascinate almost anyone with an interest in birds, and is worth every penny.

Roger Safford

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Roberts Bird Guide

Hugh Chittenden, 2007. Cape Town: John Voelcker Bird Book Fund. 456 pp, 166 colour plates. Flexible cover. ISBN 978–0-620–37557–3. UK£17.99.

Roberts Birds of Southern Africa has undergone as much, and as rapid, speciation as Darwin's Finches, tending latterly to gigantism in its recent, seventh, edition (see review in *Bull. ABC* 13: 233–237), from which this portable field guide is derived.

This new book marks another complete break with editions up to the sixth, in that the brief text and distribution maps appear opposite the plates, omitting the fuller treatment of habits, breeding and food which made those earlier editions such comprehensive and compact handbooks. This new guide will inevitably be compared with the *Sasol* guide (Sinclair *et al.* 1998), and *Newman's Birds of Southern Africa* (Newman 1998), itself in its sixth edition. So how does it measure up?

Given that the seventh edition is almost too heavy to lift, *Roberts* would have come to the end of its reign as a field book unless someone had reorganised the illustrations in this format. However, the more one studies them, the more it is apparent that the illustrations in the larger book were not designed, and are therefore not always suitable, for the field guide approach, particularly due to the lack of illustrations of birds in flight. Unbelievably, even the 1958 edition of *Roberts* possesses more species of waders depicted in flight, albeit in black and white, whilst the 1978 edition illustrates all of the waders, ducks, gulls and terns in flight, in colour! No ducks or terns are shown in flight in the present volume, only three gulls, and 19 of over 60 shorebird species. In the 1978 edition, the colour figures of flying raptors are placed together for easy comparison, whilst in the new book they appear several to a page, beside the perched examples. Both *Newman* and the *Sasol* guide score much better on flying birds.

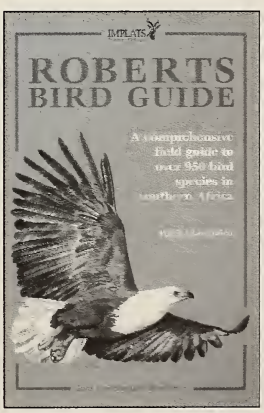
This leads to a more general appraisal of the illustrations. The 80 plates in the recent *Roberts* were newly commissioned from seven artists, and they have been cleverly digitised for the field guide, so that *c.*6 species appear on each of the 166 plates. *Sasol* has 200 plates, *Newman* a few more than that, and the styles in those books appear more uniform, with only two artists for the former and Newman's being entirely self-illustrated. Ken Newman was also responsible for most of the illustrations in the later, but previous editions of *Roberts*. As already noted in these pages (*Bull. ABC* 13: 233–237), the new ones vary considerably in style, the raptors by Chris van Rooyen being amongst the best, and considerably more lively and naturalistic than his competitors. Seabirds and especially the penguins are pleasing, but some other groups, particularly the gulls and terns, are less successful. There has been a great deal of repainting, with additional figures to extend the coverage of the larger volume, which was particularly 'light' on females, and, even now, design only permits the heads of many female weavers, estrildid and other finches and buntings to appear. The same applies to the non-breeding plumages of bishops, widowbirds and weavers, which unfortunately is how I often seem to see them! Females of flufftails are amongst other additions of this type.

One difficulty when digitising images is to balance comparative scales correctly, but this seems to have been achieved well, and the layout of the plates is attractive. As the birds are not aligned facing the same way to facilitate close comparison, they appear rather more 'lively' than many of plates in the two other guides, although the larks and pipits seem to have been positioned more with comparison in mind.

An addition to the figures in this version are the brief notes drawing attention to salient features, though many of these border on the obvious, such as noting the prominent yellow rump of a Yellow Bishop *Euplectes capensis*. There are some anomalies. For instance, the (Common) Redstart *Phoenicurus phoenicurus*—a rare vagrant—warrants a male in summer plumage, but a couple of rare wheatears *Oenanthe* spp. appear in winter plumage. I did not especially check for discrepancies between text and plates, but I was surprised to see the text for the Malagasy Pond Heron *Ardeola idae* state that the species lacks white wings, rump and tail.

The maps are clear and informative, and use ten colours (not on each map!) to indicate both status and abundance. Rarities and vagrants warrant a pink-shaded area, plus red spots for actual sightings, but sometimes the dots alone are presented. Thus the map for Eurasian Reed Warbler *Acrocephalus scirpaceus* has a large area of pink shading with some dots within it, but Basra Reed Warbler *A. griseldis* has just dots and no shading. Eleonora's Falcon *Falco eleonorae*, on the other hand, has a shaded area with some dots within it, but also dots well outside the shading. This is confusing. On some maps the red dots have pointer arrows, in others there are no arrows.

