SANDGROUSE

Volume 25 (2) *2003*

ORNITHOLOGICAL SOCIETY OF THE MIDDLE EAST,
CAUCASUS AND CENTRAL ASIA

OSME

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OSME

OSME was founded in 1978 as the successor to the Ornithological Society of Turkey. Its primary aims are:

- To collect, collate, and publish data on all aspects of the birds of the Middle East.
- To promote an interest in ornithology and bird conservation throughout the Middle East.
- To develop productive working relationships with other governmental and non-governmental organisations with an interest in conservation and/or natural history in the region.

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Publications

OSME publishes a scientific journal, *Sandgrouse*, containing papers, news and features on all aspects of Middle Eastern ornithology. Published twice yearly, it is issued free to members. Further copies are available for sale from OSME.

Meetings

An Annual General Meeting is held in London at which guest speakers provide new perspectives on ornithology in the region. There are also occasional special meetings, some taking place outside the UK.

Projects

OSME organises field expeditions to collect data on birds in little-known parts of the region and in areas where OSME can assist by teaming up with local groups.

The Conservation & Research Committee grants funds to valuable field projects and desk studies which further knowledge and conservation of birds in the region. Grants have been awarded to over 45 projects since the Conservation & Research Fund was set up in 1982.

MEBirdNet Email Discussion Group

This is an e-mail mailing list (moderated by OSME) that discusses birds and birdwatching in the Middle East, Caucasus and Central Asia. Subjects include research, conservation, bird news, recent records, identification, requests for information and exchange of information. To join the mailing list, send an empty e-mail to: MEBirdNet-subscribe@yahoogroups.com.

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SANDGROUSE
Volume 25 (2)

Cover Photograph:
Bald Ibis *Geronticus eremita*
taken by Hanne & Jens Eriksen.

Editorial

This volume of *Sandgrouse* is my last as sole editor, hence the rare event of an editorial. Volume 26 will be co-edited by Mike Blair and myself, with Mike assuming sole responsibility for the journal in 2005. Scot by birth and fellow immigrant to Norfolk, Mike formerly worked for the British Trust for Ornithology, being responsible for, among other important works, co-editing *The EBCC atlas of European breeding birds*. Within the OSME region, he has enjoyed, like me, the pleasures and tribulations of counting, in the name of conservation, seemingly innumerable Crested Larks *Galerida cristata* in central Turkey.

At a moment such as this it is always a pleasure to acknowledge the contribution of others in what has hopefully been largely a successful period for the Society. Many people have assisted me in ensuring that not only did *Sandgrouse* appear on time, but also that there was something in it worth reading. First and foremost, therefore, I thank all of the authors, photographers, referees, advertisers, sponsors, and members of the editorial committee. Additionally, Council and especially its Chairmen, Andrew Grieve and latterly Keith Betton, have provided a finely judged cocktail of encouragement and criticism. Harry Scott and Geoff & Hilary Welch were closely involved in designing the new look that *Sandgrouse* has enjoyed during my time as editor; that the journal has gained not a few favourable comments for its appearance is almost entirely due to their foresight. In addition to those already mentioned, the following deserve special thanks for their much-valued assistance of all kinds during the last seven years: Ian Andrews, Dawn Balmer, Chris Bradshaw, Duncan Brooks, Mike Dawson and all of the staff at Crowes, Paul Doherty, Hanne & Jens Eriksen, Derek Harvey, Tim Loseby, Rodney Martins, Richard Porter and Hadoram Shirihai.

This year is OSME's 25th anniversary and cause for celebration, marked in part by this special issue of the journal. Unfortunately, while politics may, thankfully, have no place in *Sandgrouse*, these are difficult times for those who live and seek to practice conservation in the Middle East. A new realpolitik has made its mark throughout the globe, but nowhere more so than in our region, making impossible some of the goals to which OSME has been working in recent years: plans for a survey in Iran in conjunction with the Department of the Environment have been shelved, as has projected work in Syria. War-torn Afghanistan still seems as off-limits as it has been for the last 20 years, and the words of Bruce Chatwin remain as potent as they were nearly a quarter of a century ago. 'Were he [Robert Byron] alive today, I think he would agree that...the Afghans will do something quite dreadful to their invaders...But that will not bring back the things we loved: the high, clear days and the blue icecaps on the mountains...Nor shall we get back the smell of the beanfields; the sweet, resinous smell of deodar wood burning, or the whiff of a snow leopard at 14,000 feet. Never. Never. Never.' Recent events in Iraq may yet provide conservationists with the opportunity to save what remains of the Mesopotamian wetland wilderness. Whether Thesiger or Maxwell would recognise what is left, who knows? As conservationists we must hope.

A decade ago I was fortunate to visit Yemen and Socotra as part of the second OSME expedition. Nowadays our Yemeni counterpart, Omar Al-Saghier, is the BirdLife representative there, detailed surveys to document magnificent, wild Socotra's biodiversity are well advanced, and one of Omar's co-workers, Nadim, has finally solved the mystery of where Jouanin's Petrel *Bulweria fallax* breeds. At the opposite side of the Middle East, in Turkey, where for so long there was only a handful of birdwatchers, there are now well-organised teams of university-educated conservationists, working cooperatively to save what remains of that most special country's superb avifauna. When I assumed this role, in 1996, BirdLife's Middle East division seemed to be largely Richard Porter. As he was always first to acknowledge, the day he could retire would mark not the end but the beginning. Happily, Richard is now (semi) retired, while Adnan Budieri, his successor, manages an ever-growing operation from the Amman office. Finally, in one of the most exciting developments, OSME has recently figuratively embraced Central Asia and the Caucasus within its remit. Judging by comments received in the editorial office from ornithologists working in these regions, this move has been welcomed, and OSME members can look forward to some exciting contributions on the birds of both areas.

Guy M. Kirwan

OSME News

OSME SUMMER MEETING 2003

OSME celebrated its 25th anniversary at the Summer Meeting, held on 19 July, in London, when over 70 members enjoyed a stimulating day of talks and socialising. It was particularly pleasing that representatives from Iran, Jordan, Palestine, Saudi Arabia, Turkey, UAE and Yemen were able to attend, making it a truly Middle Eastern day!

Adnan Budieri, Head of Birdlife Middle East, opened the morning session with an overview of ornithological and conservation work in the Middle East and talked of the challenges ahead. Imad Atrash, from the Palestine Wildlife Society, showed a film about the birds of Palestine, the first ever to be made, which he hopes will educate and inspire children to take up birdwatching. Next was Nadim Taleb, who detailed the discovery of breeding Jouanin's Petrels *Bulweria fallax* on Socotra and the hair-raising climb involved to confirm breeding. David Murdoch spoke of a recent trip to Syria and encouraged birders to discover the birding potential of the country. Chris Bowden provided an update on the Bald Ibis *Geronticus eremita* situation in Syria, discussing both the initial discovery, by Gianluca Serra, and plans for future work.

Following lunch, former OSME chairman Geoff Welch gave an overview of the first 25 years of OSME and talked inspiringly about the people, places and publications that has made OSME so successful. Ian Wallace, in his own inimitable, formidable and charming way, spoke about two groundbreaking expeditions to Jordan in the 1960s and the exciting discoveries they made. Ian even showed some of the original field recording sheets to prove that the expeditions were serious affairs, but judging by the slides they also had a lot of fun! Richard Porter, former Head of Birdlife Middle East, also offered a dose of poignant nostalgia, this time of Turkey in the 1960s. Coupled with a sobering conservation message, Richard spoke about the personalities involved and their great influence on ornithology. Finally, Tim Loseby showed some fantastic photographs taken on a guided trip to Turkmenistan. Despite not being a purely photographic trip, Tim managed to capture some superb images and introduced the variety of habitats and birds to be found.

Dawn Balmer

Plate 1. From left to right, Nadim Taleb, Adnan Budieri and Imad Atrash, OSME Summer Meeting, London, July 2003. (*Dawn Balmer*)

COUNCIL CHANGES

There have been several changes on OSME's Council. We are saying goodbye to Owen Roberts, who will be well known to many members: our grateful thanks to him for his hard work previously as Secretary and Membership Officer. New Council members elected at this year's AGM are John Bartley (incoming Secretary), Pat Bartley, Andrew Grieve (who continues to run OSME's website), Chris Harbard and David Murdoch. Council has also recently co-opted Mark Thomas of the RSPB. Dawn Balmer has agreed to act as Vice-Chairman.

2004 AGM DATE AND VENUE

The 2004 OSME Summer Meeting will be held on Saturday 10 July in central London. Once again it will be held in the head office of the Association of British Travel Agents, 68–71 Newman Street, London W1T 3AH. A full programme of speakers will be published in the spring.

OSME/NHBS AWARDS

The OSME/NHBS book award scheme is a collaborative venture between OSME and the Natural History Book Service (NHBS). Applicants from the Middle East and Central Asia can apply for ornithological books to the value of UK£100 (c. US$150). The aim of the award is to assist nationals in accessing materials otherwise difficult and expensive to obtain in their own countries, to promote their use in bird conservation. For further information and guidelines on how to prepare an application, write to OSME Book Award, The Lodge, Sandy, Beds SG19 2DL, U. K. or send an e-mail to info@osme.org. OSME is grateful to NHBS for providing this award to assist OSME in promoting birdwatching and conservation of birds in the Middle East and Central Asia.

REVIEW OF BIRD NAMES

Sandgrouse currently follows Porter *et al.* (1996) for names of birds in the OSME region. This now presents two problems. Firstly, the OSME region has recently expanded and quite a number of additional species have been incorporated into our remit, which are not covered in the Middle East field guide. Secondly, recent years, in particular, have seen dramatic changes in taxonomic arrangements for many species. OSME has decided to conduct a fairly wide-ranging reassessment of names employed in *Sandgrouse*, covering taxonomy at both species and generic levels; English names; and scientific names. OSME is therefore preparing a new list to follow, for both nomenclature and taxonomy. Once this has been assembled it will be circulated for comment with birdwatchers within the region. Anyone interested in taking part in this consultation should send an e-mail to info@osme.org.

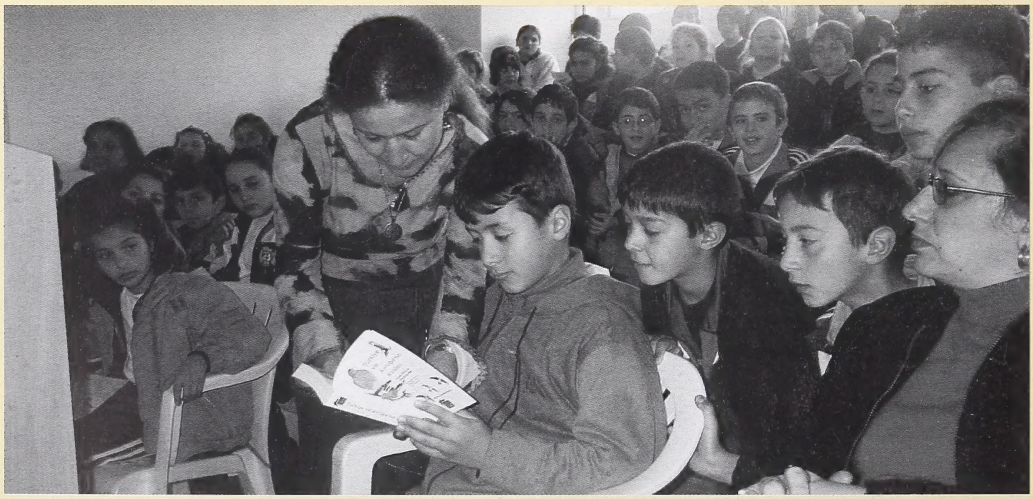

Plate 2. Recently OSME awarded £200 from its Conservation & Research Fund to purchase 40 copies of the new Turkish field guide for use in schools in North Cyprus. Unfortunately, there are no young Turkish Cypriot birdwatchers and, until now, a major difficulty in recruiting any has been the lack of a modern field guide in Turkish. The books were distributed by Alev Ören, Kuşkor Chairwoman. Shown here are the children of Aysun Primary School at Çamlibel receiving their books. (*Peter Flint*)

OSME WELCOMES SUNBIRD AS FIRST CORPORATE SPONSOR

OSME is delighted to welcome top birding tour operator Sunbird as its first Corporate Sponsor. Sunbird has been organising birding tours for 24 years. In both of the *British Birds* Overseas Bird Tours surveys, Sunbird was ranked top of all the major birdwatching tour companies. The surveys were based on over 500 tours taken by *British Birds* readers, involving 44 different bird-tour operators. The results showed that of the major companies Sunbird has the lowest number of participants per leader, the leaders with the highest ornithological ability, the leaders with the best general attitude, and the greatest interest in ensuring that the whole group enjoys the trip. Their tours were also rated as the best value for money. In recent years Sunbird has organised tours to a number of countries in the OSME region including Oman, Egypt, Kazakhstan, Israel, Jordan, Turkey and Yemen. The money from Sunbird's sponsorship will be channelled into conservation projects in the Middle East and Central Asia. To obtain details of Sunbird's 2004 tours call (+44) (0)1767 682969 or visit their website: http://www.sunbirdtours.co.uk/.

OSME SUPPORTS TURKEY BREEDING BIRD ATLAS

OSME has provided nine hand-held GPS units that use satellites to give the user a very accurate reading of their position on the planet. These units are accurate to within 5 metres and allow field workers to relocate nest sites and song posts that have been previously marked. The units have been distributed to atlas workers in Istanbul, Izmir, Ankara and Samsun. Speaking on behalf of the Turkish birdwatchers, Bahtiyar Kurt, of Doğa Derneği, remarked, "These units are essential in the work that we are trying to achieve. It is not always possible to accurately survey an area unless you have the ability to mark coordinates. These units will improve our work and will speed up the mapping of atlas data."

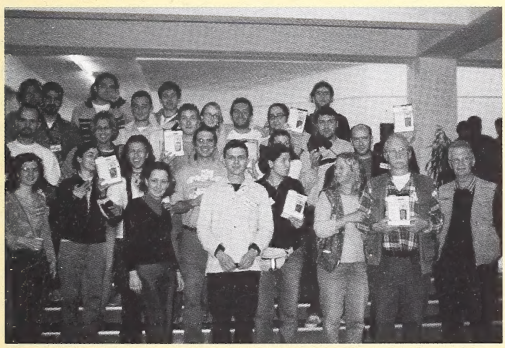

Plate 3. Turkish birdwatchers with GPS units, at the annual Turkish birdwatching conference, held in Adana, Turkey, late April 2003. OSME has funded nine GPS units for use by Turkish field workers working on a new bird atlas. These units use satellites to plot the exact position to within a few metres, permitting song posts to be mapped, and nest sites to be relocated at a later date. (*José Tavares*)

OSME PLANS TO SURVEY SYRIA

Sadly, OSME was forced to abandon plans to visit Syria in spring 2003 due to the hostilities in Iraq. Plans are being hatched for field work in 2004. It is hoped that a small team can be brought together to visit Syria in January or February to undertake counts of significant winter visitors (particularly wildfowl), to document more fully the distribution of interesting residents, to identify areas of conservation value and to reconnoitre for later visits by OSME expedition members. Depending on the level of interest, a further visit may be made in the spring to study breeders and passage migrants (particularly raptors). Anyone interested in taking part should contact David Murdoch either by e-mailing damurdoch@hotmail.com or telephoning (+44) (0)1179 731435.

More funds are needed to support projects

With this copy of *Sandgrouse* you will have received a leaflet asking for donations. Quite simply, OSME receives far more requests for support that it can consider. In the last year we have supported young birdwatchers in Cyprus with books, assisted field workers in Armenia, and supplied GPS units to help with the Turkey Breeding Bird Atlas. We would like to do more. If you can help us, we guarantee that all money given as donations will be channelled directly back into bird conservation in the Middle East and Central Asia. Thank you.

Keith Betton, OSME Chairman

ERRATUM

In *Sandgrouse* 25 (1), p. 52, it was stated: Swifts in downtown Tel Aviv were absent from the city until 09.00 (i.e. much later than at the study colony). This should have simply read: Swifts in downtown Tel Aviv were absent from the city after 09.00.

NEWS & INFORMATION

compiled by Dawn Balmer & Guy M. Kirwan

The aim of this section is to inform readers about events in the OSME region. It relies on members and others supplying relevant news and information. If you have anything concerning birds, conservation or development in the OSME area please send it to News and Information, OSME, c/o The Lodge, Sandy, Bedfordshire SG19 2DL, U. K.

This section is not intended as a definitive report or write-up of the projects concerned. Many of the projects are sponsored; such support is appreciated but is not generally given acknowledgement here.

GENERAL

Saker crisis A recent study casts doubt on the sustainability of the trade in Saker Falcon *Falco cherrug* for falconry. The study investigated the numbers of Sakers passing through animal hospitals in the Middle East. The results were startling; a minimum of 6400 Sakers are trapped and exported each year to the region. This level of trade is serious but the situation is compounded because females, being larger than males and therefore able to tackle the traditional falconers' prey, Houbara Bustard *Chlamydotis undulata*, are targetted. In some countries, more than 98% of the falcons seen at animal hospitals were female and the majority, around 80%, taken from the wild are juveniles.

The species has already disappeared from large areas of its former range, which stretched from Europe to Mongolia, with particularly severe declines in Europe, Kazakhstan and China. Some countries, notably UAE, have been actively promoting the use of captive-bred falcons to reduce pressure on wild populations, but modelling suggests that if harvesting birds from the wild continues at current levels, Saker could soon be ecologically extinct, perhaps within five years.

Meanwhile, BirdLife International reports that trapping, mainly of Saker and Peregrine Falcon *Falco peregrinus*, is rampant in Egypt in autumn, with birds being illegally exported to Arabia for falconry. Numbers involved are unknown, but Sakers have declined in the country and resident populations of other falcons, which are used as decoys to attract the more valuable species, have declined massively. Another trend is for hybrid falcons to be bred for falconry. Some of these are escaping, with unknown biological impacts on wild populations. (Source: *World Birdwatch* 24 (4): 7.)

Waterbirds Around the World is the title of a conference concerning global flyways for waterbirds to be held in Edinburgh, Scotland, on 3–8 April 2004, and organised by Wetlands International with support from the Netherlands Ministry of Agriculture, Nature Management and Fisheries and the U. K. Joint Nature Conservation Committee and other agencies. Information concerning the conference can be sought from Dr Gerard Boere (boere@wetlands.agro.nl) or via the Wetlands International website: www.wetlands.org. (Source: Gerard Boere *in litt.* March 2003.)

International conference on Caucasian Black Grouse The Georgian Center for the Conservation of Wildlife, in partnership with the Azerbaijan Ornithological Society, is organising a conference entitled Conservation of the Caucasian Black Grouse *Tetrao mlokosiewiczi*, to be held in Georgia in September 2003. The overall objective of the conference is to promote regional cooperation for the conservation of this little-known species, which is largely confined to the Caucasus. More specific goals are to: exchange information on species research results and status; share experience of the species and its habitat conservation requirements; facilitate the development of a long-term action plan for the species and its habitat throughout the Caucasus; and to promote multi-national cooperation. While the publishing deadlines for *Sandgrouse* mean that we have been unable to include information concerning the conference before now, we consider it of value to highlight this important regional initiative in support of a Near-Threatened species. More information

can be found at http://www.gccw.org. (Source: Elchin Sultanov *in litt.* April 2003.)

Makeover for Phoenix While OSME celebrates its 25th year, it is worth recalling that the Atlas of the Breeding Birds of Arabia (ABBA), brainchild, personal *tour de force* and perhaps even millstone (!) of Mike Jennings is not many years younger. Contributors to the project and other interested (and paying) parties receive latest news concerning ABBA and associated ornithological goings-on via the annual newsletter-cum-bulletin *Phoenix*, which has just received a substantial makeover, including the introduction of colour. Issue 19, which is again sponsored by the National Commission for Wildlife Conservation and Development (Saudi Arabia) contains 24 pages, within which one finds news of several significant breeding range extensions, the first breeding evidence for Jacobin Cuckoo *Clamator jacobinus* in Arabia (uncovered by the master sleuth of parasitic birds, Bob Payne), a detailed report of the ABBA survey of several Yemeni offshore islands in midsummer 2002, recent news from Kuwait, and the usual mix of news, reviews and updates concerning the project, including the welcome development that Mike has been granted early retirement from his 'real' job, thus permitting him time to complete the final atlas. However, that does mean that one of the present correspondents needs to finish his long-promised species accounts...! Correspondence concerning the ABBA project and those wishing to subscribe to *Phoenix* should contact Mike Jennings, Warners Farm House, Warners Drove, Somersham, Cambridgeshire PE28 3WD, U. K.; e-mail: arabian.birds@dial.pipix.com. (Source: Mike Jennings *in litt.* February 2003.)

Zoology in the Middle East abstracts published in volumes 21–27 are now available online. Both the abstracts (in English and German) and the key words of papers from the most recent issues are now available on the journal's website, www.kasparek-verlag.de, where you can also find information concerning subscriptions. (Source: Max Kasparek *in litt.* February 2003.)

BirdNetCaucasus goes online BirdNet Caucasus is a new e-mail group (home page: http://groups.yahoo.com/group/BirdNetCaucasus) devoted to birds of Georgia, Azerbaijan, Armenia, north-eastern Turkey and northern Iran. Postings to the list will cover research, conservation, bird news, recent literature, interesting records, field identification, requests for, and exchange of, information, etc. The group is open to anyone interested in birds of this region. To start sending messages to it, simply send an e-mail to BirdNetCaucasus@yahoogroups.com. (Source: Alexander Abuladze *in litt.* February 2003.)

New Internet resource Birders or ornithologists with a serious interest in taxonomy, distribution and nomenclature may wish to view a new website, put together by John Penhallurick. The site enables you to search for any species of bird and view its English name (with species endemic to a particular country clearly denoted), scientific name, French name, German name, Spanish name, English synonyms, Peters family name, Sibley & Monroe family name, Gill (second edn.) family name (as used by Clements), habitat, distribution, threat status (for those species listed in the BirdLife International Red Data Books), criteria for threat status, and annotated synonymy for every generic, subgeneric, species and subspecies name. The author advises that there are a number of explanatory documents on the site that explain what he is doing and why, and he urges readers to view these first. The site should be considered work in progress and is being expanded working through the Peters order. Updates should be available on a monthly basis. The site can be viewed at either: http://www.worldbirdinfo.net or http://www.worldbirdinfo.bribieisland.net. (Source: John Penhallurick *in litt.* to African Birding and Bulletin Board for Ornithologists Working with Neotropical Birds, March 2003.)

Guy Mountfort 1905–2003 Guy Mountfort died, aged 97, in late-April 2003. An advertising executive by profession, Mountfort played a leading voluntary role in the founding, in 1961, of the World Wildlife Fund (WWF) and, subsequently its campaign to save the Tiger *Panthera tigris*. He was also one of the trio of authors of the million-selling *A field guide to the birds of Britain and Europe* (1954), which revolutionised European birdwatching; the other two were Roger Tory Peterson and ex-OSME Council member, Phil Hollom. The Peterson guide, as it is best known, is currently in its fourth edition and has been translated into 13 other languages.

To OSME members, Mountfort is perhaps best remembered for the last of his trio of 'Portrait' books, *Portrait of a desert*, which told of his expedition to the Azraq oasis, in Jordan. (Source: *The Guardian* 30 April 2003.)

Max Nicholson 1904–2003 Irish-born conservationist Max Nicholson died recently at the age of 98. Although he had no particular connections with the Middle East, Nicholson's role call of credits are legion: director-general of the Nature Conservancy in 1952–1966, one of the founders of the World Wildlife Fund, founder and trustee of Earthwatch Europe (1985–1993), founder of the British Trust for Ornithology (1932), head of the world conservation section of the International Biological Programme, in addition to his formidable career of public service, commencing in the early 1930s, and authorship of a number of books, including the seminal *How birds live* (1927). He was also involved in the formation of the International Union for Conservation of Nature (IUCN). (Source: *The Guardian* 28 April 2003.)

Bird Numbers 2004: Monitoring in a Changing Europe is the title of the 16th International Conference of the European Bird Census Council, which will be held on 6–11 September 2004, at Erciyes University, Kayseri, in Turkey. The conference aims to share knowledge of all aspects of bird monitoring across Europe and is open to those interested in the following related issues and others: monitoring (field methods and analysis, conservation action and policy), accession to the European Union and pan-European monitoring and indicators, atlas studies, modeling bird numbers and distributions, monitoring ecological disasters, climate change, setting conservation priorities and site or protected areas monitoring. Plenary speakers on these topics will include: Franz Bairlein (Migration), Ali Stattersfield (Prioritisation of Species), Frank Gill (Citizen Science Projects), Carsten Rahbek (Complementarity and Biodiversity Hotspots), Brian Huntley (Climate Change), and Sancar Baris (Birds in Turkey). The registration deadline is 1 October 2003 (visit http://www.kustr.org/ebcc2004/). For further information e-mail: ebcc2004@erciyes.edu.tr or fax: +90 352 437 6748.

CYPRUS

The North Cyprus Bird Report 2001 has recently been published. In addition to the systematic list of birds recorded during the year, the contents include an updated checklist of the birds of Cyprus, details of ringing recoveries, breeding biology of the Cyprus Wheatear *Oenanthe cypriaca*, details of a May 2001 census of endemic breeding birds, systematic list of butterflies recorded in 2001, a description of the mass migration of the butterfly *Vanessa cardui* through the north of the island and a list of Cypriot ladybirds (Coleoptera: Coccinellidae). The report is published by Kuşkor (the North Cyprus Society for the Protection of Birds and Nature) and costs UK£6 plus UK£2 air mail postage and packing to Europe. Payment may also be made in Cyprus Pounds, Euros or Turkish Lira. The publication of the report has been fully sponsored and all proceeds will be used to aid the work of Kuşkor. Payment should be made by cheque with your order to: Kuşkor, PK 634, Girne, Mersin 10, Turkey (note that Mersin 10, Turkey, is the postal code for North Cyprus). E-mail: kuskor@superonline.com. Reports may also be purchased from the Kuşkor office in Girne (Kyrenia). (Source: Peter Flint *in litt.* April 2003.)

More on bird trapping in Cyprus The long-controversial issue of the killing of small migrant birds for food in Cyprus was most recently highlighted in these pages in *Sandgrouse* 24: 3–4. The total numbers of birds killed run to millions per annum. Recently, the Royal Society for the Protection of Birds (the BirdLife partner in the U. K.) has become closely involved in monitoring and lobbying against this desperate situation. Another RSPB team visited south-east Cyprus in September –October 2002 to act as observers for the local law enforcement agencies, and to document illegal trapping activities. The observers cooperated closely with the Cyprus Ornithological Society (1957) and received the full support of the Cyprus government and U. K. Sovereign Base authorities. Acting on information received from the observers, the local enforcement agencies made several arrests and seized bird-trapping equipment. A welcome development was that a general reduction in trapping was noted, partially because of press coverage of the arrests, but an estimated 500,000 birds were still killed in the study area. Both the government and media pointed out that Cyprus must reduce its bird-trapping activities in order to meet existing domestic and European bird protection legislation, if it hopes to join the European Union. A report on the RSPB findings has been

submitted to the Bern Convention on the Conservation of European Wildlife and Natural Habitats, in support of a complaint made by BirdLife and others in 2001. At its recent annual meeting, the Bern Standing Committee charged Cyprus and the U. K. to maintain the pressure on illegal bird-trappers and report back in 2003. (Source: *World Birdwatch* 25 (2): 4.)

GEORGIA

New website The Georgian Center for the Conservation of Wildlife (GCCW) has recently launched a website at http://www.gccw.org, which has information on GCCW operations, programme areas and ongoing projects, e.g. raptor migration (see below), vulture studies, Javakheti wetlands management, wildlife corridors and national parks planning. (Ramaz Gokhelashvili *in litt.* May 2003.)

Raptor migration monitoring in Georgia Located in the heart of the Caucasus, one of three Endemic Bird Areas in Europe, Georgia harbours important populations of many bird species of European Conservation Concern. The Black Sea coast is an especially important migratory corridor for large numbers of migrant raptors as well as waterbirds and passerines. This pathway, known as the Eastern Black Sea Migration Route, funnels birds from breeding populations in Fenno-Scandinavia and Russia heading to wintering areas in the Middle East and Africa. In 2000, the Georgian Center for the Conservation of Wildlife (GCCW), in partnership with BirdLife International and the BirdLife partner in Switzerland, initiated a migratory raptor conservation programme on the Black Sea coast. The main objectives are to: increase public awareness concerning migrant raptors, build capacity for long-term monitoring, identify major migration routes and watch-points, document the importance of this migration route, and commence long-term counts. As the first steps, a participatory monitoring scheme was developed jointly with local stakeholders, a guidebook for raptor identification was prepared and published in Georgian, local counters were identified and trained, and in 2002 counts were conducted involving locals and foreign volunteers (Table 1). Around 60,000 raptors were counted during the ten-week period. In autumn 2003 counts will be conducted from 15 August to 15 November close to Batumi. The GCCW invites volunteer observers with good raptor identification skills to participate in the project. For further details please contact: Zura Javakhishvili, GCCW, e-mail: zure@gccw.org, or via http://www.gccw.org.

IRAQ

Drying Mesopotamian marshes further affected by Iraq war Few OSME members will be unaware of the immense biological importance of the Mesopotamian marshes. At the time of writing, as the war in Iraq enters its second week, the United Nations Environmental Program (UNEP) announced that it would be ready to start work reconstructing Iraq immediately after the conflict ends. Whether the UN agency will get the chance to handle reconstruction is a different matter. Following the Bush administration's decision to ignore the UN Security

Table 1. Summary of raptor counts, in the Batumi area, Georgia, between 1 September and 15 November 2002.

Species	Site 1	Site 2	Site 3	Total	Species	Site 1	Site 2	Site 3	Total
Pernis apivorus	2178	5582	2567	10,327	*Aquila chrysaetos*	43	7	0	50
Milvus migrans	1401	625	70	2096	*Hieraaetus pennatus*	258	140	0	398
Circaetus gallicus	705	427	24	1156	*Pandion haliaetus*	65	134	0	199
Circus aeruginosus	173	796	236	1205	*Falco naumanni*	312	133	112	557
Circus cyaneus	132	1068	186	1386	*Falco tinnunculus*	349	133	124	606
Circus macrourus	148	1040	126	1314	*Falco vespertinus*	4	18	4	26
Circus pygargus	154	1076	51	1281	*Falco columbarius*	344	256	372	972
Accipiter gentilis	151	496	148	795	*Falco subbuteo*	317	328	265	910
Accipiter nisus	1904	909	437	3250	*Falco cherrug*	13	18	0	31
Accipiter brevipes	141	367	231	739	*Falco peregrinus*	105	12	0	117
Buteo buteo	9368	764	400	10,532	*Circus* spp.	58	0	0	58
Buteo rufinus	3749	672	25	4446	*Accipiter* spp.	123	0	0	123
Buteo lagopus	1645	496	4	2145	*Buteo* spp.	14,466	0	0	14,466
Aquila pomarina	0	0	2	2	*Aquila* spp.	153	0	0	153
Aquila clanga	42	0	0	42	*Falco* spp.	257	0	0	257
Aquila nipalensis	13	4	0	17	Unidentified raptor	449	0	0	449
Aquila heliaca	68	0	0	68	**Totals**	**39,288**	**15,501**	**5384**	**60,173**

Council in attacking the country, it is possible that the United States will also sideline the UN in the reconstruction of a post-Saddam Hussein Iraq, awarding the major reconstruction contracts only to American companies. Presently, UNEP is assessing Iraq's most urgent needs once the conflict is over. More than 20 years of military operations in the Gulf have resulted in great damage to water resources, arable land and loss of biodiversity (see *Sandgrouse* 23: 87–88). Much of the damage was deliberate destruction of the environment. The Mesopotamian wetlands were affected by the present conflict, being used as a traffic zone by U. S. ground forces en route to Baghdad. Two years have elapsed since UNEP drew the world's attention to the destruction of the fertile Mesopotamian marshlands, lost mainly as a result of drainage and damming. The Tigris–Euphrates basin is among the most intensively dammed regions in the world. The wetlands, which once covered 15,000–20,000 km^2, were reduced in 2001 to around 10% of that area. Now, in 2003, a further 30%, 325 km^2, of the remaining trans-boundary wetland has disappeared. Fresh satellite imagery shows that the desiccation trend continues unabated in the area known as Hawr Al-Hawizeh in Iraq, and as Hawr Al-Azim in Iran, and that the remaining wetlands are disappearing even more rapidly than initially thought. A recent UNEP assessment mission in Iraq confirmed that the surviving wetlands are highly degraded, qualifying the area as an environmental disaster zone. New dams and large irrigation projects have tightened the grip on the rivers feeding the surviving marshlands. Internationally recognised as an exceptional human and natural heritage site inhabited by ancient communities descended from the Sumerians, and a haven for globally significant biodiversity, the marshlands have been turned into a desolate wasteland. The collapse of Marsh Arab society, the culture of a distinct indigenous people that has inhabited these marshlands for millennia, adds a human dimension to this modern environmental disaster. A 5000-year-old culture is coming to an abrupt end. The impact of marshland loss on the area's wildlife is equally devastating, with significant implications for global biodiversity. Despite the tragic human and environmental catastrophe, UNEP believes there is still a last window of opportunity to reverse wetland desiccation and achieve partial restoration, if a long-term recovery plan can be drafted for the marshes, whereby all Tigris–Euphrates riparian countries, Iran, Iraq, Syria and Turkey, share the rivers' waters in a coordinated and equitable manner. (Source: http://ens-news.com/ens/mar2003/2003-03-21-06.asp.)

Iraq conflict: the BirdLife International Action Plan The recent conflict in Iraq may have had environmental impacts on the 42 Important Bird Areas (IBAs) identified in the country by BirdLife International, and on the 24 globally threatened species that occur there. Furthermore, the draining of the Mesopotamian Marshes Endemic Bird Area over the last 30 years has doubtless threatened, and perhaps eliminated, several IBAs. The post-conflict reconstruction of Iraq may pose further threats to biodiversity and local wildlife communities. BirdLife is committed to helping develop a conservation capacity in Iraq long term and helping people live sustainably with wildlife. An assessment by BirdLife of the known status of IBAs and key species has resulted in the following plan of action.

As soon as it is safe and possible to do so, a survey team from BirdLife's Middle Eastern headquarters in Amman (Jordan) will leave for Iraq in order to undertake a rapid assessment of a selection of key sites. This work will be followed by further surveys that will quantitatively assess the 42 Important Bird Areas, focusing on the Mesopotamian Marshes, and the threatened and endemic birds for which Iraq is particularly important. These follow-up teams will work closely with UNEP, an informal network of Iraqi ornithologists and conservationists, and others interested in the conservation of biodiversity in Iraq. The information obtained will be important for the future development of Iraq's land-use policy during reconstruction. In the longer term, BirdLife is planning, together with Wetlands International, a complete winter survey of waterbirds to mirror the last surveys, in 1979, undertaken by Wetlands International. All of the data collected by BirdLife will be immediately and freely available to interested parties and especially the Iraqi administration. (Source: BirdLife International, May 2003.)

ISRAEL

Colour-marked bee-eaters In order to study the flight routes of migratory European Bee-eaters *Merops apiaster* in southern Israel and the

Middle East, several tens of individuals will be individually marked by oxidizing a combination of different wing and tail feathers. They may include a wing marking at the wingtip (outer half of the flight feathers), mid-wing or close to the body. Tail markings will be at either side of the tail. Thus, overall, eight different locations for the marks are possible (three in each wing and the two tail-sides). The oxidized feathers are sandy coloured, quite conspicuous in the wing but less so in the tail, and are best seen in a flying bird. If you observe a European Bee-eater with a strange colour pattern to its wings and tail, please contact Nir Sapir by e-mail (nirsa@bgumail.bgu.ac.il) or letter, Nir Sapir, Department of Life Sciences, Ben Gurion University of the Negev, P. O. Box 653 Be'er-Sheva 84105, Israel. (Source: MEBirdNet.)

KUWAIT

Kuwait Bird Monitoring and Protection Team annual report The second annual report of this Kuwait bird group, covering records for 2001, has been published. The report covers the group's activities, details on bird monitoring and protection, an up-to-date Kuwait bird list with summary and status information, and selected records from 2001. For further information contact George Gregory (ggoldie51@hotmail.com). (Source: *Phoenix* 19.)

Nature reserves in Kuwait The Bird Monitoring and Protection Team has been given management rights over c. 100 km^2 of the National Park, including the important sites of Wadi Ar-Rimam, Tulha and part of the Zor escarpment. The entire National Park currently lies in the military exclusion zone, although it is hoped that access will soon be restored, in order that a management programme can be implemented. The latest reserve is a 1-km strip, c. 200 metres deep, of the important mudflats at Sulaibikhat Bay. This has been fenced and gated, and the first prefabricated buildings have been installed near the entrance, which will serve as offices, a visitor centre, library and accommodation for the guards. The reserve is particularly important as the rest of the shoreline at Sulaibikhat Bay is scheduled for development. (Source: George Gregory.)

YEMEN

The Socotra Conservation Fund (SCF) is a newly created NGO, one of whose main aims is conserving the endemic and globally significant biodiversity of this Yemen archipelago. (Socotra is often regarded as the Galápagos of the Indian Ocean. It has over 300 endemic plants, at least six endemic birds and 21 endemic reptiles.) Among other major objectives of interest to birders and wildlife conservationists in the U. K. are the fund's aims to protect and manage the large biodiversity reserves identified in the Socotra Zoning Plan, and promote scientific research into wildlife conservation requirements in this unique island complex in the Arabian Sea. Improving environmental awareness among the people of Socotra and the promotion of ecotourism are also high on the fund's agenda. The management of the SCF is designed to be flexible and democratic. While it has been incorporated in the UK as a not-for-profit company, its operational bases are in the Yemeni capital, Sana'a, and the Socotran capital, Hadibu. Although the SCF is an NGO and thus independent of government it should have considerable political clout as one of its directors is a past Prime Minister of Yemen. Anyone requiring further information or wishing to join SCF should first visit its website: www.socotraisland.org. (Source: Richard Porter *in litt.* February 2003.)

Formation of Socotra Bird Records Committee A records committee has recently been established to maintain the Socotra Bird List and assess records of rare birds in this Yemen archipelago. Records should be sent to either Omar Al-Saghier (e-mail: omarbio@y.net.ye) or Richard Porter (e-mail: richardporter@dialstart.net). Details of new birds for Socotra, which are also new for Yemen, will be published in *Sandgrouse*. (Source: Richard Porter *in litt.* February 2003.)

Conservation on Socotra—new status and important agreement signed On 10 July 2003, the Socotra archipelago was named as the first UNESCO Man and Biosphere Reserve in Yemen. Socotra is internationally renowned for its remarkable plant and animal diversity, and for its cultural richness, with the 40,000 inhabitants speaking the unique Soqotri language. The archipelago has at least six endemic species of birds. The world network of Biosphere Reserves consists of globally important sites, where an interdisciplinary approach to sustainable development can be applied in actual situations. The network covers a representative—and growing—sample of the major ecological regions and human-use systems of the earth.

In addition, UNDP and key stakeholders, notably the Yemen Ministry of Water and Environment and the Ministry of Planning, have signed a major programme for 'Sustainable Development and Biodiversity Conservation for the People of the Socotra Islands'. The programme will be financed by UNDP and the governments of Italy and Yemen, who will collectively contribute over US$5 million. The aim is to continue to support the people of Socotra through conservation and sustainable use of the islands' unique biodiversity and natural resources for the coming five years. The programme is designed to assist the Yemen government with a number of initiatives including the implementation of a Zoning Plan, management of protected areas and support for the local economy through ecotourism and sustainable fisheries. There are also plans to develop a partnership with the Galápagos National Park. (For further details contact Faud Ali Abdulla: faud.ali@undp.org or visit www.socotraisland.org.)

REQUESTS *for* INFORMATION

Metapopulation dynamics of Greater Flamingo: implications for conservation

A new project started in December 2002 led by Erciyes University, Turkey, and Tour du Valat Biological Station, in France, and is part of a major flamingo project coordinated by the latter organisation. The main goals are to improve understanding of the Greater Flamingo *Phoenicopterus ruber roseus* metapopulation and provide conservation guidelines for the species and wetlands used by it in Turkey. There are four annual stages: (i) a workshop presenting information concerning the project, its methodology and the technique of reading rings in the field, (ii) ring-reading field trips in January to undertake population counts and resight flamingos, with the help of birdwatchers, (iii) another workshop concerning the methodology of a ringing study, in July, and (iv) flamingo ringing at one locality in late July. All will be undertaken for three years, during which time additional financial support will be raised to sustain the project. The Turkish project coordinators welcome information from birdwatchers concerning sightings of ringed flamingos, which can be made to: ozgebalkiz@hotmail.com (Özge Balkiz) or uozesmi@erciyes.edu.tr (Dr Uygar Özesmi).

Research into Barbary Falcon

Anne-Marie Drieux-Dumont heads a team that is currently researching the genetics of the genus *Falco*. The aim is to investigate the evolutionary history of the morphologically variable Peregrine Falcon *Falco peregrinus* and its close relative, Barbary Falcon *F. pelegrinoides*. The team would be very grateful for any biological material (feathers, blood or, for dead birds, muscle) of any subspecies from anywhere in their breeding ranges. Furthermore, material from hybrid falcons and other species in the genus, such as Lanner *F. biarmicus*, Merlin *F. columbarius* and Eleonora's Falcon *F. eleonorae*, is also required. Contact: Anne-Marie Drieux-Dumont, Director of Genetics Laboratory, International Foundation for Conservation and Development of Wildlife, P. O. Box 116 Inezgane, Morocco. Fax: +212 48 240766; e-mail: am2d.fcg@wanadoo.fr.

Nightjar photographs wanted

Photographs of nightjars and related families are urgently required for a new, high-quality, comprehensive photographic guide currently in preparation. This title is to be published by WILDGuides Ltd., with profits benefitting BirdLife International. If you are able to help, please contact Nigel Cleere, 2 Hawthorn House, Roundfields, Upper Bucklebury, Berks. RG7 6RQ, U. K. E-mail: cleere@churr.freeserve.co.uk.

Have you seen a ringed Cyprus Warbler?

In Cyprus, a Ph.D. study is underway to investigate the potential impact of Sardinian Warbler *Sylvia melanocephala* (which has recently started to breed in Cyprus) on Cyprus Warbler *S. melanothorax*. Vicky Jones is just completing her first field season and has ringed over 200 birds of the two species within study plots. The birds are ringed with BirdLife Cyprus metal rings and carry two colour rings on one leg and a third above the metal ring. Any sightings or recaptures may, among other things, help to clarify what proportion of Cyprus Warblers migrate in winter, and would be gratefully received by Vicky Jones, vrj21@cam.ac.uk, Department of Zoology, University of Cambridge, U. K.

Socotra: Yemen's special island

RICHARD PORTER

The undeveloped island of Socotra has been described as the 'Galápagos of the Indian Ocean'. A third of its plants, a third of its lepidoptera, four-fifths of its reptiles and a fifth of its breeding birds are endemic. The Socotra archipelago has attracted much attention in recent years. It was a focus of OSME's second expedition in 1993 and since then BirdLife International, funded through the Darwin Initiative, has undertaken an extensive survey of the island's birds.

Lying in the Gulf of Aden, some 350 km off Yemen's southern coast, the Socotra archipelago comprises Socotra and neighbouring smaller islands of Abd al-Kuri, Samha and Darsa. Socotra is unique in every sense. No visitor can fail to be impressed by its remoteness, dramatic landscape, strange plants and different culture. Of its biodiversity, among the 850 species of flowering plants and ferns, nearly 300 are endemic; of the 24 reptiles, 21 are endemic, and of the 190 species of lepidoptera over 60 are endemic. Turning to birds, the level of endemism is lower (as would be expected with such mobile organisms), but nonetheless six species are endemic (plus the resident buzzard *Buteo* and scops owl *Otus*, the taxonomy of which are the subject of ongoing research). This is the highest concentration of endemic birds in the Middle East outside the highlands of Yemen.

Geology and climate

Socotra can be divided into three main physiographic zones: the Haggier Mountains, whose granite peaks rise above 1500 metres and dominate the island's skyline; the extensive limestone plateaux with steep escarpments and deep wadis; and the semi-desert plains, of which the Noged on the south coast is the most significant.