For users of previous editions, as well as *Newman* or the *Sasol* guide, getting used to the new sequence of families will be problematic. Furthermore, because this guide possesses twice as many plates as the 'big' *Roberts*, the sequence has been modified to suit the plate contents. Even allowing for this, though, it is questionable why a plate of babblers should appear halfway through the warbler plates, or why one plate of crows appears amidst the shrike



plates. Personally, I find it absurd in a field guide to see a plate of ducks adjacent to one of barbets, and orioles on a plate following shearwaters. It is not as if, with the constraints imposed by having only six species per plate, such a guide cannot present a satisfactory linear statement of relationships.

There are no references to other bird books for further reading, and it would have been nice if the African Bird Club had been listed under useful addresses, given that the Bulletin has much of interest to southern African birders.

The final 100 pages comprise a glossary and indices, which apart from the usual English and scientific name indices, include those to names in Portuguese, German, French, Zulu, and no less than seven local languages as well as Afrikaans. Another unusual feature is that 40 pages (!) are devoted to explaining the derivation of both scientific and patronymic names.

For many people, this will represent an attractive, well-produced and printed pocket guide, and many of the plates are more appealing than those available in other guides. Some information, however, will have to be sought elsewhere. One wonders what the *Roberts* lineage can possibly produce next.

Martin Woodcock

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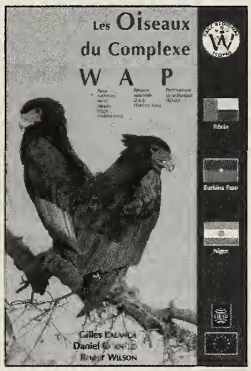
Les Oiseaux du Complexe WAP

Gilles Balança, Daniel Cornélis & Roger Wilson, 2007. Ecopas. 199 pp, 166 colour photographs, 4 maps. Softback. ISBN 978–2-87614–645–7. € 22.00.



The 'WAP' Complex covers a vast savanna area of *c.*2 million ha, situated at the meeting point of three countries, Benin, Burkina Faso and Niger. It comprises the 'W', Arly and Pendjari National Parks and several contiguous reserves, and is one of the last sanctuaries for herds of large mammals in West Africa. As everywhere in Africa, this protected area has suffered from widespread habitat degradation due to the unsustainable, and mostly illegal, exploitation of its natural resources by a booming human population. More effective conservation measures have progressively been put in place since the 1980s, most recently with the help of the European-funded Ecopas programme. This programme, together with the Centre for International Cooperation and Agricultural Research Cirad (Centre de Coopération Internationale en Recherche Agronomique pour le Développement), has now published an attractive and lavishly illustrated guide to the birds of the area. The introductory part briefly but clearly presents the different habitats of the 'WAP' Complex and its avifauna. A complete avifauna is included, which not only lists (with status and abundance) the 455 species that have been recorded to date, but also 79 potential species. The bulk of the book consists of a guide to 128 of the commonest and most easily observed bird species occurring in the area, among them 26 of the complex's 52 raptors. Each species is treated within half a page of text, which covers identification, habitat, breeding and status, and is illustrated by 1–5 colour photographs. Although the guide is primarily aimed at the general public and the novice birdwatcher, it is also useful to the more experienced birder as, apart from the detailed birdlist, it also contains much practical information (e.g. on the best areas to observe birds) and clear colour maps. It is entirely in French, but English bird names are given. As more than half of the 'WAP' Complex, which includes no less than four Important Bird Areas, has been ornithologically surveyed to date, much remains to be learned, and visiting birders could make interesting contributions to the knowledge of the avifauna.

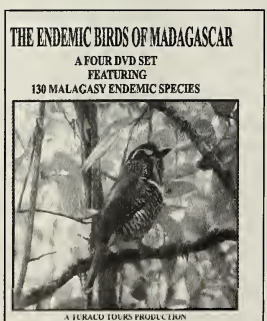
In Africa the book is available at the park offices and the IRD (Institut de Recherche pour le Développement)/Cirad documentation centre in Ouagadougou at 15,000 F CFA, all benefits going to the park. Distribution elsewhere is by the French QUAE publishers (www.Quae.com), with at least €10 per book going to the park.

Ron Demey

The Endemic Birds of Madagascar

Guy Eldridge, 2008. Privately published. Four DVD set featuring 130 Malagasy endemic species. Obtainable from the African Bird Club & WildSounds. UK£47.