The vegetation (and the islanders and their livestock) must cope with a harsh climate influenced by the dry south-west monsoon in summer and the wet north-east monsoon in winter. The former sweeps across the island from June to September, when winds of over 100 km/ph are regularly recorded. It can be impossible to stand straight and the huge seas mean Socotra is virtually isolated from the outside world. These unrelenting winds have had an important effect on the evolution and development of the vegetation, which must withstand such harsh, desiccating conditions. Thereafter, in late autumn and winter, the north-east monsoon brings much-needed rain in October–January, and is followed in March–May by a hot, dry period (with occasional rains) before the south-west monsoon commences in earnest again in June.

The vegetation

Although tree cover can be extensive, Socotra is relatively sparsely vegetated. The plants have been widely studied, notably by botanists from the Royal Botanic Garden, Edinburgh (RBGE), led by Tony Miller. Over 30% of the plants are endemic and four broad vegetation categories have been identified.

The high Haggier Mountains, above 750 metres, possess a mosaic of dense, low shrubland, grassland and rock vegetation. Lower, in the submontane zones of mainly limestone plateaux, there is much semi-deciduous thicket; here several plant species are prominent of which the most famous is the Dragon's Blood tree *Dracaena cinnabari*.

Below, on the lower mountain slopes up to c. 500 metres, there is open deciduous or succulent shrubland containing a broad range of species; here the Desert Rose or Bottle Tree *Adenium obesum* is characteristic. Finally, the coastal plains and low inland hills support areas of open shrubland, notably Croton shrubland, named after the dominant endemic *Croton socrotanus*, mixed with scattered emergents and an open ground cover of cushion shrubs.

The avifauna and breeding birds

In terms of species numbers, Socotra has a rather impoverished avifauna: the islands' list stands at only 179 (with a further ten claims awaiting supporting evidence). Of these 41 are breeders, 88 are regular migrants and 50 vagrants, though several of the latter will doubtless prove to be regular visitors as more observers visit Socotra. The current list is presented as an appendix.

Of the 41 breeding species, ten are seabirds, five raptors, two waders, 16 passerines and two are introduced: the Feral Pigeon *Columbia livia* and House Crow *Corvus splendens*. With the exception of the endemics (see below), breeders likely to most interest the visiting birder include Masked Booby *Sula dactylatra*, Jouanin's Petrel *Bulweria fallax*, Persian Shearwater *Puffinus persicus* and Socotra Cormorant *Phalacrocorax nigrogularis* (all regular in the seas around the island, probably for most of the year), Red-billed Tropicbird *Phaethon aethereus* (usually difficult to see), Egyptian Vulture *Neophron percnopterus* (the most conspicuous and tamest bird on the main island), Cream-coloured Courser *Cursorius cursor*, Lichtenstein's Sandgrouse *Pterocles lichtensteinii*, White-browed Coucal *Centropus superciliosus* (very elusive), Nubian Nightjar *Caprimulgus nubicus* (difficult to see due to it being very localised), Forbes-Watson's Swift *Apus berliozi* (in spring it is possible to see large flocks), Somali Starling *Onychognathus blythii* (widespread), Golden-winged Grosbeak *Rhynchostruthus socotranus* (widespread) and African Rock Bunting *Emberiza tahapisi* (also widespread).

Endemic birds

However, among the breeders, it is the endemics that will undoubtedly attract the birdwatcher to Socotra. The commonest and most widespread is Socotra Sparrow *Passer insularis* with a population of over 200,000 (this and other population assessments are highly provisional calculations from the BirdLife International surveys of 1999–2001, and are presented purely as an indication of abundance). Next, in terms of numbers and distribution, is Socotra Sunbird *Nectarina balfouri* with over 30,000 individuals. The fruit-eating Socotra Starling *Onychognathus frater* is widely dispersed and numbers c. 14,000 individuals, while the more secretive Socotra Warbler *Incana incana* has a population in the order of 20,000. That of the lowland and coastal plain-dwelling Socotra Cisticola *Cisticola haesitatus* has recently been calculated to be around 3000 pairs, while Socotra Bunting *Emberiza socotrana* (of the highlands) is the rarest of the endemics and probably numbers no more than 1000 individuals; it is also the most difficult to find. The taxonomically enigmatic buzzard and scops owl are widespread, with populations of fewer than 500 pairs.

Migrants and vagrants

Socotra is not particularly noted for its migrants, being too oceanic to lie on any main bird migration routes. The appendix shows those migrants that have been recorded, but many are uncommon or only found in small numbers.

As would be expected, passage raptors are particularly rare. Among waders, Pintail Snipe *Gallinago stenura* and Pacific Golden Plover *Pluvialis fulva* are regular in autumn and winter. Wintering Palearctic-breeding gulls are

dominated by Heuglin's Gull *Larus (fuscus) heuglini*, but both Baraba Gull *L. (cachinnans) barabensis* and Caspian Gull *L. (c.) cachinnans* occur, albeit in small numbers. In spring there is a large passage of terns and this is the best period to see White-cheeked Tern *Sterna repressa*. In autumn, and to a lesser extent spring, European Roller *Coracias garrulus* and Blue-cheeked Bee-eater *Merops persicus* occur on passage.

While most migrant pipits, chats and warblers are rare or uncommon, two species, Desert Wheatear *Oenanthe deserti* and Isabelline Wheatear *O. isabellina* are widespread in winter. The wintering population of the former may exceed 120,000 and it is the only migrant for which the island probably has an internationally important population.

BIRDS OF CONSERVATION IMPORTANCE

Globally threatened species. According to the latest assessment by BirdLife International, none of the bird species on Socotra is globally Endangered or Critically Threatened. Three are afforded Vulnerable status, Socotra Cormorant, Socotra Cisticola and Socotra Bunting, and two are considered Near Threatened, Jouanin's Petrel and Persian Shearwater.

Internationally important populations. By definition, all of the endemics have internationally important populations, as do several other breeders, notably Egyptian Vulture (probably over 2000 individuals on Socotra) and Forbes-Watson's Swift (Socotra is its stronghold). The archipelago is also suspected of harbouring internationally important populations of the following three species: Long-billed Pipit *Anthus similis* (over 100,000 individuals), Southern Grey Shrike *Lanius meridionalis* (over 15,000 individuals) and Golden-winged Grosbeak (over 6000 individuals).

Pride of place, however, probably goes to the seabirds. The following were found to have internationally important populations during 1999 surveys by Peter Symens, Omar Al-Saghier and Abdullah Alsuhaibany: Masked Booby, Brown Booby *Sula leucogaster*, Persian Shearwater, Red-billed Tropicbird, Sooty Gull *Larus hemprichii*, Bridled Tern *Sterna anaethetus*, Saunders's Tern *S. saundersi* and Common Noddy *Anous stolidus*.

BIRD STUDIES AND CONSERVATION ON SOCOTRA

Sandgrouse 17, which chronicled the OSME survey in 1993, also provided details of previous ornithological work on the island, notably by Prof. Balfour in 1880, Ogilvie-Grant & Forbes in 1898–99 and Forbes-Watson in 1964. Since 1993, the main avian studies have been conducted by a French team led by Michel Clouet (particularly advancing our knowledge of the buzzard); a Czech Republic team led by Karel Stastný (majoring on the ecology of the cisticola), a German team consisting of Kai Gedeon and Volker Neumann (undertaking valuable research on the two starlings) as well as visits by individuals, notably David Stanton and Michael Jennings for the Arabian Breeding Bird Atlas. There has also been a United Nations Development Programme/Global Environmental Facility seabird survey under the leadership of Peter Symens. On the extensive BirdLife International/Darwin Initiative surveys (in 1999–2001) my colleagues were Omar Al-Saghier, Simon Aspinall, Mike Evans, David Flumm and Rod Martins.

In addition to helping train Yemeni staff at the Socotra Biodiversity Centre, the aims of the BirdLife visits included mapping the distribution of the breeding birds, detailing their habitat requirements, estimating their populations and assessing their conservation requirements.

The results of these studies have or will be published in appropriate journals, including *Sandgrouse*, and this short article

is not the appropriate place to make more than a brief mention. But, reference must also be made to the work of Ahmed Sa'id Sulaiman and Nadim Taleb, two of the young Yemenis at the Socotra Biodiversity Centre. They have greatly assisted the BirdLife International surveys and made one of the most important ornithological discoveries in the Middle East in recent years, finding the world's first Jouanin's Petrel breeding colony, which was published in detail in *Sandgrouse* 24: 105–108. Together with Omar Al-Saghier, they also recently proved that Socotra Cormorant breeds; hitherto, despite the species' name, it had been considered only a non-breeding visitor.

The ornithological research and surveys undertaken to date have assisted in developing a Socotran conservation programme. Establishing the Important Bird Areas (IBAs) was a first step to determining those areas of conservation priority. Since then, the work by BirdLife International has supported the RBGE botanical surveys which have identified six Areas of Special Botanical Interest: four on Socotra and the islands of Samha and Abd al-Kuri (see Fig. 1); these Biodiversity Reserves also cover a representative selection of the habitats and sites most important for birds.

In 1996, the Yemen government ratified the International Convention on Biodiversity and declared the Socotra archipelago a special, natural area in urgent need of protection. This led to a conservation programme (Conservation and Sustainable Use of the Biodiversity of the Socotra Archipelago) funded by the GEF and managed jointly with Yemen's Environmental Protection Authority (EPA) and the UN. Within this programme the Biodiversity Reserves form the basis of a Zoning Plan, the aim of which is to protect the archipelago's most important sites.

Finally, Species Action Plans for the conservation of the petrel, cisticola and bunting are currently under consideration.

Visiting Socotra: when, where and how

The best time to visit Socotra is in November–April, which is outside the south-west (summer) monsoon when the temperature is more agreeable. Be prepared for heavy rain though, especially in autumn. While it is possible to see all of the endemics in a 2–3 day trip, if you do encounter bad weather (when wadis can break their banks and cut off roads) then travel into the hills for the bunting may prove impossible. At least a week is really required, ideally two as there is much more to enjoy than just the unique bird species. As a crude 'rule of thumb' anywhere on the island that appears good for birds usually is productive. However, if you just visit the following few places you will see all the specialities.

Hadibu inland to Wadi Denegen: Socotra Sparrow, Socotra Sunbird, Socotra and Somali Starlings, African Rock Bunting, Long-billed Pipit, the scops owl (at night), and possibly Socotra Bunting if you climb up Wadi Denegen.

Plate 1. Sooty *Larus hemprichii* and Heuglin's Gulls *L.* (*fuscus*) *heuglini*, Socotra, November 1999. (*Richard Porter*) **Plate 2.** Socotra Starling *Onychognathus frater*, Socotra, November 1999. (*Richard Porter*) **Plate 3.** Socotra Sparrow *Passer insularis*, Socotra, November 1999. (*Richard Porter*) **Plate 4.** Golden-winged Grosbeak *Rhynchostruthus socotranus*, Socotra, February 2000. (*Richard Porter*) **Plate 5.** Scops owl *Otus* sp., Socotra, 23 February 2000. (*Richard Porter*) **Plate 6.** Juvenile buzzard *Buteo* sp., Socotra, February 2001. (*Richard Porter*) **Plate 7.** Socotra Bunting *Emberiza socotrana*, Socotra, December 1999. (*Richard Porter*) **Plate 8.** Southern Grey Shrike *Lanius meridionalis*, Socotra. (*Omar Al-Saghier*) **Plate 9.** Lichtenstein's Sandgrouse *Pterocles lichtensteinii*, Socotra. (*Richard Porter*) **Plate 10.** Socotra Bunting *Emberiza socotrana*, Socotra. (*Simon Aspinall*) **Plate 11.** Nubian Nightjar *Caprimulgus nubicus*, Socotra. (*Simon Aspinall*) **Plate 12.** Black-crowned Finch Lark *Eremopterix nigriceps*, Socotra. (*Richard Porter*) **Plate 13.** Wadi Denegen, Socotra, November 1999. (*Richard Porter*) **Plate 14.** The Haggier Mountains as viewed from Hadibu, Socotra, March 2000. (*Richard Porter*) **Plate 15.** Western Socotra, February 2000. (*Richard Porter*) **Plate 16.** Dragon's Blood trees *Dracaena cinnabari*, Diksam, Socotra, November 1999. (*Richard Porter*) **Plate 17.** Diksam, Socotra, November 1999. (*Richard Porter*) **Plate 18.** The Haggier Mountains, Socotra, March 2000. (*Richard Porter*) **Plate 19.** Cucumber tree, Socotra, March 1996. (*Richard Porter*)


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Journey from Hadibu across the island to the Noged Plain: Forbes-Watson's Swift, Socotra Warbler, Golden-winged Grosbeak and Socotra Buzzard.
Noged Plain: Socotra Cisticola, Nubian Nightjar (difficult) and Cream-coloured Courser.
Wadi Ayhaft: most endemics and Golden-winged Grosbeak.
Lower slopes of Haggier Mountains (above Diksam): most endemics including Socotra Bunting; also White-browed Coucal (elusive).
Pelagics: boat hire can be expensive but a 3–4 hour pelagic out of Hadibu should produce Jouanin's Petrel and Persian Shearwater, though both can be seen, distantly, from most of the island's headlands.

There are Yemenia flights to Socotra from Sana'a, Aden and Riyan once or twice a week, currently on Mondays (Aden–Riyan–Socotra) and Fridays (Sana'a–Riyan–Socotra). You will need to book these through the Yemenia office in your country. It is cheaper to buy your Socotra leg as part of your international Yemenia ticket (if you travel to Yemen using this airline).

Permission for tourists to visit the island is no longer required, unless you are intending to conduct scientific research, in which case you should contact Yemen's EPA at epa@y.net.ye.

Yemen travel companies such as Ashtal Travel (fax +967 1 263371, tel: +967 1 266412) or Summerland Tours and Travel (fax +967 1 413416) can assist with arrangements, including accommodation and vehicle/boat hire; the latter can also be arranged locally.

If you visit the island do stop by at the EPA/UN Biodiversity Centre in Hadibu, the staff are very helpful and, on request, can arrange special presentations (films and photographs) for visiting groups, in support of the Socotra Conservation Fund. They will be able to direct you to the best places to see the endemic birds as well as some of the other specialities of this magical island. For more information on the island, ongoing conservation projects, the Socotra Conservation Fund, and useful links, visit: www.socotraisland.org.

SUBMITTING RECORDS

If you visit Socotra, please send your bird observations to the Socotra Biodiversity Centre (socotravis@aol.com) and/or to Richard Porter (address below or to richardporter@dialstart.net). All records will be lodged at the SBC.

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Richard Porter, c/o BirdLife International, Wellbrook Court, Girton Road, Cambridge CB3 ONA, U. K.

Appendix. Checklist of the birds of the Socotra archipelago (at February 2003)

Breeding species (B); Endemics (E); Vagrants (V); species not labelled are regular migrants/winter visitors. * New species for Yemen awaiting publication in *Sandgrouse*.

Little Grebe *Tachybaptus ruficollis*
Jouanin's Petrel *Bulweria fallax* (B)
Wedge-tailed Shearwater *Puffinus pacificus*
Flesh-footed Shearwater *Puffinus carneipes*
Persian Shearwater *Puffinus persicus* (B)
Wilson's Storm-petrel *Oceanites oceanicus*
Red-billed Tropicbird *Phaethon aethereus* (B)
Masked Booby *Sula dactylatra* (B)
Brown Booby *Sula leucogaster* (B)
Socotra Cormorant *Phalacrocorax nigrogularis* (B)
* Long-tailed Cormorant *Phalacrocorax africanus* (V)
Darter *Anhinga rufa* (V)
White Pelican *Pelecanus onocrotalus* (V)
* Yellow Bittern *Ixobrychus sinensis* (V)
Night Heron *Nycticorax nycticorax*
Striated Heron *Butorides striatus*
Squacco Heron *Ardeola ralloides*
* Madagascar Pond Heron *Ardeola idae* (V)
Indian Pond Heron *Ardeola grayii* (V)
Cattle Egret *Bubulcus ibis*
Western Reef Heron *Egretta gularis*
Little Egret *Egretta garzetta*
Intermediate Egret *Egretta intermedia* (V)
Great White Egret *Egretta alba*
Black-headed Heron *Ardea melanocephala* (V)
Grey Heron *Ardea cinerea*
Purple Heron *Ardea purpurea*
White Stork *Ciconia ciconia* (V)
Glossy Ibis *Plegadis falcinellus*
African Spoonbill *Platalea alba* (V)
Greater Flamingo *Phoenicopterus ruber*
White-fronted Goose *Anser albifrons* (V)
Cotton Teal *Nettapus coromandelianus* (V)
Wigeon *Anas penelope*
Gadwall *Anas strepera*
Teal *Anas crecca*
Mallard *Anas platyrhynchos* (V)
Pintail *Anas acuta*
Garganey *Anas querquedula*
Shoveler *Anas clypeata*
Pochard *Aythya ferina* (V)
Ferruginous Duck *Aythya nyroca*
Tufted Duck *Aythya fuligula* (V)
Black Kite *Milvus migrans* (V)
Egyptian Vulture *Neophron percnopterus* (B)
Marsh Harrier *Circus aeruginosus* (V)
Pallid Harrier *Circus macrourus* (V)
Steppe Buzzard *Buteo buteo vulpinus* (V)
buzzard sp. *Buteo* (*buteo*) sp. (B) (E)
Osprey *Pandion haliaetus* (B)
Kestrel *Falco tinnunculus* (B)
* Amur Falcon *Falco amurensis* (V)
Sooty Falcon *Falco concolor*
Peregrine Falcon *Falco peregrinus* (B)
Quail *Coturnix coturnix*
Water Rail *Rallus aquaticus* (V)
Spotted Crake *Porzana porzana* (V)
Moorhen *Gallinula chloropus*
Coot *Fulica atra* (V)
Common Crane *Grus grus* (V)
Houbara Bustard *Chlamydotis undulata* (V)
Pheasant-tailed Jacana *Hydrophasianus chirurgus* (V)
Oystercatcher *Haematopus ostralegus* (V)
Black-winged Stilt *Himantopus himantopus*
Crab Plover *Dromas ardeola* (V)
Cream-coloured Courser *Cursorius cursor* (B)
Collared Pratincole *Glareola pratincola* (V)
Little Ringed Plover *Charadrius dubius*
Ringed Plover *Charadrius hiaticula*
Kentish Plover *Charadrius alexandrinus* (B)
Lesser Sand Plover *Charadrius mongolus*
Greater Sand Plover *Charadrius leschenaultii*
Pacific Golden Plover *Pluvialis fulva*
Grey Plover *Pluvialis squatarola*
Knot *Calidris canutus* (V)
Sanderling *Calidris alba*
Little Stint *Calidris minuta*
Temminck's Stint *Calidris temminckii*
Curlew Sandpiper *Calidris ferruginea*
Dunlin *Calidris alpina*
Broad-billed Sandpiper *Limicola falcinellus* (V)
Ruff *Philomachus pugnax* (V)
Common Snipe *Gallinago gallinago*
Pintail Snipe *Gallinago stenura*
Black-tailed Godwit *Limosa limosa* (V)
Bar-tailed Godwit *Limosa lapponica*
Whimbrel *Numenius phaeopus*
Curlew *Numenius arquata*
Spotted Redshank *Tringa erythropus*
Redshank *Tringa totanus*
Marsh Sandpiper *Tringa stagnatilis* (V)
Greenshank *Tringa nebularia*
Green Sandpiper *Tringa ochropus*
Wood Sandpiper *Tringa glareola*
Terek Sandpiper *Xenus cinereus* (V)
Common Sandpiper *Tringa hypoleucos*
Turnstone *Arenaria interpres*
Red-necked Phalarope *Phalaropus lobatus*
Arctic Skua *Stercorarius parasiticus* (V)
Sooty Gull *Larus hemprichii* (B)
White-eyed Gull *Larus leucophthalmus*
Black-headed Gull *Larus ridibundus*
Lesser Black-backed Gull *Larus fuscus*
Heuglin's Gull *Larus* (*fuscus*) *heuglini*


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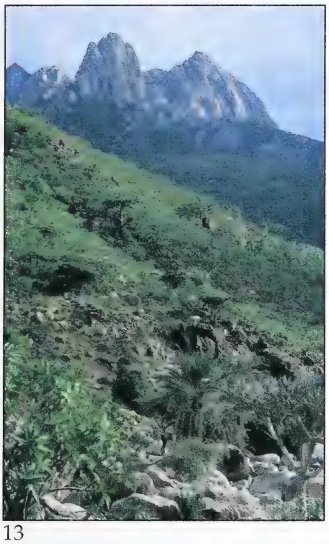
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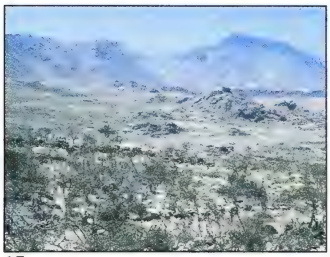
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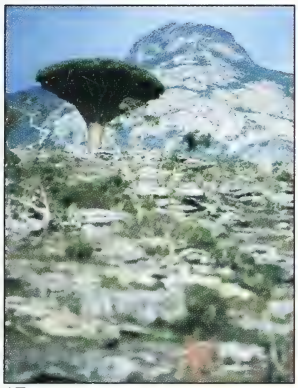
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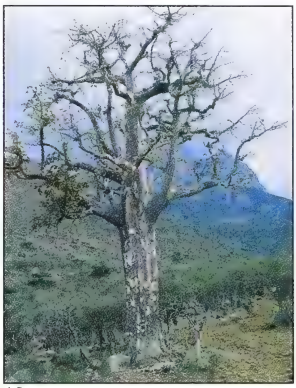
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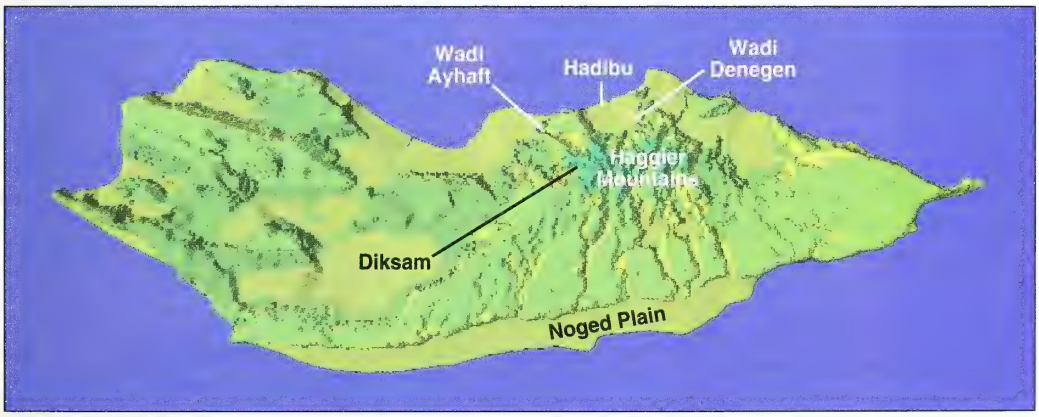


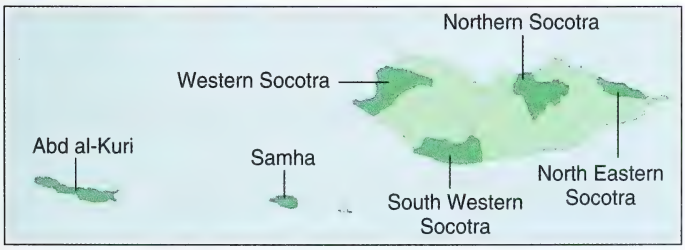


Figure 1. (above) Map of the main island of Socotra showing topography and places mentioned in the text. **Figure 2. (left)** Map of the Socotran archipelago showing Socotra's Biodiversity Reserves, which aim to protect the most important wildlife sites.

Baraba Gull *Larus (cachinnans) barabensis*
Caspian Gull *Larus (cachinnans) cachinnans*
Gull-billed Tern *Gelochelidon nilotica* (V)
Caspian Tern *Sterna caspia*
Swift Tern *Sterna bergii*
Lesser Crested Tern *Sterna bengalensis*
Sandwich Tern *Sterna sandvicensis*
Roseate Tern *Sterna dougallii* (V)
Common Tern *Sterna hirundo*
White-cheeked Tern *Sterna repressa*
Bridled Tern *Sterna anaethetus* (B)
Sooty Tern *Sterna fuscata*
Saunders's Tern *Sterna saundersi* (B)
Whiskered Tern *Chlidonias hybridus* (V)
White-winged Black Tern *Chlidonias leucopterus* (V)
Common Noddy *Anous stolidus* (B)
Lichtenstein's Sandgrouse *Pterocles lichtensteinii* (B)
Feral Pigeon *Columba livia* (B) Introduced
Laughing Dove *Streptopelia senegalensis* (B)
Namaqua Dove *Oena capensis* (V)
Bruce's Green Pigeon *Treron waalia* (B)
Jacobin Cuckoo *Clamator jacobinus* (V)
Common Cuckoo *Cuculus canorus*
White-browed Coucal *Centropus superciliosus* (B)
scops owl *Otus* sp. (B) (E)
Nubian Nightjar *Caprimulgus nubicus* (B)
European Nightjar *Caprimulgus europaeus*
Forbes-Watson's Swift *Apus berliozi* (B)
Little Swift *Apus affinis*
Blue-cheeked Bee-eater *Merops persicus*
European Roller *Coracias garrulus*
Abyssinian Roller *Coracias abyssinica* (V)
Indian Roller *Coracias benghalensis* (V)
Hoopoe *Upupa epops*
Black-crowned Finch Lark *Eremopterix nigriceps* (B)
Short-toed Lark *Calandrella brachydactyla*
Sand Martin *Riparia riparia*
African Rock Martin *Hirundo fuligula* (B)
Barn Swallow *Hirundo rustica*
House Martin *Delichon urbica*
Tawny Pipit *Anthus campestris*
Long-billed Pipit *Anthus similis* (B)
Tree Pipit *Anthus trivialis*
Red-throated Pipit *Anthus cervinus*
Yellow Wagtail *Motacilla flava*
Citrine Wagtail *Motacilla citreola* (V)
Grey Wagtail *Motacilla cinerea*
White Wagtail *Motacilla alba*
Bluethroat *Luscinia svecica*
Black Redstart *Phoenicurus ochruros*
Isabelline Wheatear *Oenanthe isabellina*
Pied Wheatear *Oenanthe pleschanka*
Desert Wheatear *Oenanthe deserti*
Blue Rock Thrush *Monticola solitarius*
Socotra Cisticola *Cisticola haesitatus* (B) (E)
Socotra Warbler *Incana incana* (B) (E)
Ménétries's Warbler *Sylvia mystacea*
Lesser Whitethroat *Sylvia curruca*
Common Whitethroat *Sylvia communis* (V)
Wood Warbler *Phylloscopus sibilatrix* (V)
Chiffchaff *Phylloscopus collybita* (V)
Spotted Flycatcher *Muscicapa striata* (V)
Socotra Sunbird *Nectarinia balfouri* (B) (E)
White-breasted White-eye *Zosterops abyssinicus* (B)
Golden Oriole *Oriolus oriolus* (V)
Isabelline Shrike *Lanius isabellinus*
Southern Grey Shrike *Lanius meridionalis* (B)
House Crow *Corvus splendens* (B) Introduced
Brown-necked Raven *Corvus ruficollis* (B)
Socotra Starling *Onychognathus frater* (B) (E)
Somali Starling *Onychognathus blythii* (B)
Starling *Sturnus vulgaris* (V)
Socotra Sparrow *Passer insularis* (B) (E)
Golden-winged Grosbeak *Rhynchostruthus socotranus* (B)
African Rock Bunting *Emberiza tahapisi* (B)
Socotra Bunting *Emberiza socotrana* (B) (E)

Records pending (awaiting evaluation)

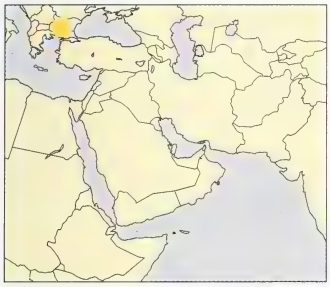
Spoonbill *Platalea leucorodia*
Eleonora's Falcon *Falco eleonorae*
Barbary Falcon *Falco pelegrinoides*
Red-knobbed Coot *Fulica cristata*
Caspian Plover *Charadrius asiaticus*
Great Knot *Calidris tenuirostris*
Hume's Tawny Owl *Strix butleri*
Bimaculated Lark *Melanocorypha bimaculata*
Willow Warbler *Phylloscopus trochilus*

Unsubstantiated records

Streaked Shearwater *Calonectris leucomelas*
Red-footed Booby *Sula sula*
Cormorant *Phalacrocorax carbo*
Little Bittern *Ixobrychus minutus*
Lanner Falcon *Falco biarmicus*
Harlequin Quail *Coturnix delegorguei*
Lesser Noddy *Anous tenuirostris*
Common Swift *Apus apus*
Pallid Swift *Apus pallidus*
Crag Martin *Hirundo rupestris*
Little Rock Thrush *Monticola rufocinerea*

Distribution and abundance of Tengmalm's Owl *Aegolius funereus* on Mount Pirin, south-west Bulgaria

PETER SHURULINKOV, GEORGE STOYANOV, PETKO TZVETKOV, KOSTADIN VULCHEV, RUMEN KOLCHAGOV AND MIHAELA ILIEVA



A survey of the status, distribution and numbers of Tengmalm's Owl *Aegolius funereus* on Mount Pirin, south-west Bulgaria, was undertaken in autumn 2001 and spring 2002, financed by the Bulgarian–Swiss Biodiversity Conservation Programme. We encountered at least one Tengmalm's Owl at 23 of the 38 study points (60.5%) in northern Pirin. The total number of birds heard was at least 34; in the study area, we estimate there are at least 30 breeding pairs and the species has been seen in all surveyed areas on Pirin. The extrapolated total for Pirin National Park, in northern Pirin, is 180–200 pairs. In Pirin, Tengmalm's Owl inhabits mostly old forests of Norway spruce *Picea abies*, Bosnian *Pinus leucodermis* and Macedonian pines *P. peuce*, but also occupies mixed spruce–pine forests on plateaux at 1550–2000 metres. At seven of the 23 points where Tengmalm's Owl occurred, Tawny Owl *Strix aluco* was also found.

TENGMALM'S OWL is widespread in northern Eurasia and North America, while in southern Europe and Central Asia it is a rare glacial relict whose disjunct and irregular distribution reaches the Pyrenees, Greece (including the southern Rhodopes), Turkey, Armenia and the Tien Shan (Bauer *et al.* 1969, Mertens 1981, Simeonov 1985, Bauer & Bohr 1987, Simeonov 1988, Martins 1989).

The species, thought rare in Bulgaria, is included in the Red Data Book of Bulgaria (Simeonov 1985). Its localised distribution is concentrated mainly on the Rila Mountains (just south of Sofia), the central Stara Planina (the 'Balkan Range' south of the Romanian border) and the Rhodopes (on the Greek border) (Simeonov 1988, Simeonov *et al.* 1990). At Mount Vitosha, Tengmalm's Owl was discovered as recently as 1990 (Nankinov & Todorov 1992) but further work indicates it is not rare there (Nikolov *et al.* 2001, Shurulinkov & Hristov 2001). Other recent data demonstrate that the species occurs even in the western Stara Planina (Kouzmanov *et al.* 1995, S. Nikolov *in litt.* 2002).

The precise status of Tengmalm's Owl on Mount Pirin has not previously been clarified. S. Kochler found three calling males in May 1971, but did not specify their location (Baumgart 1987, Nankinov 1996). In 1996, D. Uzunov photographed a Tengmalm's Owl on the mountain. A specimen was taken near Baiuvi Dupki Reserve, in northern Pirin, at 2340 metres (Beron 2002). Although Mount Pirin National Park contains no designated Important Bird Areas (Kostadinova 1997, 2000), it nevertheless is of national importance for ornithological and other ecological reasons that have yet to be quantified. Our work goes some way to redressing the balance. In autumn 2001 and spring 2002 we undertook a specific study of the status, distribution and numbers of Tengmalm's Owl as part of preliminary work for the Management Plan of Pirin National Park financed by the Bulgarian–Swiss Biodiversity Conservation Programme (BSBCP).

MATERIAL AND METHODS

Research was conducted at 38 points in Pirin National Park (27, 500 ha) in October 2001 and spring 2002. We worked in northern and north-eastern Pirin on 12–15 October, visiting 30 points in the coniferous forest zone around Bunderitza Chalet (14 points), Yavorov Chalet (seven), Mocharata (five) and Kulinoto (four). We walked or drove

Plates 1–3. Tengmalm's Owl *Aegolius funereus*, Baiuvi Dupki, Mount Pirin, Bulgaria, at 2350 metres, 24 August 2002. (*B. Petrov*)

between points. At all points we sought to provoke a response from Tengmalm's Owl by imitating the species' advertising call. Nikolov *et al.* (2001) have shown that this method is rather effective during autumn, when it frequently evokes the 'smacking call' that both sexes make in different situations (Cramp & Simmons 1985). Unseasonal autumn song is uncommon in Bulgaria (Pacenovsky 1996, Nikolov *et al.* 2001).

In spring 2002 we visited 12 points (four identical to those surveyed in autumn) at Bunderitza Glade (Bunderishka Polyana), Yavorov Chalet, Bezbog Chalet, Pirin Chalet (all on 21–28 April) and Kamenitza Chalet (28–29 May), thus covering most of the south and south-west slopes of Pirin National Park. Birds were giving full advertising songs, obviating the need for imitations. The times given in Table 1 are in astronomic (winter) time (GMT + 2).

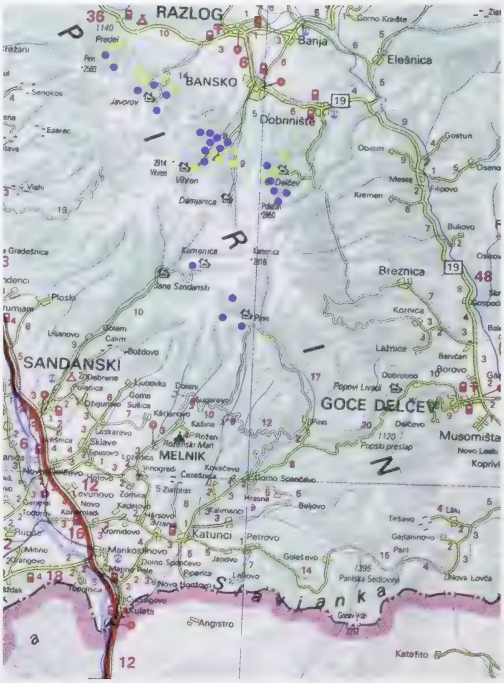


Figure 1. Map showing the survey localities for Tengmalm's Owl *Aegolius funereus* on Mount Pirin, Bulgaria. Blue spots = localities with Tengmalm's Owl. Yellow spots = localities at which Tengmalm's Owl was not recorded.

Table 1. Tengmalm's Owl *Aegolius funereus* on Mount Pirin: search points, positive records locations, numbers, and recorded habitat and weather conditions.

Point number and description	Region	Date	Time	Number of Tengmalm's Owls heard	Altitude (metres)	Habitat	Weather
1. Upper Ilezov Dol River	Kulinoto	12 Oct 2001	22.20– 22.27	Two birds	1670	Spruce forest with some beech and Macedonian pine	Calm and clear, 8°C
2. Ditto	Kulinoto	12 Oct 2001	22.15–22.35	One bird	1550	Beech–fir forest	Calm and clear, 8°C
3. Ditto	Kulinoto	12 Oct 2001	22.51–22.58	-	1600	Beech forest	Calm and clear, 8°C
4. Kulinoto ski-run	Kulinoto	13 Oct 2001	23.10–23.20	-	1300	Beech forest	Calm and clear, 8°C
5. Varnitzite area	Yavorov Chalet	13 Oct 2001	18.10–18.20	-	1300	Beech–fir forest	Calm and clear, 8°C–10°C
6. Prajir area	Yavorov Chalet	13 Oct 2001	18.30–18.50	One bird	1600	Mixed forest of spruce, beech, fir and Scots pine	Calm and clear, 8°C–10°C
7. Polyanite area, south of Yavorov Chalet	Yavorov Chalet	13 Oct 2001	19.25–19.45	Two birds	1800	Bosnian pine forest	Calm and clear, 8°C–10°C
8. Below Yavorov Chalet	Yavorov Chalet	13 Oct 2001	20.30–20.37	Two birds	1700	Bosnian pine forest with mixture of spruce	Calm and clear, 8°C–10°C
(Second visit)		25 Apr 2002	04.22– 05.00	One singing (advertising call)			Calm and clear 2°C, snow cover
9. Road from Yavorov Chalet Byala Reka.	Yavorov Chalet	13 Oct 2001	22.20–22.45	-	1650	Beech forest with spruce and Scots pine	Calm and clear, to 8°C–10°C
10. On the road from Yavorov Chalet to Byala Reka	Yavorov Chalet	14 Oct 2001	00.00–00.08	-	1750	Mixed forest of spruce, fir, Bosnian pine and beech	Calm and clear, 8°C–10°C
11. Road from Yavorov Chalet Byala Reka	Yavorov Chalet	14 Oct 2001	00.50–01.00	-	1400	Beech forest	Calm and clear, to 8°C–10°C
12. Above Baykusheva Mura	Banderitza Chalet	14 Oct 2001	18.00–18.40	-	1950	Bosnian pine and dwarf mountain pine	Calm and clear, c. 3°C
13. Baykusheva Mura	Banderitza Chalet	14 Oct 2001	18.55–19.05	One bird	1870	Bosnian pine and glades	Calm and clear, c. 3°C

14. Akademika Chalet	Banderitza Chalet	14 Oct 2001	19.45–19.50	Two birds	1770	Spruce forest with some Scots pine	Calm and clear, c. 3°C
15. Meche Cheshalo area	Banderitza Chalet	14 Oct 2001	20.03–20.10	-	1730	Spruce forest with some Scots pine	Calm and clear, c. 3°C
(Second visit)		21 Apr 2002	21.00–21.30	One singing (advertising call)			Variable cloud cover, calm, 7°C
16. Dulgata polyana (The long glade)	Banderitza Chalet	14 Oct 2001	20.30–20.45	-	1650	Spruce forest, glades	Calm and clear, c. 3°C
(Second visit)		21 Apr 2002	20.30–21.00	Two singing (advertising call)			Variable cloud cover, calm, 7°C
17. End of the old Todorka ski-run	Banderitza Chalet	14 Oct 2001	21.06–21.20	One bird	1700	Spruce forest, glades	Calm and clear, c. 3°C
18. End of Todorka ski-run	Banderitza Chalet	14 Oct 2001	21.27–21.45	-	1750	Spruce and Macedonian pine forest, glades	Calm and clear, c. 3°C
19. Between Shilegarnika & Haidushka Polyana area	Pirin Chalet	14 Oct 2001	22.02–22.24	One bird	1600	Spruce–Scots pine forest, windthrow	Calm and clear, c. 3°C
20. Above Bistritza hotel	Pirin Chalet	15 Oct 2001	23.28–23.40	-	1600	Macedonian and spruce forest	Calm and clear, c. 3°C
21. Above Bistritza hotel	Pirin Chalet	15 Oct 2001	23.53–00.10	-	1600	Spruce forest	Calm and clear, c. 3°C
22. Below Bunderitza Chalet	Pirin Chalet	14 Oct 2001	18.35–19.00	One bird	1800	Bosnian pine forest	Calm and clear, c. 3°C
23. Below Mechy dol	Pirin Chalet	14 Oct 2001	19.23–19.47	Two birds	1730	Spruce–Bosnian pine forest	Calm and clear, c. 3°C
24. Bunderishka Glade	Pirin Chalet	14 Oct 2001	20.01–20.15	One bird	1670	Spruce and mixed spruce–Scots pine forest; glades	Calm and clear, c. 3°C
(Second visit)	Pirin Chalet	21 Apr 2002	20.00–20.40	Three singing (nuptial song)			Changeable cloud, c. 7°C
25. Tzurna Mogila	Pirin Chalet	14 Oct 2001	20.15–20.30	-	1650	Spruce forest with some Scots pines	Calm and clear, c. 3°C

26. Above Mocharata Chalet	Pirin Chalet	15 Oct 2001	18.55–19.20	Two birds	1600	Spruce forest near Scots pine and beech forest, glades	Calm and clear, c. 6°C
27. Upper Pleshka River	Pirin Chalet	15 Oct 2001	19.47–20.07	-	1650	Spruce forest	Calm and clear, c. 6°C
28. Lopusha area	Pirin Chalet	15 Oct 2001	20.35–20.50	One bird	1600	Spruce–beech forest	Calm and clear, c. 6°C
29. Spushtaloto area	Pirin Chalet	15 Oct 2001	21.15–21.35	-	1700	Spruce forest	Calm and clear, c. 6°C
30. Pleshka River south of Koychovoto area	Pirin Chalet	15 Oct 2001	23.36–23.56	-	1600	Beech–fir forest with some Scots pine	Calm and clear, c. 6°C
31. Transitional station	Pirin Chalet	22 Apr 2002	20.00–21.00	One singing (nuptial song)	1870	Macedonian pine forest and glades	Calm and clear, 0°C, snow cover
32. Below Bezbog Chalet	Pirin Chalet	22 Apr 2002	21.00–21.20	One singing (nuptial song)	2000	Macedonian pine dwarf mountain pine	Calm and clear, 0°C, snow cover
33. Okadenski range above Yavorov Chalet	Pirin Chalet	24 Apr 2002	20.15–20.45	Two singing (nuptial song)	1900	Bosnian pine and spruce forest	Clear, almost no wind, snow cover
34. Govedarnika region	Pirin Chalet	26 Apr 2002	20.07–20.20	One singing (nuptial song)	1950	Macedonian pine forest, glades	Calm and clear, snow cover
(Second visit)	Pirin Chalet	27 Apr 2002	04.10–04.40	One singing (nuptial song)			Calm and clear, snow cover
35. Golnitza River Valley	Pirin Chalet	26 Apr 2002	20.50–21.10	One singing (nuptial song)	1750	Spruce forest near beech	Calm and clear, snow cover
36. Between Pirin Chalet and Malina Chalet	Pirin Chalet	27 Apr 2002	19.40–20.30	-	1450	Beech–fir forest	Variable cloud cover, slight wind
37. Near Pirin Chalet	Pirin Chalet	27 Apr 2002	21.50–22.00	One singing (nuptial song)	1620	Fir forest	Variable cloud cover, slight wind
38. Kamenitza Chalet	Kamenitza Chalet	28 May 2002	21.45–21.55	One singing (nuptial song)	1700	Spruce forest	Cloudy (earlier it had been raining)

RESULTS AND DISCUSSION

In 23 (60.5%) of the 38 study points we found at least one Tengmalm's Owl. We heard at least 34 birds overall, 16 giving the advertising call in spring, the remainder uttering their autumn 'smacking call'. We did not hear the advertising call in autumn, unlike in some other locations, e.g. Vitosha, central Stara Planina and the Rhodopes (Nikolov *et al.* 2001). Table 1 presents the results from each of our survey points.

It is reasonable to assume that Tengmalm's Owl is widely distributed across Mount Pirin and that its numbers are relatively high. Those areas we surveyed hold at least 30 pairs, the highest densities being at Bunderitza Glade on 21 April (in the evening) and above Pirin Chalet. The species occurs mainly in coniferous-type forests and in adjacent beech *Fagus sylvatica* forests, but is also found in sparsely forested areas close to the treeline. It occurs at altitudes of 1550–2000 metres, being most numerous in old spruce *Picea abies*, Bosnian *Pinus leucodermis* and Macedonian pines *P. peuce*; mixed spruce–pine forests with glades at 1600–1900 metres are also favoured. Apparently, in these zones the species is omnipresent on Mount Pirin. Undoubtedly Tengmalm's Owl visits much higher altitudes to hunt; Beron (2002) found it at 2340 metres, at Baiuvi Dupki Reserve, in the dwarf mountain pine zone.

At four study points lower on the mountain (below 1550 metres), we found no Tengmalm's Owls, possibly because Tawny Owl *Strix aluco* is common in these areas. It has been often suggested that Tawny Owl out-competes or predates Tengmalm's Owl in their territories (Simeonov 1988, Nankinov 1996). However, we found Tawny Owl at seven of the 23 points with Tengmalm's Owls, but these points mostly were near the boundary between coniferous and beech forests. Tawny Owl tended to become more numerous with decreasing altitude (in pure beech or beech–fir forests) where Tengmalm's Owl probably was absent. Elsewhere (on Mount Ponor in the western Stara Planina) where there are few or no Tawny Owls, Tengmalm's Owl occurs in pure beech forests (S. Nikolov *in litt.* 2002).