More than four years in the making, Guy spent over 24 weeks in the field producing this truly stunning set of DVDs of Madagascar's endemic birds. However, I would question whether some of the species that migrate to continental Africa, e.g.



Madagascar Pond Heron *Ardeola idae*, Madagascar Pratincole *Glareola ocularis* and Madagascar Bee-eater *Merops superciliosus* can really be called endemics. Coverage includes such localised species as Madagascar (Bernier's) Teal *Anas bernieri*, although there are still a few omissions, namely Sakalava Rail *Amaurornis olivieri*, Slender-billed Flufftail *Sarothrura watersi* and Madagascar Red Owl *Tyto soumagnei*, leaving Guy with a few challenges for the next edition.

Individual coverage lasts from a few seconds to a couple of minutes, but almost without exception the footage is superb. I am sure everyone will have their own personal favourites but for me it is difficult to beat the ground-rollers, particularly Short-legged *Brachypteracias leptosomus* and Rufous-headed *Atelornis crossleyi*, and the couas *Coua* spp. Quality-wise, my only small gripe is that the freeze-frame images at the start of some of the species sequences flickered badly on one of the review DVDs, but other than that I had no complaints at all.

Although the price may be off-putting, this is a great reminder of how terrific a destination for bird-watchers Madagascar is. The set should appeal to everyone who has already been there and surely act as a catalyst for those yet to do so. I would certainly like to return after watching this. Now if only Guy would move on to the lemurs. Highly recommended.

Richard Webb

Vocalisations of Angolan Birds. Vol. 1

In my review of Michael Mills' CD in MP3 format, *Vocalisations of Angolan Birds. Vol. 1* (*Bull. ABC* 15: 141) I expressed regret that there was no accompanying booklet with useful recording details, such as date, locality, length of the recording and background sounds. It has since been brought to my attention that this information, as well as notes on specific taxa, is provided on the CD itself in an html file 'Accompanying notes'. The absence of any indication of the existence of this file is apparently due to an oversight.

Ron Demey

Corrigendum
***Bull. ABC* 15 (1)**

In Africa Round-up, the item on p. 16 'Another Northern Bald Ibis sighting, in Eritrea' actually refers to a sighting in Djibouti, not Eritrea, as should have been clear from the text.

Notes for Contributors

The ABC welcomes original contributions on all aspects of the birds of Africa, here defined as the area covered by Collar, N.J. & Stuart, S.N. 1985. *Threatened Birds of Africa and Related Islands: The ICBP/IUCN Red Data Book*. Cambridge, UK: International Council for Bird Preservation, namely continental Africa, Indian Ocean islands west of 80°E, e.g. Madagascar, the Mascarene Islands and Socotra; Atlantic Ocean islands on or east of the mid-Atlantic ridge, e.g. the Tristan da Cunha group, the Azores and the Canaries.

Contributions will be accepted subject to editing and refereeing by independent reviewers, where appropriate. The Editorial Team will be happy to advise authors on the acceptability of material at draft stage if desired.

Submissions

Two hard (printed) copies should be sent unless submitting by e-mail (preferred) to the editor's address on the inside front cover. Typewritten manuscripts should be double-spaced, on one side of the paper only, with wide margins all round. All submissions are acknowledged.

Contributions are accepted in English or French: French summaries are required for all papers published in English, and vice versa. Those submitting papers should supply a summary for translation into English, or French, as appropriate.

If you submit your contribution on CD or floppy disk, please state computer (e.g. IBM compatible PC, Macintosh) and word-processing package (e.g. Word, WordPerfect) used.

When sending your contribution on disk, please do not key anything in ALL CAPS (i.e. with the CAPS LOCK key depressed) unless the combination always occurs in that form (e.g. 'USA'). Do not use the carriage return key at the end of lines, and do not right justify the margins. When formatting tables use one tab, and not spaces, between each column. Unless a sketch map is provided as part of the article, the names of places should follow those on standard or readily available maps (preferably a recent edition of *The Times Atlas of the World*).

Preferred names

Given the current instability over worldwide lists of bird names, authors are requested to follow those used in *The Birds of Africa* Vols. 1–7. The African Bird Club has recently published (www.africanbirdclub.org/resources/checklist.html) a checklist of birds in its region. This is based on *Birds of Africa* but incorporates more recent revisions where appropriate. It includes preferred scientific, English and French names, as well as races and alternatives used by publications widely used in Africa. For bird names this list should be used or at least the preferred name used there should be given as an alternative. For non-*Birds of Africa* species (e.g. from the Malagasy region) use Dowsett & Forbes-Watson (1993). Deviation from such works should be noted and the reasons given. The Editorial Team will keep abreast of changes in nomenclature and when an agreed list of African names is available, will consider switching to follow it.

Style

Authors are requested to follow conventions used in The *Bulletin of the African Bird Club* and to refer to a recent issue for guidance. A detailed style guide can be obtained, either electronically or as a hard copy, on request from the Managing Editor.

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The ABC Representatives scheme aims to support existing members by providing a local point of contact in their region, for example, to answer queries to the Club, to solicit submissions for the bulletin, and possibly to arrange local meetings for members. Existing ABC members can contact their local Representative in the first instance with queries relating to the Club. ABC Representatives help to recruit new members in their region, for example, by distributing posters and arranging local advertising. In Africa, ABC Representatives help to identify opportunities to invest the ABC Conservation Fund and candidates for the Supported Membership scheme.

The Club aims to appoint many further ABC Representatives. If you are interested in supporting and promoting the Club in your region, have any queries, or require further information relating to the ABC Representatives scheme please do not hesitate to contact the Membership Secretary at the Club address, e-mail membership@africanbirdclub.org.

ABC is seeking Country Representatives in the following countries, principally within the Club's region: Algeria, Azores, Benin, Burkina Faso, Burundi, Cameroon, Cape Verde Islands, Chad, Comoros & Mayotte, Côte d'Ivoire, Djibouti, Equatorial Guinea, Ethiopia, Gabon, Guinea-Bissau, Guinea Conakry, Libya, Madeira, Mali, Mauritania, Mauritius, Morocco, Mozambique, Niger, Réunion, Rodriguez, Rwanda, Senegal, Socotra, Somalia, St Helena, Sudan, Togo, Tristan da Cunha and USA.

Supported and Affiliated Membership

The Supporting Members scheme is a key part of the Club's strategy of encouraging the spread of knowledge and understanding of birds as widely as possible throughout Africa. The scheme enables Africans who would not otherwise have the resources to join, to become members of the Club. The scheme is funded by Supporting Members who pay a minimum of UK£30 to cover their own membership and the subscription of at least one African member. The money they contribute over and above their own subscription is placed in a special fund that is used to cover the membership expenses of African members whom they may have nominated, or who have been nominated by other Club members.

Although we have suggested a minimum of UK£30 to become a Supporting Member, any contribution is welcome. All members of the Club, even if they do not feel able to become Supporting Members themselves, are invited to nominate candidates for supported memberships. Candidates should be nationals of an African country, with a genuine interest in wild birds but without the resources to become members in their own right. Africans who think they may qualify are very welcome to put their own names forward, supported by a letter of recommendation from someone such as their employer, teacher or an officeholder in a local wildlife organisation.

The scheme now also includes clubs who wish to be affiliated with the African Bird Club in African countries where it is difficult for local individuals to become members in their own right. Clubs accepted for membership under the scheme receive up to six copies of each issue of the bulletin for circulation among their members. Instead of paying a membership fee, Clubs are asked to provide a short annual report on their activities that may be published in the bulletin. Clubs interested in becoming Affiliated Member Clubs are invited to apply to the ABC Secretary giving details of their membership, their constitution or a statement of their objectives and conditions of their membership, and their activities to date.

ABC Information Service

ABC offers a service to help members with information requests. Perhaps you are planning a trip to Africa and need local advice, or maybe you are in search of an obscure fact about an African species. The Club does not guarantee to find all the answers but will try to help. The service is free to ABC members. Contact: Keith Betton, who is also custodian of ABC's journal library, at 8 Dukes Close, Folly Hill, Farnham, Surrey, GU9 0DR, UK. Tel: +44 1252 724068. E-mail: info@africanbirdclub.org.

AfricanBirding e-mail discussion list

Launched, in October 2000, by the ABC and the Pan-African Ornithological Congress, AfricanBirding or AB, as it is known, has become a useful forum for those inrerested in African birds. To join the discussion, which averages 1–2 messages a day, send a blank e-mail to AfricanBirding-subscribe@yahoogroups.com. You will then receive an e-mail instructing you how to join.

The Club also maintains a list of members' e-mail addresses. This list is confidential and used only for Club purposes, e.g. for informing members of upcoming events and news concerning the Club. It is not divulged to anybody outside the Club or used for commercial advertising. At present it includes addresses for about 50% of the membership. Please send any additions or amendments to the membership secretary: membership@africanbirdclub.org.


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