In the last third of April 2002, we found that Tengmalm's Owl evening activity commenced around 20.00 hours and continued until at least 22.00 hours (or probably later) at high intensity. Morning activity during the same nights occurred from 04.10 to 05.00 hours (probably starting earlier). In autumn (mid-October) imitations of advertising calls produced good results from 18.30 to 22.35 hours, after which imitation was unproductive (seven points overall), although the biotope was generally ideal. Almost certainly, the owls commenced hunting after this time and did not engage in territory defence. The corollary is that our estimated total of 30 pairs in the study area is probably a very conservative figure.

We encountered a male calling late on 28 May, following a long period of heavy rain. All our data indicated calling ceased in April and that such weather conditions suppressed vocal activity. However, Kochler also heard calls on Mount Pirin in May (Baumgart 1987). Because calling in Bulgaria is normally concentrated in March–April (Simeonov 1985, Nikolov *et al.* 2001), Simeonov (1980) posits the existence of second clutch (in the Rila Mountains). This may also be true on Mount Pirin.

In April 2002 we discovered that imitating Tengmalm's Owl's calls close to a calling male produced an intensified response, the various components occurring more often, sometimes combining into a continuous series without breaks. Nikolov *et al.* (2001) reported similar results at Vitosha Mountain.

CONCLUSIONS

Our study area comprises c. 15% of the most suitable habitat for Tengmalm's Owl on Mount Pirin, leading us to believe that the total breeding population in Pirin National Park and adjacent areas of northern Pirin is at least 180–200 pairs. We speculate that the species also occurs in middle and southern Pirin, although probable prime habitat there is much scarcer. The data we collected strongly support the hypothesis of Nikolov *et al.* (2002) that there are no fewer than 700–1100 breeding pairs of Tengmalm's Owl in Bulgaria.

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A long-term bird survey of Kulu Gölü, Turkey (2001–2002)

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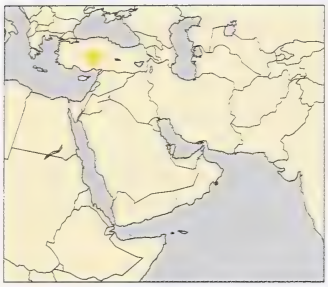

This paper describes a survey of Kulu Gölü, south of Ankara, Turkey, for a period of over a year. Due to its location, the area is often visited by birdwatchers, but there has been no long-term survey of its avifauna. This paper describes the results of 40 visits to the lake and reports the observation of several rare birds in Turkey, including Bean Goose *Anser fabalis*. The current breeding status of White-headed Duck *Oxyura leucocephala* is enigmatic; although there are many summering birds there has been little recent proof of nesting activity. While numbers of wintering geese appear to have decreased considerably, those of breeding gulls and terns have remained stable. Current numbers of migrants and wintering birds are also reported.

KULU GÖLÜ IS ONE of the more accessible Important Bird Areas in Turkey, given that it is just 100 km south of the capital, Ankara. However, despite its ornithological importance, it is less regularly visited than Mogan Gölü to the north and it has not received the systematic attention devoted to other areas in Turkey, notably the Kızılırmak, Göksu and Büyük Menderes deltas or the lakes of the Çukurova system. Thus, a long-term survey of the Kulu area is overdue.

Part of the lake's interest to ornithologists is a product of the fact that it consists of two sections, separated by a broad, alluvial spit. The northern section (Düden Gölü) is saline and drained by the diminutive Kulu River, while the southern part (Küçük Göl) is fresh water, fed by an underground spring, its water derived from a subterranean aquifer (Çangiri 1999). The result is a considerable diversity of habitats, ranging from mudflats to *Phragmites* reedbeds, with an accompanying avian diversity. Over 200 bird species have been recorded, including many waders, ducks, geese and passerines, as well as saltwater specialities such as Greater Flamingo *Phoenicopterus ruber* and Avocet *Recurvirostra avosetta*. This paper describes the changes that have occurred at the lake in recent decades, as well as the results of a 13-month bird survey.

PREVIOUS ORNITHOLOGICAL RESEARCH

One of the earliest accounts of the lake's avifauna is also among the most comprehensive: Kasparek (1987) provided a detailed report for most species known to occur, including many of the wintering and migrant birds. Several summaries of the breeding birds have appeared subsequently (e.g. Ertan *et al.* 1989, Magnin & Yarar 1997, Eken & Magnin 1999). Karauz (1999) surveyed the bird populations of a number of the lakes of the Tuz Gölü basin, including Kulu, while Karauz Kiraç & Kiraç (1996) provided details of some of the breeding waterbirds at Kulu, concentrating on the colonies of gulls and terns. In contrast to the earlier literature, the present paper places greater emphasis on the wintering and migrant species.

Kulu Gölü has long been known as a productive birding area but, since the 1980s, its history appears to have been one of gradual decline. In retrospect, Kasparek (1987) makes interesting reading as he refers to features of the landscape that are now missing—perhaps due to lower water levels at the lake. Among bird species that he listed as breeding were reed-dwellers such as Black-necked Grebe *Podiceps nigricollis*, Marbled Teal *Marmaronetta angustirostris* and, possibly, Black Tern *Chlidonias niger*. It is currently doubtful whether the latter breeds in Turkey, given an ongoing debate

concerning its precise status at Uluabat Gölü. However, at least in the past, the report of 50 pairs at Kulu suggests a greater degree of certainty concerning the subject (Kasparek 1987). Apparently, all of these species inhabited a mass of floating vegetation in the centre of the lake, which has now disappeared.

Similarly, there is presently some doubt concerning the breeding status of White-headed Duck *Oxyura leucocephala* at Kulu; once this was a notable speciality. During the 1990s, reviews of the species' status on the Central Plateau initially suggested a population of 150 pairs (Kirwan 1994), although due to ongoing habitat modification this was subsequently considered over-optimistic (Kirwan 1995). Thus, while Kasparek (1987) and Green & Moorhouse (1995) confidently reported c. 40 breeding pairs at Kulu, only a few years later Karauz Kiraç & Kiraç (1996) cautiously noted only summering individuals. Robinson *et al.* (1998) noted that many males at Kulu Gölü were unlikely to have bred there due to low water levels, and this situation persists to the present. Nevertheless, there are frequently significant numbers of oversummering individuals present, occasionally more than 150 birds. Despite recent reports of courtship behaviour at the lake (S. Karauz pers. comm. 2001), this does not constitute direct proof of breeding. The most recent proof of breeding record involved an observation of fledglings in summer 2001 (B. Kurt pers. comm. 2001). Although there is uncertainty concerning the species' breeding status at Kulu, it appears possible that the birds move between lakes in the region and could breed there again in the future.

Even on the islands in the centre of Düden Gölü there have been noticeable changes: e.g. numbers of Avocet *Recurvirostra avosetta* and Black-winged Stilt *Himantopus himantopus* appear to have decreased since the 1980s. Because several islands become connected to the mainland in summer, this increases the level of disturbance and predation by foxes and dogs. The geography of these islands is quite uncertain and, in the summer heat, additional sandbars to those described earlier (Karauz Kiraç & Kiraç 1996) have appeared.

Due to conflicting reports, it is difficult to determine trends for steppe species in the area; probably none was ever very common. However, in the 1980s, Kasparek (1987) reported flocks of up to 200 Black-bellied Sandgrouse *Pterocles orientalis* and 40 Stone Curlew *Burhinus oedicnemus* at Kulu. Presently, it is rare to see more than small groups of sandgrouse and it is even more unusual to observe Stone Curlew, perhaps due to its nocturnal habits. Heunks *et al.* (2001) reported a population of just 83 Great Bustard *Otis tarda* in four areas of the Konya Basin, including around Tuz Gölü, and some breeding sites are probably reasonably close to Kulu Gölü. These findings give added credibility to the reports of local farmers that groups of up to 20 bustards occur in spring/summer on semi-steppe east of the lake. If correct, this is welcome news, as Kasparek (1987) only reported single birds and my only observation was of a male in flight, on 14 April 2001. This area may also prove suitable for Little Bustard *Tetrax tetrax*, though it has not been observed there. Additionally, there has been little recent evidence of Common Crane *Grus grus* breeding in the Kulu area.

Not all species have undergone such demise and it is notable that the colonies of gulls and terns have remained relatively stable (see Table 1). The principal species breeding at the lake are Mediterranean Gull *Larus melanocephalus* (at least 200 pairs), Black-headed Gull *L. ridibundus* (250 pairs), Slender-billed Gull *L. genei* (200 pairs) and Gull-billed Tern *Sterna nilotica* (300+ pairs). While much higher estimates of the populations of these species have been made (Karauz 1999), the current totals are very similar to those reported by Karauz Kiraç & Kiraç (1996). Despite hunting pressure, numbers of

wintering wildfowl also appear little changed to those reported in the 1980s (Kasparek 1987). Numbers of passage waders appear lower than formerly—when more than 1000 Little Stint *Calidris minuta* were occasionally reported—but most of the commoner species are still well represented. Post-breeding flocks of Ruddy Shelduck *Tadorna ferruginea* sometimes reach 2000 and migrant flocks of Garganey *Anas querquedula* similar figures.

Regrettably, a project of the Kulu District Council could threaten bird populations at the lake. Currently, sewerage from Kulu town only enters Kulu Gölü indirectly through a nearby stream (see Magnin & Yarar 1997), but a pipeline and a wastewater treatment plant are being constructed to empty sewage directly into the lake. Though this development will reduce the level of toxicity in the waste and some water inflow in summer may benefit avian populations at the lake, the effects of inputting such chemicals into such a shallow waterbody are uncertain (Başak 2003).

THE PRESENT STUDY

During the period March 2001 to August 2002, no fewer than 40 visits were made to the lake, mainly to count waders. Usually, the procedure was to walk around the lake: starting at Kulu town and working towards Küçük Göl and the village of Karapınar on the north shore. Visits were at irregular intervals each month according to personal convenience. Usually two visits were made per month but there were four visits in August and December 2001 (see Appendix). Particular attention was paid to the productive freshwater Küçük Göl and to the delta of the Kulu River on the west shore of the lake.

RESULTS

For a complete list of species and maximum monthly totals see the Appendix, which covers the 13-month period from August 2001 to August 2002 (serious study of the lake's avifauna only commenced in the former month). Table 1 summarises previous and my own estimates for several important breeding species at the lake, as well as four species that use the area in winter or as a post-breeding moult site.

Wildfowl

Like other playa lakes, for these species Kulu Gölü is primarily of importance as a migration stopover and wintering area, and numbers of ducks and geese are erratic, e.g. in early September 2001 very few ducks were present, but within a few days over 1000 Garganey *Anas querquedula* had arrived. Such rapid turnover demonstrates one of the chief limitations of attempting a comprehensive study without working permanently on site.

Nevertheless, general indications suggest a decline in numbers since Kasparek's (1987) résumé. In the 1980s, over 10,000 Ruddy Shelduck were reported on post-breeding dispersal, but present-day figures for July are closer to 2000. On migration, Garganey still occurs in flocks of up to a 1000 or more, and it is not uncommon to see flocks of 1000–2000 Shoveler *Anas clypeata* (Table 1). One of the most important constituents of the lake's avifauna is the globally threatened White-headed Duck and, while Kasparek (1987) reported flocks of 500 in July, current numbers only rarely reach 200. Up to 19,000 White-fronted Geese *Anser albifrons* formerly wintered in the Kulu area (Kasparek 1987), but most recent counts have been of 2000–4000 birds (Table 1).

Surprisingly, not all such changes are due to hunting pressures, as this problem appears reduced. When I first visited the lake in the 1990s, as many as ten hunters were sometimes observed working the area around Küçük Göl but since then activity has been lower.

Clearly, this is a view based on personal impressions but, as the lake is a designated Specially Protected Area, Konya Natural Park wardens occasionally visit it. Probably, a more serious pressure on the environment comes from changes in agricultural practice and the decline in arable land, reducing the feeding opportunities for geese.

Gulls

Estimates of gull and tern numbers have varied considerably, possibly due to changing conditions at the lake. However, there appears greater stability in numbers of these species than among wintering geese. Since the 1980s, there would appear to have been at least 200 pairs of the major gull species while numbers of Gull-billed Tern *Gelochelidon nilotica* have apparently increased (See Table 1). During the most recent decade, several Armenian Gulls *Larus armenicus* have summered on the lake and there have even been records of breeding (Karauz 1999). If this trend continues to increase it may have a negative effect on colonies of the smaller species. Also in recent years, several pairs of Spoonbill *Platalea leucorodia* have taken to nesting on the islands alongside the gulls (Karauz 1999).

Table 1. Summary of the estimated numbers of selected species at Kulu Gölü by various authors. For breeding gulls and terns, Karauz Kiraç & Kiraç (1996) and Karauz (1999) have provided the most reliable estimates, as these authors visited the islands. Present estimates of the numbers of gulls represent a compromise between my own and Karauz and Kiraç's (pers. comm. 2002) observations in the same period. Their estimates for gull and tern numbers were made on 25 May 2002 and, given broad agreement with my data, Table 1 provides a compromise between the two sets of totals. All other data in the right-hand column of Table 1 are based purely on personal observations. Most estimates of breeding bird populations were made in May.

Species	Kasparek (1987)	Ertan *et al.* (1987)	Karauz Kiraç & Kiraç (1989)	Karauz (1996)	This study (1999)
Breeders					
Black-necked Grebe *Podiceps nigricollis*	100–150 pairs	120 pairs	2 pairs		1–2 birds
Spoonbill *Platalea leucorodia*				2–5 pairs	2 pairs
White-headed Duck *Oxyura leucocephala*	30 pairs		38 birds	30 pairs	17 birds
Black-winged Stilt *Himantopus himantopus*	80 pairs	100 pairs	8 pairs	62 pairs	29 birds
Avocet *Recurvirostra avosetta*	150–200 pairs	200–400 pairs	143 pairs	276 pairs	60+ birds
Collared Pratincole *Glareola pratincola*			3 pairs		3 birds
Greater Sand Plover *Charadrius leschenaultii*	5 pairs	5 pairs	1 pair		1 pair
Mediterranean Gull *Larus melanocephalus*	<30 pairs	389 pairs	180 pairs	1190 pairs	790 pairs
Slender-billed Gull *Larus genei*	100 pairs	100 pairs	326 pairs	200 pairs	230 pairs
Armenian Gull *Larus armenicus*				1 pair	3–4 birds
Gull-billed Tern *Gelochelidon nilotica*	200 pairs	200 pairs	473 pairs	775 pairs	150 pairs
Wintering/post-breeders					
Greater Flamingo *Phoenicopterus ruber*	3000 birds	3000 birds		4500 birds	2000 birds
White-fronted Goose *Anser albifrons*	19,000 birds			5055 birds	2000 birds
Ruddy Shelduck *Tadorna ferruginea*	10,000 birds	10,000 birds		950–1310 birds	2000 birds
Shoveler *Anas clypeata*	3000 birds				2000 birds

Whereas the increase in the number of gulls and terns is very apparent from these figures, other species have been subject to less complete and detailed reports. For example, less certain are the numbers of White-headed Duck, as some authors prefer to think in terms of summering birds and others in terms of breeding pairs (Karauz Kiraç & Kiraç 1996, Karauz 1999).

Waders

For an inland location, the presence of large numbers of waders is one of the most interesting features of Kulu. This is due to ready availability of mudflats and the presence of fresh and salt water, attracting a broad range of species, although as with other migrant waterbirds numbers vary dramatically.

Freshwater Küçük Göl appears to be particularly attractive to species such as Red-necked Phalarope *Phalaropus lobatus*, Curlew Sandpiper *Calidris ferruginea*, Temminck's Stint *C. temminckii* and Dunlin *C. alpina*. A similar range of species as was reported at the lake in the 1980s (Kasparek 1987) still occurs. Though it is very rare to encounter thousands of Little Stint *Calidris minuta*, it is not unusual for their numbers to reach hundreds, as is true of Little Ringed Plover *Charadrius dubius*. Several species reported by Kasparek (1987) were not observed during the present survey, most notably Terek Sandpiper *Xenus cinereus* and Broad-billed Sandpiper *Limicola falcinellus*. The majority of individuals of these species that pass through Turkey use the eastern flyway through Van Gölü and Erçek Gölü, with only smaller numbers moving through the Central Plateau (e.g. Martins 1989, Kirwan & Martins 1994).

Passerines

There have been relatively few interesting records of passerines at the lake, presumably because most observers principally focus their attention on waterbird species. However, Küçük Göl does hold breeding European Reed Warbler *Acrocephalus scirpaceus*, Moustached Warbler *A. melanopogon*, Bearded Tit *Panurus biarmicus* and possibly Penduline Tit *Remiz pendulinus*. The reeds there also attract a range of migrants: Common Whitethroat *S. communis*, Chiffchaff *Phylloscopus collybita* or Willow Warbler *P. trochilus*, Nightingale *Luscinia megarhynchos*, Common Redstart *Phoenicurus phoenicurus*, as well as occasional Bluethroat *Luscinia svecica* and Thrush Nightingale *L. luscinia*. The Appendix gives an indication of the temporal distribution of these species.

OTHER RECORDS

Bean Goose *Anser fabalis*

A very rare visitor to Turkey, Kulu has remarkably hosted two records: one on 2 April 1984 (Kasparek 1987) and two on 22 February 2002. It was not possible to confirm, through detailed observation of the bill pattern, the taxon involved, but the relatively small size of these birds suggests that the north-west Siberian subspecies *rossicus* was involved. Given the numbers of White-fronted Geese *Anser albifrons* wintering in the area, the species may be under-recorded in central Turkey. Three were also observed at Seyfe Gölü on 23 February 2003.

Black-winged Pratincole *Glareola nordmanni*

Small numbers move through the Central Plateau on migration (e.g. Martins 1989). During the study period the only record was of five on 26 May 2002. Unlike the resident Collared Pratincole *G. pratincola*, this species shows a preference for the freshwater Küçük Göl.

Jack Snipe *Lymnocryptes minimus*
Though not usually considered rare, this species is only infrequently reported in Turkey and no published records are available from the lake (Kasparek 1987, Martins 1989, Kirwan & Martins 1994). It was observed on several occasions in autumn 2001 and 2002, and can be considered a fairly regular migrant, though doubtless often overlooked.

Citrine Wagtail *Motacilla citreola*
A pair was present at Küçük Göl throughout April 2002 and may have attempted to breed but their efforts were apparently curtailed by haymaking activities. In addition, Citrine Wagtail probably also attempted to breed at Kulu in the early 1990s (G. M. Kirwan *in litt.* 2002). In Turkey, the species has been spreading west since the late 1980s (Kirwan & Martins 1994, Roselaar 1995) and it now almost certainly breeds at most suitable wetlands on the Central Plateau (Eken & Magnin in prep., Kirwan *et al.* 2003, G. M. Kirwan *in litt.* 2002).

Twite *Acanthus flavirostris*
A flock of five was observed beside Küçük Göl on 4 January 2002, the first published record for the site (Kasparek 1987). There are occasional records of high montane species on the Central Plateau in winter, but there appears to be very few records of Twite in the Ankara area.

Red-fronted Serin *Serinus pusillus*
One was observed near Kulu town on 9 December 2001. Winter records of this species are available from Eymir Gölü and the Middle East Technical University campus, both close to Ankara (KAD Ringing Report 2002). The nearest known breeding area for the species is Uludağ, c. 300 km west of Ankara, but suitable habitat also exists in the Ilgaz and Köroğlu ranges north-east of the capital, which plausibly harbour breeding populations.

CONCLUSIONS

Compared to earlier accounts (Kasparek 1987, Karauz Kiraç & Kiraç 1996), three types of change have occurred at the lake: geographical, e.g. changes to the islands in the lake, economic and ecological. Not all of these are a result of human activities. In recent years, the unusually long, hot and dry Anatolian summers appear to have wrought equally significant changes at Kulu.

Clearly, the lake is still of international importance for wildlife, but the effects of many of these changes have thus far gone either unnoticed or unreported. While gull and tern colonies appear to remain at 1980s levels, other species seem to be decreasing. Birds that were once almost symbolic of the lake now require new research, particularly White-headed Duck, which summers at the lake but may no longer breed.

Kulu Gölü remains one of the most ornithologically interesting lakes in Turkey and, if we are to adequately preserve it, much can be learned from the fate of other Anatolian wetlands, particularly the situation facing the rather poorly known, smaller lakes of the Konya Basin, south of Kulu, which often dry-up in summer due to climatic conditions (and change) and because of the disappearance of surface or underground water sources. It is therefore difficult to recommend specific solutions, but whether their precarious summer hydrology should be accepted as being merely a result of 'natural developments' must be a subject for future discussions among conservationists, as this factor threatens the very existence of these lakes.

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Appendix. Maximum numbers of all bird species observed at Kulu Gölü, Turkey, in August 2001–August 2002. Number of visits each month is presented in brackets. The lake is often frozen during the months highlighted (January and February). An asterisk denotes those species known to breed. No observations were made in July. Interesting observations are emboldened. Pr = present but not counted; h = heard.

Species	Aug (4)	Sept (3)	Oct (3)	Nov (2)	Dec (4)	Jan (2)	Feb (2)	Mar (3)	Apr (2)	May (2)	Jun (3)	Jul (0)	Aug (3)
*Little Grebe *Tachybaptus ruficollis*	30	30	5					4	5	10	15		30
Great Crested Grebe *Podiceps cristatus*								2					
Black-necked Grebe *Podiceps nigricollis*	30	50	2					7		3	60		25
White Pelican *Pelecanus onocrotalus*		2											
Bittern *Botaurus stellaris*					1								
Little Bittern *Ixobrychus minutus*										2			
Night Heron *Nycticorax nycticorax*										2			
Squacco Heron *Ardeola ralloides*										2			
Little Egret *Egretta garzetta*													
Great White Heron *Egretta alba*			1										
Grey Heron *Ardea cinerea*	2	5	1					1					6
Purple Heron *Ardea purpurea*									1				
*White Stork *Ciconia ciconia*								1	1	1	1		
Glossy Ibis *Plegadis falcinellus*									13	1			
*Spoonbill *Platalea leucorodia*									3		1		
Greater Flamingo *Phoenicopterus ruber*	1000	1000	800	20	20			896	1500	2000	2000		1000
Whooper Swan *Cygnus cygnus*				6									
Bean Goose *Anser fabalis*							2						
White-fronted Goose *Anser albifrons*				100	110	1	1750	2500					
*Greylag Goose *Anser anser*	1	1						15	2	7			
*Ruddy Shelduck *Tadorna ferruginea*	300	65	320		60	20	15	20	2		2000		800
*Shelduck *Tadorna tadorna*	50	15	20	50	40		12	20	10	6	20		15
Wigeon *Anas penelope*				10	40		40	60	6				
*Gadwall *Anas strepera*	5	3	4	3						2	10		**15**
*Teal *Anas crecca*	55	10	30	300	200	15	75	45	100	1	1		15
*Mallard *Anas platyrhynchos*	200	100	200	50	300	100		50		15	10		
Pintail *Anas acuta*	2	1			6			49					
Garganey *Anas querquedula*	20	1500								1	4		30
*Shoveler *Anas clypeata*		1000	500	300	600	300	10	1500	50				30
*Red-crested Pochard *Netta rufina*			20	5				10	2				2
*Pochard *Aythya ferina*	30	20	30	10	5		50	70		15	20		25
Tufted Duck *Aythya fuligula*			8										
White-headed Duck *Oxyura leucocephala*	120	80	**200**	100	60		3		60	15	20		50

Species	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Marsh Harrier *Circus aeruginosus*	1	1	2		1			5	6	4			1
Hen Harrier *Circus cyaneus*			1	1	1	4		2					
Pallid Harrier *Circus macrourus*		1											1
*Montagu's Harrier *Circus pygargus*	1	1											1
Sparrowhawk *Accipiter nisus*				1	1								1
Common Buzzard *Buteo buteo*	1												
*Long-legged Buzzard *Buteo rufinus*		2	1	2			1	1	2		1		1
Osprey *Pandion haliaetus*									1				
Lesser Kestrel *Falco naumanni*													3
*Kestrel *Falco tinnunculus*					1								1
Red-footed Falcon *Falco vespertinus*			1										
Merlin *Falco columbarius*						1							
Hobby *Falco subbuteo*	1												
Peregrine Falcon *Falco peregrinus*								1					1
*Quail *Coturnix coturnix*										3	8		1
*Water Rail *Rallus aquaticus*	h	h	h	h	h			2h	h	4h	h		h
*Moorhen *Gallinula chloropus*	Pr	Pr	3	6	2				10	20			2
*Coot *Fulica atra*	10	15	30	300	1000	250	50	40	50	15			15
Common Crane *Grus grus*							350						
*Oystercatcher *Haematopus ostralegus*								3	4	6	4		
*Black-winged Stilt *Himantopus himantopus*	2									30	300		30
*Avocet *Recurvirostra avosetta*	10	50	30	2				10	60	20	100		15
Stone Curlew *Burhinus oedicnemus*									1				
*Collared Pratincole *Glareola pratincola*	1									4	50		
Black-winged Pratincole *Glareola nordmanni*										5			
Little Ringed Plover *Charadrius dubius*	10	300	2						2	5			100
Ringed Plover *Charadrius hiaticula*									1	2			
Kentish Plover *Charadrius alexandrinus*	15	300							3	6			12
*Greater Sand Plover *Charadrius leschenaultii*	2										1		4
Dotterel *Charadrius morinellus*		**1**	**1**										
European Golden Plover *Pluvialis apricaria*										3			
Grey Plover *Pluvialis squatarola*										1			
*Spur-winged Plover *Hoplopterus spinosus*		1						3	1				4
*Lapwing *Vanellus vanellus*	8	8	3	5	30		3	15	3		2		28
Sanderling *Calidris alba*	2												
Little Stint *Calidris minuta*	115	200	15	50	30	3			4	50			200
Temminck's Stint *Calidris temminckii*			1							1			2

Species	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Curlew Sandpiper *Calidris ferruginea*	8	3								17			4
Dunlin *Calidris alpina*		3	5	8					10	1			3
Ruff *Philomachus pugnax*	40	55	15					3000	40	20			60
Jack Snipe *Lymnocryptes minutus*		1	1	1	1								
Common Snipe *Gallinago gallinago*	1	4	5	9	5	2	2	6					5
Black-tailed Godwit *Limosa limosa*		1											
Whimbrel *Numenius phaeopus*									1				
Curlew *Numenius arquata*	1	2	1					2					
Spotted Redshank *Tringa erythropus*	1										5		
*Redshank *Tringa totanus*	3	4	2	2			2			5	5		3
Marsh Sandpiper *Tringa stagnatilis*	1	3	1						1				5
Greenshank *Tringa nebularia*	1	2							1	2	2		2
Green Sandpiper *Tringa ochropus*		2	2	4	2	3	2	6	1		3		6
Wood Sandpiper *Tringa glareola*									2	3	8		2
Common Sandpiper *Actitis hypoleucos*		1							4	1	1		5
Turnstone *Arenaria interpres*										2			
Red-necked Phalarope *Phalaropus lobatus*		4											5
*Mediterranean Gull *Larus melanocephalus*	500	35	50						100	1000	1000		15
Little Gull *Larus minutus*											4		
*Black-headed Gull *Larus ridibundus*	2	5	2	4	15		10	100	100	1000	30		
*Slender-billed Gull *Larus genei*								20		100	300		30
Lesser Black-backed Gull *Larus fuscus*		3		1									
Yellow-legged Gull *Larus cachinnans*			10	2						2			
Armenian Gull *Larus armenicus*	30	8	20		30		4	3		4	20		
*Gull-billed Tern *Gelochelidon nilotica*								5		500	1000		
Common Tern *Sterna hirundo*													1
Little Tern *Sterna albifrons*		1									1		
Whiskered Tern *Chlidonias hybrida*										4	3		
Black Tern *Chlidonias niger*		1								4	1		2
White-winged Black Tern *Chlidonias leucopterus*										40			15
*Black-bellied Sandgrouse *Pterocles orientalis*	h	h						2					
*Collared Dove *Streptopelia decaocto*	5	10	10	5	Pr	Pr	4	Pr	5	10			5
*Little Owl *Athene noctua*	1		1		1	1			1				
Common Swift *Apus apus*									15	25	50		
Alpine Swift *Apus melba*									1				
Common Kingfisher *Alcedo atthis*			1										
European Bee-eater *Merops apiaster*		20											

Species	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Hoopoe *Upupa epops*	3	2							2		4		8
Wryneck *Jynx torquilla*									2				1
*Calandra Lark *Melanocorypha calandra*		20	4000	30	5000	14	500	10	50	Pr	6		
Bimaculated Lark *Melanocorypha bimaculata*		2											
Short-toed Lark *Calandrella brachydactyla*		30							4				
*Asian Short-toed Lark *Calandrella cheleensis*	20	5	50	10	300	1	10	20		8			15
*Crested Lark *Galerida cristata*		3	10	20	20	1		3	4	Pr	7		3
Skylark *Alauda arvensis*			2		2		5	3					2
*Sand Martin *Riparia riparia*	30	500								50	5000		40
Barn Swallow *Hirundo rustica*	10	50							30	30	5		40
House Martin *Delichon urbica*									5				
Tawny Pipit *Anthus campestris*	2	2	5						3	3	2		10
Tree Pipit *Anthus trivialis*		2	2						4				1
Meadow Pipit *Anthus pratensis*			5					1	1				
Red-throated Pipit *Anthus cervinus*		10	5	5					3	1			
Water Pipit *Anthus spinoletta*			1	4									
*Yellow Wagtail *Motacilla flava*	4	15		3					10	Pr	3		10
Citrine Wagtail *Motacilla citreola*									2				
Grey Wagtail *Motacilla cinerea*		1						1	1				
White Wagtail *Motacilla alba*		2		1			1	20	20				
Wren *Troglodytes troglodytes*			1										
Dunnock *Prunella modularis*								3	1				
Robin *Erithacus rubecula*			1	1	1			2					
Thrush Nightingale *Luscinia luscinia*									1				
Nightingale *Luscinia megarhynchos*									1				
Bluethroat *Luscinia svecica*			1										
Common Redstart *Phoenicurus phoenicurus*	1	1	1										
Whinchat *Saxicola rubetra*	6	4							10				
Stonechat *Saxicola torquata*			2	3				2					
*Isabelline Wheatear *Oenanthe isabellina*		6						1			2		10
Northern Wheatear *Oenanthe oenanthe*	3	20	10	1					5	6	2		8
Blackbird *Turdus merula*							1						
Fieldfare *Turdus pilaris*								1					
Song Thrush *Turdus philomelos*				1									
*Cetti's Warbler *Cettia cetti*		1	2	1	1	1		1		2	2		1
*Moustached Warbler *Acrocephalus melanopogon*			1							2	1		3
*Sedge Warbler *Acrocephalus schoenobaenus*	2									2	2		2

Species	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
*European Reed Warbler *Acrocephalus scirpaceus*	2							6		10	2		5
*Great Reed Warbler *Acrocephalus arundinaceus*	3	2							2	6	10		5
Common Whitethroat *Sylvia communis*									1				
Willow Warbler/Chiffchaff *Phylloscopus trochilus/collybita*	10	20	5						8	20	50		10
Goldcrest *Regulus regulus*				1									
Spotted Flycatcher *Muscicapa striata*	1	5											3
Semi-collared Flycatcher *Ficedula semitorquata*									2				
Collared Flycatcher *Ficedula albicollis*									2				
*Bearded Tit *Panurus biarmicus*		5	5	10	3								h
Penduline Tit *Remiz pendulinus*		2	2										
Red-backed Shrike *Lanius collurio*		1								2			2
Lesser Grey Shrike *Lanius minor*													4
*Magpie *Pica pica*	5	10	Pr	5	5	10	5	Pr	20	5	4		
*Jackdaw *Corvus monedula*	10	15	200	40	200	20	30	Pr	5	5	10		Pr
Rook *Corvus frugilegus*			200	100	Pr	100	100	40					
Raven *Corvus corax*							1						
*Starling *Sturnus vulgaris*			300				2000		1000	10	15		500
*House Sparrow *Passer domesticus*			20	Pr	Pr								
Chaffinch *Fringilla coelebs*				1		2			2				
Red-fronted Serin *Serinus pusillus*					**1**								
Greenfinch *Carduelis chloris*				5	2								
*Goldfinch *Carduelis carduelis*		2	5					1	20				3
*Linnet *Carduelis cannabina*					1		3						
Twite *Carduelis flavirostris*						**5**							
Reed Bunting *Emberiza schoeniclus*			1	5	3		5	20	4				
*Black-headed Bunting *Emberiza melanocephala*										2	3		3
*Corn Bunting *Miliaria calandra*			10	5	2					2	3		2

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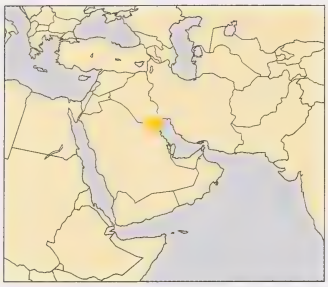
The status of desert birds in Kuwait

P. J. COWAN AND C. W. T. PILCHER



The status in Kuwait of the 17 desert bird species accepted to occur in the country by the Kuwait Ornithological Rarities Committee, and Spotted Sandgrouse *Pterocles senegallus*, is presented. Breeding has been recorded for Brown-necked Raven *Corvus ruficollis* and Black-crowned Finch Lark *Eremopterix nigriceps*, Bar-tailed Desert *Ammomanes cincturus*, Desert *A. deserti*, Hoopoe *Alaemon alaudipes*, Thick-billed *Ramphocoris clotbey* and Temminck's Horned Larks *Eremophila alpestris* since 1995. Hooded *Oenanthe monacha*, Hume's *O. albonigra* and White-crowned Black Wheatears *O. leucopyga* are accidentals.

ONLY 26 OF THE bird species that occur in the south-west Asian desert (Arabian Peninsula to north-west India) are desert birds *sensu stricto* (Cowan 2000). The current paper presents the status in Kuwait of the desert bird species that occur there. CWTP maintains a Kuwait ornithological record of observers' sightings, a duty he took over in 1979. The status of the country's birds was briefly summarised by Haynes (1979), with some supplementary details in Bundy & Warr (1980). The Kuwait Ornithological Rarities Committee was formed in 1994. The species name is followed by letters indicating the present status: RB = resident breeder, BSV = breeding summer visitor, OB = occasional breeder, PM = passage migrant, WV = winter visitor and A = accidental (a question mark indicates uncertainty). The Atlas of Breeding Birds of Arabia (ABBA) square reference is given for confirmed breeding records (Jennings 1995). The nearest breeding areas to Kuwait are mentioned.

Houbara Bustard *Chlamydotis undulata* PM
A scarce passage migrant. Previously, a breeder and common, subsequently an uncommon winter visitor (Meinertzhagen 1954, Haynes 1979, Jennings 1989). Present-day records presumably relate to birds that breed in the former Soviet Union and perhaps Iran (Goriup 1997).

Cream-coloured Courser *Cursorius cursor* WV ?RB
Until the late 1950s a common resident breeder. Haynes (1979) reported the species to be a fairly common resident breeder and common winter visitor. Now, an uncommon winter visitor and probably a scarce resident breeder. Breeds in north-east Saudi Arabia and the Iraq desert (Jennings 1995, Snow & Perrins 1998).

Spotted Sandgrouse *Pterocles senegallus* ?
Gregory (2001) reported that approximately 250 pairs of Spotted Sandgrouse bred each year from 1994 to 2000 near the northern border, in Kuwait. Apparently the species did not breed there in 2001 due to disturbance by human activities (Gregory 2001). This is the first reported occurrence of the species in Kuwait but identification details have yet to be presented. Spotted Sandgrouse breeds in southern Iraq, although there has been no recent information from this region (Snow & Perrins 1998).

Egyptian Nightjar *Caprimulgus aegyptius* PM
An uncommon passage migrant in spring and autumn. In recent years regularly recorded (e.g. Gregory 2000a) though previously considered a vagrant. The birds presumably breed in Iraq (where supposedly now rare, Snow & Perrins 1998), Iran and the deserts of the former Soviet Union (Cramp 1985).

Black-crowned Finch Lark *Eremopterix nigriceps* BSV
Previously described as a common breeding summer visitor, very common on post-

breeding dispersal, but scarce and local in October–March (Haynes 1979, Bundy & Warr 1980). Subsequently there were relatively few records and no evidence of breeding. However, breeding was confirmed once in both 1996 and 1997 in the north-east (adult feeding a juvenile and adults with nest containing nestlings, ABBA square NB36; Cowan & Newman 1998). In 1998 breeding was recorded again in the north-east (a record of recently fledged juveniles, ABBA square NB36). A small breeding colony has been found in the south, in ABBA square OA34 (Gregory 2001, 2003). Black-crowned Finch Lark is now a fairly common breeding summer visitor to areas less disturbed by livestock. Occasionally overwinters. It is a breeding summer visitor to north-east Saudi Arabia (Jennings 1995), although its status in Iraq is uncertain (Snow & Perrins 1998).

Dunn's Lark *Eremalauda dunni* ?OB
First record was of one in March 1987 (Pilcher *et al.* 1990). Another single was recorded in December 1989. In 1999 an influx occurred into the west and north-west, with a May record and a series of records in August–October. In 2000 the species was again present in these areas, with records in May–September including a juvenile in fresh plumage on 1 June. In the north-east, song flights were observed on 26 May 1999 (Gregory 2000b). The species may well have bred in Kuwait in both years. One was heard singing in the north-east on 8 March 2002 (Gregory 2003). Dunn's Lark breeds in northern and eastern Saudi Arabia (Jennings 1995) and has temporarily and locally invaded and bred in Israel and Jordan (Andrews 1995, Shirihai 1996).

Bar-tailed Desert Lark *Ammomanes cincturus* RB
Previously scarce and irregular in occurrence. However, breeding was recorded once in 1996 and twice in 1997 in the north-east (adult feeding juveniles and an adult with nest containing nestlings; Cowan & Newman 1998, and a recently fledged juvenile, all in ABBA square NB36). The species is now present year-round, being widespread and fairly common in the desert north, north-west and west of the Jahra / Kuwait City / Ahmadi conurbation. Breeding was confirmed three times in 2001 and twice in 2002, all in the west (adults with nests containing eggs or nestlings, an adult carrying food and an adult sitting on nest, in ABBA square MB35; non-chronological order). Bar-tailed Desert Lark breeds in north-east Saudi Arabia but its status in southern Iraq is uncertain (Jennings 1995, Snow & Perrins 1998).

Desert Lark *Ammomanes deserti* RB
A locally common resident breeder in the west. The species was formerly far more widespread. Haynes (1979) described it as a very common resident breeder. In recent years, breeding was confirmed once in 1995, twice in 1998, once in 2001 and twice in 2002 (adults with nests containing eggs or nestlings in ABBA square MB35). Resident in north-east Saudi Arabia and southern Iraq (Jennings 1995, Snow & Perrins 1998).

Hoopoe Lark *Alaemon alaudipes* RB
A widespread and fairly common resident breeder. Latterly, breeding was confirmed twice on Failaka Island in 1993 (adults with nests containing eggs, ABBA square OA35) and once each in 1996, 2000 and 2001 in western Kuwait (adults with nests containing eggs or nestlings, ABBA square MB35). Resident in southern Iraq and north-east Saudi Arabia (Jennings 1995, Snow & Perrins 1998).

Thick-billed Lark *Ramphocoris clotbey* ?OB
Previously noted as a winter and spring visitor to the west in small numbers, which might have bred (Haynes 1979, Bundy & Warr 1980). Subsequently there were very few records and none since 1985. However, in 2002 the species was recorded again in the west including a record of confirmed breeding (adults with a nest containing eggs, ABBA square MB35). Breeds sparingly in northern Saudi Arabia (Jennings 1995).

Temminck's Horned Lark *Eremophila bilopha* RB
A fairly common resident breeder in the west. Breeding confirmed once each in 1978 (adults feeding nestling), 2001 (adult feeding juveniles) and 2002 (adults with nest containing eggs), all in ABBA square MB35. Breeds in north-east Saudi Arabia but its status in southern Iraq is uncertain (Jennings 1995, Snow & Perrins 1998).

Desert Wheatear *Oenanthe deserti* PM WV
Common passage migrant and fairly common winter visitor. Possibly has bred, as pairs and singing males have been noted in suitable habitat during the breeding season. Breeds in Iraq (Snow & Perrins 1998).

Hooded Wheatear *Oenanthe monacha* A
Four records, all of singles, in 1958, 1971, 1984 and 1999. Resident south-west Iran (Cramp 1988) and a resident breeder in central Saudi Arabia (Jennings 1995).

Hume's Wheatear *Oenanthe albonigra* A
Four records, all of singles, in 1963, 1977, 1978 and 1983. Resident in south-west Iran (Cramp 1988).

White-crowned Black Wheatear *Oenanthe leucopyga* A
Ten records, all of singles, in 1954, 1971 (twice), 1972, 1983, 1987, 1989, 1998, 1999 and 2000. Resident in eastern Saudi Arabia (Jennings 1995).

Desert Warbler *Sylvia nana* PM WV
Fairly common passage migrant and winter visitor. Most common in spring. Sings in Kuwait (Stuart & Pilcher 1983) and pairs observed in suitable habitat in spring but no confirmation of breeding. Breeds in north-east Iran and the Caspian deserts (Cramp 1992).

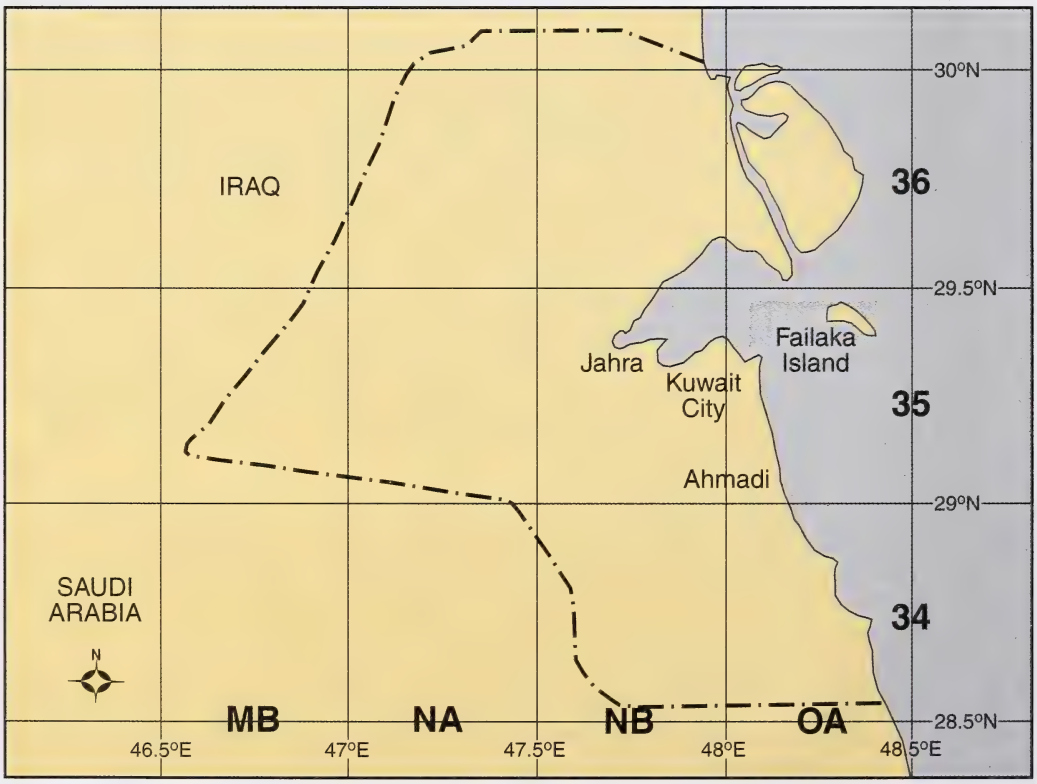


Figure 1. Map of Kuwait showing Atlas of Breeding Birds of Arabia (ABBA) grid squares. Each half-degree square has a unique alphanumeric reference e.g. NB35.

Brown-necked Raven *Corvus ruficollis* ?RB

Decreased breeder near extinction. Described by Haynes (1979) as a locally fairly common resident breeder but absent in summer. One pair nested unsuccessfully in 1999 (adult on nest, ABBA square NB36) after an eight-year period without sightings of this species. The nest was reoccupied in 2000 when three nestlings were seen, but it unknown whether they successfully departed the nest. Resident in north-east Saudi Arabia and south-west Iran, although status in Iraq is uncertain (Cramp & Perrins 1994, Jennings 1995, Snow & Perrins 1998).

Trumpeter Finch *Bucanetes githagineus* WV ?OB

An occasional winter visitor in very small numbers. However, twice in 2001 and once in 2002 probable breeding (uncertain whether observations involved feeding of juveniles or courtship feeding) was recorded in the west (ABBA square MB35). Resident in eastern Saudi Arabia and south-west Iran (Cramp & Perrins 1994, Jennings 1995).

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Stan Howe, bird 'guru' in Kuwait 1968–1973, read the manuscript.

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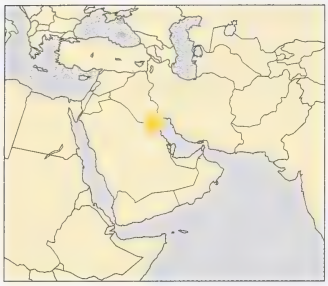
Some moult data for raptors in Kuwait

GEORGE GREGORY



Few data on moult among birds in the Middle East have been published. Specimens of Honey Buzzard *Pernis apivorus*, Crested Honey Buzzard *P. ptilorhynchus*, Black Kite *Milvus milvus* and Steppe Buzzard *Buteo buteo vulpinus*, found dead in Kuwait in September–October 2002, were examined for moult. Primary and rectrical moult scores were recorded for each species. High levels of replacement of accidentally lost major feathers, and great variation in the extent of primary moult and in sequence of rectrical moult, are reported for these species. One Steppe Buzzard had a supernumerary rectrix. The data are considered as evidence for and against suspension of moult.

DURING THE LAST FEW YEARS, and particularly recently, in Kuwait, I have examined a number of raptors, shot and left by hunters, for signs of active moult of primaries, rectrices and sometimes other feather tracts. The evidence is presented according to species below. Moult scores used for all species are based on the system employed by Ginn & Melville (1983), modified so that: X = accounted for but not scored; 0 = first-generation, full-grown feather; 1–5 = second-generation feathers; 6–10 = third-generation feathers etc. Estimation of date of death involved examination of the eyes and of the extent of rigor mortis, mummification and decomposition. Ageing and sexing was based on criteria presented in Baker (1993), Cramp & Simmons (1980) and/or number of moult series present.

Honey Buzzard *Pernis apivorus*
This monotypic species passes through Kuwait on autumn migration in August–October. The closest breeding grounds are in northern Iran, c. 900 km from Kuwait, and its winter quarters are in central and southern Africa. There are no records of wintering in Kuwait.

Specimen A, a third-year or older (EURING Code 6) male, wing 427 mm, estimated date of death 24 September 2002, found at Qaisat (29°24′N 47°43′E) was in a state of apparent suspended moult, interrupted at p1 in each wing, in an apparently conventional descendant moult, with a primary moult score of 5. At the same locality, specimen B, a third-year or older (EURING Code 6) male, wing 416 mm, with estimated date of death also 24 September 2002, was actively regrowing a single primary in each wing, giving a mean primary moult score of 13.5 (see Table 1). Specimen C, a second-year (EURING Code 5) unsexed individual, wing 399 mm, estimated date of death 4 October 2002, from Hujaijah (29°40′N 48°04′E), was in a state of apparently suspended moult, interrupted at p3 in each wing, giving a primary moult score of 15. In all three individuals, all secondaries and rectrices were at moult stage 0. Specimen D, a juvenile (EURING Code 3) unsexed individual, estimated date of death 4 October 2002, from Qaisat, was in fresh plumage and showed no sign of moult.

Crested Honey Buzzard *Pernis ptilorhynchus*
This species has recently been discovered passing through Kuwait on autumn migration; there are no winter records. Its nearest breeding grounds are central Siberia and Pakistan, at least 1500 km from Kuwait, and its main wintering quarters are in the Philippines, the Indian subcontinent and south-east Asia. Where those recently identified moving through the Middle East winter is unknown, but the majority presumably spends this season in Africa.

A juvenile (EURING Code 3) unsexed individual, of unknown subspecies, estimated date of death 20 September 2002, from Qaisat, had an adult-patterned p5 and its corresponding primary-covert, on the right wing, at moult stage 3. All other remiges and rectrices were juvenile-patterned, fresh and full-grown. Presumably, these feathers were prematurely regrowing after accidental feather loss, but it is interesting that both the flight feather and its covert were regrowing.

Black Kite *Milvus migrans*
A common passage migrant and an uncommon winter visitor in Kuwait. The nearest breeding grounds are in the Zagros Mountains of Iran, in Turkey and Syria, all at least 500 km from Kuwait. The main wintering grounds are in sub-Saharan Africa and the Indian subcontinent. Most are probably intergrades between *M. m. migrans and M. m. lineatus*, although some appear to be pure *M. m. lineatus*.

At Abdali (30°03′N 47°44′E), Specimen A, a juvenile (EURING Code 3) unsexed individual, with estimated date of death 4 October 2002, had the entire remiges and rectrices fresh and fully grown, except r6 on the right side, which was at moult stage 2. Presumably, this was prematurely regrowing following accidental feather loss. At Qaisat, Specimen B, second-year (EURING Code 5) unsexed individual, with estimated date of death 4 October 2002, was actively regrowing one primary in each wing, giving a mean primary moult score of 28.5 (see Table 2). At Ras as Subiyah (29°31′N 48°10′E), Specimen C, third-year or older (EURING Code 6) unsexed individual, with estimated date of death 4 October 2002, was actively regrowing one primary on the left wing, giving a mean primary moult score of 32 (see Table 3).

Steppe Buzzard *Buteo buteo vulpinus*
Steppe Buzzards pass Kuwait on autumn migration mostly in August–October. Small numbers overwinter in Kuwait (and elsewhere in Arabia) in December–February, but the main winter quarters are in Sudan and Ethiopia south through Africa. The nearest breeding grounds are in European Russia and Siberia, at least 1500 km from Kuwait. The similar, controversial form, *B. b. menetriesi* appears to be largely resident in Turkey and the Caucasus region, at least 1000 km north of Kuwait.

At Qaisat (29°24′N 47°43′E) 12 Steppe Buzzards were examined for moult as follows. Specimens A and B were unsexed juveniles (EURING Code 3) with estimated date of death 20 September 2002, in fresh plumage and with no evidence of moult. Specimen C, a second-year or older (EURING Code 4) male, estimated date of death 20 September 2002, was in a state of apparently suspended moult, interrupted at p6, giving a primary moult score of 30 (see Table 4). Specimen D, second-year or older (EURING Code 4) female, with estimated date of death 20 September 2002, was actively regrowing one primary (in a serially descendant moult), giving a primary moult score of 39 (see Table 5). Specimen E, unsexed juvenile (EURING Code 3), with estimated date of death 27 September 2002, was in fresh plumage and lacked signs of moult. Specimen F, a second-year or older (EURING Code 4) male, with estimated date of death 27 September 2002, was in a state of apparently suspended moult, interrupted at p5, giving a primary moult score of 25 (see Table 6). Specimen G, a second-year or older (EURING Code 4) male, with estimated date of death 27 September 2002, was in a state of apparently suspended moult, interrupted at p5, giving a primary moult score of 25 (see Table 7). Specimen H, an unsexed second-year or older (EURING Code 4), with estimated date of death 27 September, was actively regrowing one primary in each wing, giving a primary moult score of 34 (see Table 8). Additionally, s3 on the left wing was at moult stage 1, indicating fairly recent drop of the old feather. Specimen I, a fourth-year or older (EURING Code 8) female, with estimated

date of death 27 September 2002, was in a state of apparently suspended moult, with three generations of feathers in the remiges and rectrices (see Table 9). Specimen J, a fourth-year or older (EURING Code 8) blackish female, with estimated date of death 27 September 2002, was in a state of apparently suspended primary moult, but was actively regrowing one secondary, s3 at moult stage 9, in the right wing, and two rectrices, r6 at moult stage 9 on each side (see Table 10). Specimen K, an unsexed juvenile (EURING Code 3), with estimated date of death 4 October 2002, was in fresh plumage and with no sign of moult. Specimen L, a fourth-year or older (EURING Code 8), with estimated date of death 4 October 2002, was in a state of apparently suspended moult, with three generations of feathers in the remiges but fully regrown fresh rectrices (see Table 11). Specimen M, an unsexed second-year or older (EURING Code 4), with estimated date of death 11 October 2002, was in a state of apparent suspended moult, interrupted at p6, giving a primary moult score of 30 (see Table 12).

At Ras as Subiyah (29°31′N 48°10′E) Specimen N, an unsexed fourth-year or older (EURING Code 8), with estimated date of death 4 October 2002 was in a state of apparently suspended moult, with three generations of feathers in the remiges and rectrices (see Table 13). At Hujaijah (29°40′N 48°04′E) Specimen O, an unsexed juvenile (EURING Code 3), with estimated date of death 4 October 2002, was in fresh plumage and lacked signs of moult, while Specimen P, an unsexed second-year or older (EURING Code 4), with estimated date of death 4 October 2002, was actively regrowing one primary in each wing, giving a primary moult score of 29 (see Table 14). One secondary, s11 at moult stage 4, was regrowing in each wing. At Al-Abraq Al-Khabari (29°22′N 46°58′E) Specimen Q, an unsexed second-year or older (EURING Code 4) was actively regrowing one primary and one secondary in each wing and one rectrix in the left side of the tail. This individual, remarkably, had 13 rectrices (see Table 15). Supernumerary rectrices have been previously recorded (Clarke *et al.* 1988). Specimens I, J, L and N had three generations of feathers in the remiges and rectrices. It was occasionally difficult to be wholly confident to which generation a feather belonged, and moult scores should be interpreted with this in mind.

DISCUSSION AND CONCLUSIONS

The primary moult scores presented here are a contribution to the study of the progress of moult in the species concerned. Nevertheless, there is clearly great variation among individual Honey Buzzards, Black Kites and Steppe Buzzards in primary moult score at any time during autumn migration.

Evaluation of the data for second-year and older Black Kites and Steppe Buzzards as evidence for or against suspension of moult during autumn migration is complicated by the fact that Black Kites (regularly) and Steppe Buzzards (occasionally) overwinter in Kuwait. Clearly second-year and older Honey Buzzards, Black Kites and Steppe Buzzards frequently regrow major flight feathers while on autumn migration, presumably involving completing renewal of those feathers for which moult was initiated just prior to the onset of migration. If suspension is considered in the broader sense to include both drop and regrowth of such feathers, then at least some of these individuals had probably not suspended their moults. However, if suspension is considered in the narrower sense to mean just the drop of such feathers, then my data are not inconsistent with suspension, but do not directly support it.

Among the Steppe Buzzards examined there was variation in the sequence of rectrical moult among Specimens C, D, F, G, I, J, M, N, P and Q, while Specimen H showed extreme asymmetry. There appears to be a relatively high level of premature

replacement of accidentally lost primaries in this species.

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Table 1. Primary moult score of Honey Buzzard *Pernis apivorus* Specimen B, a third-year or older (EURING Code 6) male, wing 416 mm, from Qaisat, Kuwait, with estimated date of death 24 September 2002.

Primaries	Left	1	2	3	4	5	6	7	8	9	10	11
Moult score		5	5	3	0	0	0	0	0	0	0	X
Primaries	Right	1	2	3	4	5	6	7	8	9	10	11
Moult score		5	5	4	0	0	0	0	0	0	0	X

Table 2. Primary and rectrice moult score of Black Kite *Milvus milvus* Specimen B, an unsexed second-year (EURING Code 5), wing 469 mm, from Qaisat, Kuwait, with estimated date of death 4 October 2002.

Primaries	Left	1	2	3	4	5	6	7	8	9	10	11	
Moult score		5	5	5	5	5	3	0	0	0	0	X	
Primaries	Right	1	2	3	4	5	6	7	8	9	10	11	
Moult score		5	5	5	5	5	4	0	0	0	0	X	
Rectrices	Left	6	5	4	3	2	1	1	2	3	4	5	6 Right
Moult score		5	0	0	5	0	5	5	0	5	0	0	5

Table 3. Primary and rectrice moult score of Black Kite *Milvus milvus* Specimen C, an unsexed second-year or older (EURING Code 6), wing 471 mm, from Ras as Subiyah, Kuwait, with estimated date of death 4 October 2002.

Primaries	Left	1	2	3	4	5	6	7	8	9	10	11	
Moult score		5	5	5	5	5	5	4	0	0	0	X	
Primaries	Right	1	2	3	4	5	6	7	8	9	10	11	
Moult score		5	5	5	5	5	5	0	0	0	0	X	
Rectrices	Left	6	5	4	3	2	1	1	2	3	4	5	6 Right
Moult score		5	0	0	5	0	5	5	0	5	0	0	5

Table 4. Primary and rectrice moult scores of Steppe Buzzard *Buteo buteo vulpinus* Specimen C, a second-year or older (EURING Code 4) female, wing 347 mm, from Qaisat, Kuwait, with estimated date of death 20 September 2002. (The left wing was damaged by gunshot and was not scored.)

Primaries	Right	1	2	3	4	5	6	7	8	9	10	11	
Moult score		5	5	5	5	5	5	0	0	0	0	X	
Rectrices	Left	6	5	4	3	2	1	1	2	3	4	5	6 Right
Moult score		5	0	5	0	5	5	5	5	0	5	0	5

Table 5. Primary and rectrice moult of Steppe Buzzard *Buteo buteo vulpinus* Specimen D, a second-year or older (EURING Code 4) female, wing 397 mm, from Qaisat, Kuwait, with estimated date of death 20 September 2002. (The left wing was damaged by gunshot and was not scored.)

Primaries	Right	1	2	3	4	5	6	7	8	9	10	11	
Moult score		5	5	5	5	5	5	4	5	0	0	X	
Rectrices	Left	6	5	4	3	2	1	1	2	3	4	5	6 Right
Moult score		5	5	5	0	5	5	5	5	4	5	5	5

Table 6. Primary and rectrice moult of Steppe Buzzard *Buteo buteo vulpinus* Specimen F, a second-year or older (EURING Code 4) male, wing 341 mm, from Qaisat, Kuwait, with estimated date of death 27 September 2002.

Primaries	Left and right	1	2	3	4	5	6	7	8	9	10	11	
Moult score		5	5	5	5	5	0	0	0	0	0	X	
Rectrices	Left	6	5	4	3	2	1	1	2	3	4	5	6	Right
Moult score		5	0	5	0	0	5	5	0	0	5	0	5	

Table 7. Primary and rectrice moult of Steppe Buzzard *Buteo buteo vulpinus* Specimen G, a second-year or older (EURING Code 4) male, wing 344 mm, from Qaisat, Kuwait, with estimated date of death 27 September 2002.

Primaries	Left and right	1	2	3	4	5	6	7	8	9	10	11	
Moult score		5	5	5	5	5	0	0	0	0	0	X	
Rectrices	Left	6	5	4	3	2	1	1	2	3	4	5	6	Right
Moult score		5	0	0	5	0	5	5	0	0	5	0	5	

Table 8. Primary and rectrice moult of Steppe Buzzard *Buteo buteo vulpinus* Specimen H, an unsexed second-year or older (EURING Code 4), wing 357 mm, from Qaisat, Kuwait, with estimated date of death 27 September 2002.

Primaries	Left and right	1	2	3	4	5	6	7	8	9	10	11	
Moult score		5	5	5	5	5	5	4	0	0	0	X	
Rectrices	Left	6	5	4	3	2	1	1	2	3	4	5	6	Right
Moult score		0	0	0	0	0	0	5	5	5	5	5	5	

Table 9. Primary and rectrice moult of Steppe Buzzard *Buteo buteo vulpinus* Specimen I, a fourth-year or older (EURING Code 8) female, wing 389 mm, from Qaisat, Kuwait, with estimated date of death 27 September 2002. (The right wing was damaged by gunshot and was not scored.)

Primaries	Left	1	2	3	4	5	6	7	8	9	10	11	
Moult score		10	10	10	10	10	0	5	5	5	5	X	
Rectrices	Left	6	5	4	3	2	1	1	2	3	4	5	6	Right
Moult score		10	5	10	5	10	0	10	10	5	10	5	10	

Table 10. Primary and rectrice moult scores of Steppe Buzzard *Buteo buteo vulpinus* Specimen J, a fourth-year or older (EURING Code 8) blackish female, wing 395 mm, from Qaisat, Kuwait, with estimated date of death 27 September 2002.

Primaries	Left and right	1	2	3	4	5	6	7	8	9	10	11	
Moult score		10	10	10	0	0	0	5	5	5	5	X	
Rectrices	Left	6	5	4	3	2	1	1	2	3	4	5	6	Right
Moult score		9	5	0	5	0	10	10	5	0	0	5	9	

Table 11. Primary and rectrice moult of Steppe Buzzard *Buteo buteo vulpinus* Specimen L, an unsexed fourth-year or older (EURING Code 8), wing 383 mm, from Qaisat, Kuwait, with estimated date of death 4 October 2002.

Primaries	Left and right	1	2	3	4	5	6	7	8	9	10	11	
Moult score		10	10	10	0	0	5	5	5	5	5	X	
Rectrices	Left	6	5	4	3	2	1	1	2	3	4	5	6	Right
Moult score		10	10	10	10	10	10	10	10	10	10	10	10	

Table 12. Primary and rectrice moult of Steppe Buzzard *Buteo buteo vulpinus* Specimen M, an unsexed second-year or (EURING Code 4), wing 375 mm, from Qaisat, Kuwait, with estimated date of death 11 October 2002.

Primaries	Left and right	1	2	3	4	5	6	7	8	9	10	11	
Moult score		5	5	5	5	5	5	0	0	0	0	X	
Rectrices	Left	6	5	4	3	2	1	1	2	3	4	5	6	Right
Moult score		5	5	0	0	0	5	5	0	5	0	0	5	

Table 13. Primary, secondary and rectrice moult of Steppe Buzzard *Buteo buteo vulpinus* Specimen N, an unsexed fourth-year or older (EURING Code 8), wing 379 mm, from Ras as Subiyah, Kuwait, with estimated date of death 4 October 2002. (The left wing was damaged by gunshot and was not scored.)

Primaries	Right	1	2	3	4	5	6	7	8	9	10	11		
Moult score		10	0	0	5	5	5	5	5	5	5	X		
Rectrices	Left	6	5	4	3	2	1	1	2	3	4	5	6	Right
Moult score		5	5	0	5	0	10	0	5	0	5	0	5	

Table 14. Primary and rectrical moult of Steppe Buzzard *Buteo buteo vulpinus* Specimen P, an unsexed second-year or older (EURING Code 4), wing 352 mm, at Hujaijah, Kuwait, with estimated date of death 4 October 2002.

Primaries	Left and right	1	2	3	4	5	6	7	8	9	10	11		
Moult score		5	5	5	5	5	4	0	0	0	0	X		
Rectrices	Left	6	5	4	3	2	1	1	2	3	4	5	6	Right
Moult score		5	5	0	5	0	5	5	0	0	5	0	5	

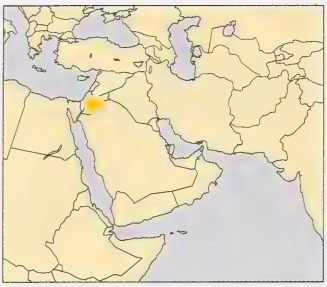
Table 15. Primary and rectrice moult of Steppe Buzzard *Buteo buteo vulpinus* Specimen Q, an unsexed second-year or older (EURING Code 4) unsexed individual, wing 369 mm, from Al-Abraq Al-Khabari, Kuwait, with estimated date of death 11 October 2002.

Primaries	Left and right	1	2	3	4	5	6	7	8	9	10	11		
Moult score		5	5	5	5	5	5	5	4	0	0	X		
Rectrices	Left	7	6	5	4	3	2	1	1	2	3	4	5	6	Right
Moult score		0	4	0	5	5	5	5	5	0	5	0	0	5	

Sandgrouse 25 (2): 132–142 2003

Phenology of passerine migration in central Jordan

FARES KHOURY



Spring and autumn passerine migration through central Jordan was studied for the first time, in 2002, at a plantation on the western fringe of the Eastern Desert of Jordan. Over 6600 individuals of 77 species were caught during the year, Blackcap *Sylvia atricapilla* being most abundant at both seasons. The field work revealed the true status of many species, previously considered very rare, e.g. River *Locustella fluviatilis* and Marsh Warblers *Acrocephalus palustris*. In general, the number of individuals and species was lower in autumn, except for a few species, e.g. Common Redstart *Phoenicurus phoenicurus* and Willow Warbler *Phylloscopus trochilus*, which were more common in autumn than in spring. A comparison with Eilat, in Israel, demonstrates that there is considerable variation in the migration patterns and stopover behaviour of some species at different sites in the region.

THE DIVERSITY AND NUMBERS of migrants passing through and pausing at various sites in Jordan have been a source of fascination to ornithologists and birdwatchers, whose observations have shed some light on the magnitude and timing of migration of several common or conspicuous species at a few sites (Wallace 1982, Nelson 1973, Andrews 1995). Nevertheless, our cumulative knowledge of the numbers and phenology of migrant passerines is still rather scant due to a lack of continuous observations, in addition to the difficulty of detecting many 'secretive' migrants. Recent research into passerine migration also suggests a great variation in the numbers of different species between sites in Jordan, attributable to the different habitats and geographical locations.

Most of the eastern populations of migrant birds, which winter in Africa, must cross the Middle East. This migration route has not been well studied, except at Eilat, and Jordan may lie at the crossroads for different species and populations that breed in various parts of Europe and Asia (Nelson 1973).

Here, I summarise some of the results of the first spring and autumn trapping seasons at the ringing station of the Hashemite University, at Dhleil, within an olive and fruit plantation on the western edge of the Eastern Desert. The work has already revealed much concerning the status of certain migrants and sheds light on the magnitude of passerine migration, at least in central Jordan. These results will be used as comparison with, and reference for, future studies on passerine migration in Jordan. The short-term research project at Dhleil also revealed the importance of agricultural landscapes as alternative stopover sites for migrants, given that natural habitats including the dense vegetation required by many migrant passerines, have disappeared in many areas of Jordan.

SITE LOCATION AND DESCRIPTION

Ringing activities were undertaken on a farm at Dhleil, c. 15 km east of Zarqa (32°04′N 36°12′E). The site was selected for its proximity to the Hashemite University and to study the importance of orchards and olive plantations in arid areas as stopover sites for migrants. The farm, which covers over 150 ha, contains mainly olive trees, which are irrigated due to insufficient precipitation in the area (annual mean c. 120 mm; Hashemite University Meteorological Station). Up to 10 ha are planted with various fruit trees, mainly cherry, apple, pear, peach, fig and pomegranate. The

fringes of the farm have semi-natural scrub vegetation and *Tamarix*, as well as rows of introduced *Acacia*, pines and *Casuarina*. There are also *Eucalyptus* and *Cypress* trees lining different sections and roads within the farm. The plantation is surrounded by rocky limestone hills, with sparse low scrub, and lies on the edge of the Eastern Desert plateau of Jordan, an area generally regarded as arid steppe. The Eastern Desert plateau itself possesses a very small number of sites with suitable habitat, which have a relatively low capacity for refuelling migrants due to their limited size and resources. The western fringe of the desert where the Dhleil station is located contains extensive farms with olive and alfalfa plantations. Such green areas were assumed to attract migrants within the generally arid surroundings. Today, most natural habitat in the area, which probably included denser steppe vegetation of bushes and low shrubs, as well as scattered reeds and pistachio trees in some wadis, have been lost or degraded due to overgrazing and reduced water resources.

METHODS

Trapping using mist-nets commenced on 28 February and continued daily until 24 May 2002, and on 24 August–6 November 2002. Forty-four, four-shelf nets, ranging in length from 7–14 m were erected in the different habitats of the farm. These included olive trees, orchards and the borders of the plantation. Nets were usually opened 24 hours per day, but were closed for a few hours around noon on several days in May, August and September when temperatures exceeded 30°C. The first net round was always performed during the first hour after dawn and the final check just after sunset. During the day, the nets were checked at least once per hour. Following identification and ringing, the age and sex of each individual were determined where possible and mensural data taken.

This report summarises the basic results of the spring and autumn seasons in 2002, including data on species diversity, numbers and timing. Recaptures were not considered within the analyses. The tables include the totals, first and last dates, and median dates of the four most numerous families of migrant passerines in Jordan: Turdidae, Muscicapidae, Sylviidae and Laniidae. The median date relates to that when half of the total for the season had been caught and was only calculated for those species trapped more than 15 times in a season. Diagrams illustrate migration phenology at a given season for species with more than 50 captures. For some species with a considerable resident, wintering or breeding population at the site, migration phenology diagrams are not presented, and medians were not calculated (e.g. Blackbird *Turdus merula*, Robin *Erithacus rubecula*, Olivaceous Warbler *Hippolais pallida* and Chiffchaff *Phylloscopus collybita*). Trapping periods were partitioned into pentads, i.e. periods of five days. The first spring pentad (no.12 of the year) was 25 February–1 March, while the last (no. 29) covered 21–25 May. The first autumn pentad (no. 48) was 24–28 August, while the last (no. 62) covered 2–6 November.

Annual variations, which may result from climatic and other environmental factors, could not be studied as ringing activities at Dhleil were part of a short-term project. For some species comparison is made with Azraq, where limited ringing activities were undertaken, for training purposes, on 2–3 weeks from mid-March to early April and from late August to late September 2002. These comparisons are based on personal communication with workers of the Royal Society for the Conservation of Nature (RSCN) involved in the ringing. Other comparisons are made with results from Eilat (Israel) in 1984–1993 (Morgan & Shirihai 1997), which is 350 km south-southwest of Dhleil.

RESULTS AND DISCUSSION

In general, the number of species and individuals were greater in spring than in autumn, with the exception of a few species, e.g. Tree Pipit *Anthus trivialis*, Common Redstart *Phoenicurus phoenicurus* and Willow Warbler *Phylloscopus trochilus*, which were caught in larger numbers at the latter season. The total number of birds trapped at Dhleil in spring 2002 was c. 4900 birds, of 77 different species, and in autumn c. 1800 of 58 species. These included residents and non-passerine migrants. The following account treats only migrant passerines. The commonest migrant in spring was Blackcap *Sylvia atricapilla* (1959 individuals), followed by Garden Warbler *S. borin*, Lesser Whitethroat *S. curruca* and Nightingale *Luscinia megarhynchos* (Table 1). Blackcap was also the most common species in autumn, followed numerically by Common Redstart, Chiffchaff *Phylloscopus collybita*, Lesser Whitethroat, Willow and Garden Warblers (Table 2).

Hirundinidae

Barn Swallow *Hirundo rustica* was an abundant and conspicuous migrant throughout both seasons, but only 36 were ringed in spring and 20 in autumn. Red-rumped Swallow *H. daurica* and House Martin *Delichon urbica* were only observed, mainly during April and as singles in early September, while two Sand Martin *Riparia riparia* were ringed on 28 April.

Motacillidae

Tree Pipit *Anthus trivialis* was the only pipit in the plantation observed in considerable numbers, nine being ringed between 30 March and 12 May, consistent with its spring phenology at Eilat (Morgan & Shirihai 1997). A Meadow Pipit *A. pratensis* was also ringed on 15 April. In autumn, Tree Pipit was fairly common; 36 were caught in early September–late October and the habitat at Dhleil appears to be suitable, especially in autumn, although it is rarely trapped at Eilat (Morgan & Shirihai 1997). Several Tawny Pipit *A. campestris* were observed at the edges of the farm in September. Wagtails were scarce and none was caught, although Yellow Wagtail *Motacilla flava* is a common migrant elsewhere, e.g. at Azraq, Aqaba (and Eilat) and in the Jordan Valley (Andrews 1995, Morgan & Shirihai 1997). White Wagtail *M. alba* is a common winter visitor in Jordan and started to appear at Dhleil in late October.

Turdidae (see Tables 1–2 for a complete list of species)

In spring, Rufous Bush Robin *Cercotrichas galactotes* was fairly common in the second half of the season, and c. 4 pairs bred at the plantation. Three of those ringed during spring were controlled in late August. All those trapped were of the nominate subspecies. Timing of spring migration at Dhleil was within the range noted at Eilat (Morgan & Shirihai 1997). Numbers were slightly lower in autumn than in spring, with most passing in late August–early September.

Robin *Erithacus rubecula* was also fairly common in the first half of spring, and the high number of recaptures in certain nets indicated that at least half of these wintered at Dhleil. It was less common in autumn, when 15 were caught in late October–November, presumably due to the species being a late arrival in the region. Robin overwinters in the Middle East in areas with trees and sufficient undergrowth. Given that Robin is rare at Azraq (pers. obs.) and Eilat (Morgan & Shirihai 1997), it appears to avoid crossing deserts on migration. No *Oenanthe* species were trapped or observed in the plantation, but several were observed at its edges and in the more open surroundings at both seasons. These included Northern *O. oenanthe*, Isabelline *O. isabellina*, Black-eared *O. hispanica* and Finsch's Wheatears *O. finschii*. The latter is also a winter visitor to the area surrounding the farm (pers. obs.).

The most numerous Turdidae were Nightingale *Luscinia megarhynchos*, Thrush Nightingale *L. luscinia* and Common Redstart *Phoenicurus phoenicurus* (Tables 1–2, Figs. 1–2). Peak spring migration for Nightingale (pentad 18: late March; Fig. 1a) occurred before the first Thrush Nightingale was trapped, and the latter peaked one month later (pentad 24: 26–30 April; Fig. 1b). This accords with results for these species from Eilat (Morgan & Shirihai 1997) and suggests that their differing migration phenologies reduce competition at stopover sites. In autumn, however, Nightingale was rare, while nearly 50 Thrush Nightingales were caught (Table 2). Thrush Nightingales originating from distant breeding areas may rest at suitable Middle Eastern sites. Given that most individuals had relatively high fat scores, it may be assumed that these may have paused their migrations to maintain water balance before crossing the Sahara. Most Nightingales were of the nominate and *L. m. africana* subspecies, but a few had measurements (e.g. tail length) intermediate between *africana* and *hafizi*.

Bluethroat *Luscinia svecica* was rare in spring and scarce in autumn (Tables 1–2), which is not unexpected as it prefers moist habitats with dense vegetation. The species is a winter visitor in Jordan (Andrews 1995), and as Bluethroat is common at Azraq in winter (pers. obs.) and at Eilat in spring (Morgan & Shirihai 1997), it readily crosses deserts on migration, unlike Robin.

Common Redstart was fairly common in spring and common in autumn (Tables 1–2, Figs. 1c, 2b). Similar seasonal variation occurs at Eilat (Morgan & Shirihai 1997), although it appears that larger numbers stopover at Dhleil in spring, probably due to the more suitable habitat (orchards and plantations). The first peak in mid-March (pentad 15, Fig. 1c) was clearly dominated by *P. p. samamiscus*, which was totally replaced by the nominate form after early April.

Over 100 Blackbirds *Turdus merula* were ringed in spring and, although resident at the site, numbers appeared to be augmented by winter visitors and/or migrants in the first half of the season. In autumn, 83, mostly immatures, were ringed, and 14 adults, trapped in spring, were controlled. This demonstrates that a large breeding population is present at the farm and that the species is expanding east into desert areas following the planting and growth of olive plantations. Song Thrush *T. philomelos* was common during the first half of spring and those caught had apparently wintered at Dhleil. The first individual appeared in late October and two were ringed in early November. The wintering population was estimated at more than 50 individuals. The species is rarely recorded further east, e.g. at Azraq, suggesting that it avoids crossing vast desert areas.

Sylviidae (see Table 1 for complete list)
Most warblers are secretive and many escape detection by birdwatchers. Ringing has thus revealed and will reveal in the future more concerning the true status of several migrant species in Jordan. A Grasshopper Warbler *Locustella naevia* was ringed on 10 May, the third record in Jordan of a very rare migrant in the region (Morgan & Shirihai 1997). River Warbler *L. fluviatilis* is a late-spring migrant: 15 were ringed within 11 days in May and many more were observed in the dense, low annual vegetation. Slightly larger numbers were caught in the first half of autumn, indicating that, even at this season, irrigated plantations are suitable stopover sites for this species, which was formerly considered rare (Andrews 1995). Savi's Warbler *L. luscinioides* was less numerous than the previous species at both seasons (Tables 1–2), in contrast with the situation observed at Eilat,

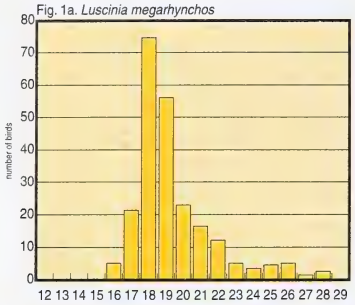


Fig. 1a. *Luscinia megarhynchos*

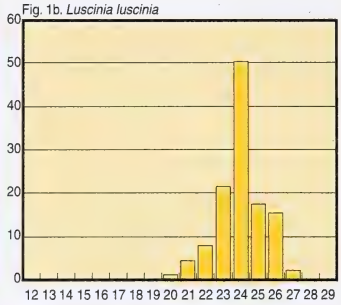


Fig. 1b. *Luscinia luscinia*

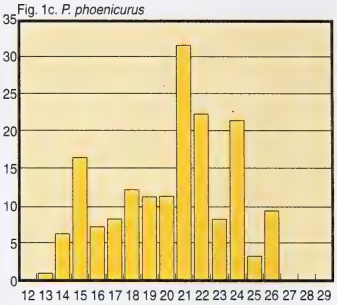


Fig. 1c. *P. phoenicurus*

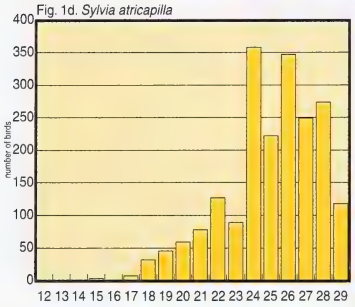


Fig. 1d. *Sylvia atricapilla*

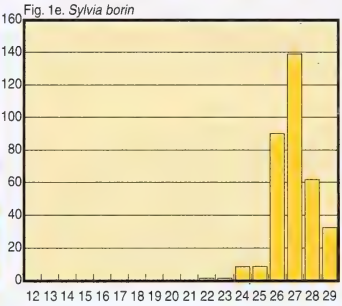


Fig. 1e. *Sylvia borin*

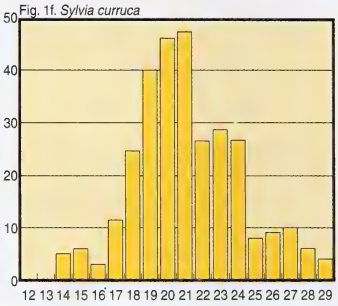


Fig. 1f. *Sylvia curruca*

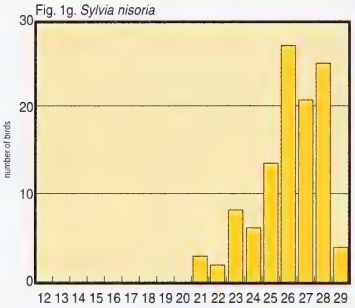


Fig. 1g. *Sylvia nisoria*

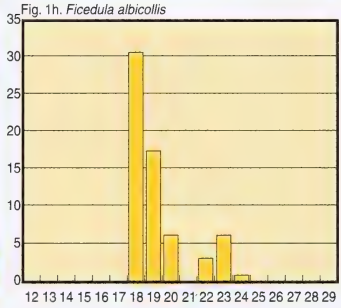


Fig. 1h. *Ficedula albicollis*

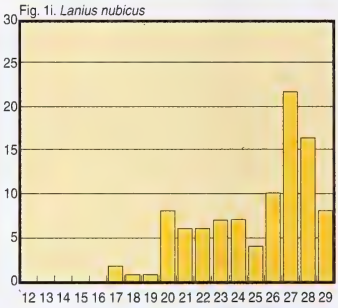


Fig. 1i. *Lanius nubicus*

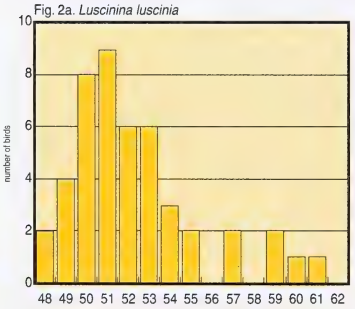


Fig. 2a. *Luscinina luscinia*

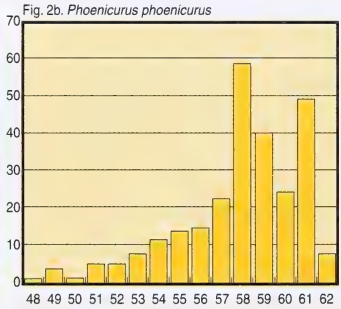


Fig. 2b. *Phoenicurus phoenicurus*

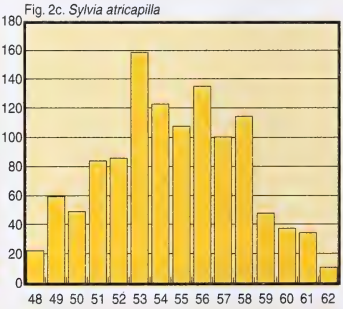


Fig. 2c. *Sylvia atricapilla*

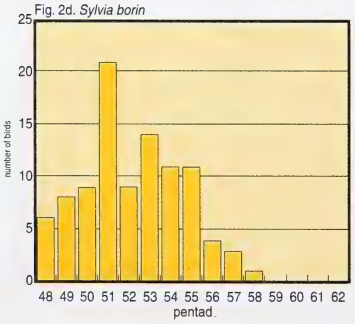


Fig. 2d. *Sylvia borin*

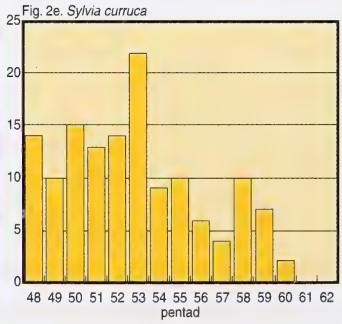


Fig. 2e. *Sylvia curruca*

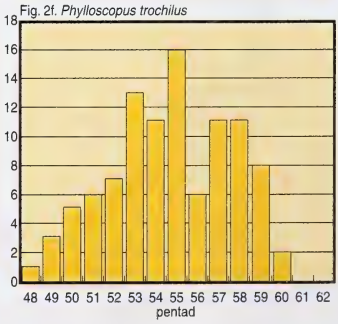


Fig. 2f. *Phylloscopus trochilus*

where Savi's Warbler is more common than River Warbler (Morgan & Shirihai 1997). This indicates that populations of the two species passing through the Middle East prefer different stopover habitats and may have different migration routes and strategies.

Sedge Warbler *Acrocephalus schoenobaenus* was rather scarce (Tables 1–2) due to the absence of suitable habitat: it was common at Azraq in late March–early April 2002 (K. Omari/RSCN pers. comm.) and is usually common at Eilat in spring (Morgan & Shirihai 1997). Smaller numbers are usually caught at the latter site in autumn, when the species tends to overfly much of the Middle East (Morgan & Shirihai 1997). Few Marsh Warblers *A. palustris* were caught in late spring, but it was more numerous in autumn (Tables 1–2). The same seasonal patterns are evident at Eilat (Morgan & Shirihai 1997) and the species is now considered a regular but uncommon spring and autumn migrant in Jordan. Thirty-five and 21 Reed Warblers *A. scirpaceus* were ringed in spring and autumn, suggesting that the species is flexible in its habitat selection during stopover if reeds are unavailable. Nevertheless, it was the commonest species caught in the reeds at Azraq in March–early April 2002 (K. Omari/RSCN pers. comm.), and it is common at the Eilat ringing station, which has reedbeds (Morgan & Shirihai 1997).

Olivaceous Warbler *Hippolais pallida* was common in spring but scarce in autumn (Tables 1–2) and had a similar migration phenology to that reported from Eilat (Morgan & Shirihai 1997). Much variation in size and plumage was evident, suggesting that several distinctive populations pass through the area. It also bred at high density at Dhleil, but local breeders had apparently departed by early August. Upcher's Warbler *H. languida* was trapped only twice in spring, and it is very rare at Eilat (Morgan & Shirihai 1997). Observations elsewhere in Jordan on passage are also few (Andrews 1995) suggesting that very few stopover in the Middle East close to the breeding areas (Shirihai 1996). The same may partially be true for Olive-tree Warbler *H. olivetorum*, which was caught only once in May, and may also take a more westerly route, mainly across the eastern Mediterranean.

Sylvia warblers were the most prominent migrant passerines, especially in spring (Tables 1–2). A Ménétries's Warbler *S. mystacea* was trapped at Dhleil on 5 April and five were caught around this period at Azraq (K. Omari/RSCN per. comm.). The species is regularly recorded in Wadi al Butm, in early April (Andrews *et al.* 1999), which lies between the two stations, but is very rare further west (Andrews 1995, Shirihai 1996). Orphean Warbler *S. hortensis* was fairly common in late March–late April, but only two were trapped at Azraq in the same period (K. Omari/RSCN per. comm.). Over 100 Barred Warblers *S. nisoria* were caught at Dhleil in late spring and the species can now be considered more common in Jordan than was previously known (Andrews 1995). Migration timing in spring is similar to that observed at Eilat (Morgan & Shirihai 1997), but numbers appear to be larger at Dhleil. In comparison to the previous species, it is a late migrant being most common in May (pentads 25–28; Fig. 1g). One Barred Warbler

Figure 1. Seasonal occurrence of the nine commonest migrant passerines belonging to four major families (see text) at Dhleil during spring 2002. a: Nightingale *Luscinia megarhynchos*, b: Thrush Nightingale *L. luscinia*, c: Common Redstart *Phoenicurus phoenicurus*, d: Blackcap *Sylvia atricapilla*, e: Garden Warbler *S. borin*, f: Lesser Whitethroat *S. curruca*, g: Barred Warbler *S. nisoria*, h: Collared Flycatcher *Ficedula albicollis*, and i: Masked Shrike *Lanius nubicus*.

Figure 2. Seasonal occurrence of the six commonest migrant passerines at Dhleil, Jordan, during autumn 2002. a: Thrush Nightingale *Luscinia luscinia*, b: Common Redstart *Phoenicurus phoenicurus*, c: Blackcap *Sylvia atricapilla*, d: Garden Warbler *S. borin*, e: Lesser Whitethroat *S. curruca*, and f: Willow Warbler *Phylloscopus trochilus*.

ringed at Dhleil in spring 2002 was recovered in Ukraine. Both Orphean and Barred Warblers were scarce in autumn, as they are at Eilat (Morgan & Shirihai 1997). Lesser Whitethroat *S. curruca* was common in both seasons. Migration phenology was similar to that observed at Eilat in spring (Fig. 1f), but it was fairly common at Dhleil in autumn, compared to Eilat (Fig. 2e; Morgan & Shirihai 1997). At Azraq, Lesser Whitethroat appears to be the commonest *Sylvia*, at least in spring (pers. obs.).

Garden Warbler *S. borin* was co-dominant with Blackcap *S. atricapilla* at Dhleil during May (Table 1, Fig. 1d–e), when up to 50 were trapped in a day. Though numbers may have decreased at Azraq since the 1960s (Andrews 1995), the species is still a very common spring migrant in western Jordan. Phenology at this season was much like that observed at Eilat. But, in autumn, Garden Warbler was still trapped in significant numbers, compared to Eilat where it is rather scarce, providing further evidence of overflying, rather than loop migration, as indicated by Morgan & Shirihai (1997). In autumn, Garden Warbler tends to briefly pause at certain sites with suitable habitat to maintain water balance before crossing the Sahara, and Eilat does not appear to be a preferred stopover. This pattern is even more pronounced in Blackcap, which was the most abundant migrant at Dhleil at both seasons (Tables 1–2). Several waves occurred in spring involving birds with different morphometrics, suggesting that they belonged to different populations. The first, small peak was in mid-April (pentad 22), and was apparently followed by at least two peaks in late April–May (Fig. 1d). A similar pattern was observed at Eilat in spring (Morgan & Shirihai 1997). The recapture rate for these species was also rather high in spring, indicating the importance of the site for refuelling at this season (Khoury in prep.). In May, Blackcaps were mainly caught in the orchards, where they fed on ripening cherries. Many had traces of *Eucalyptus* pollen on the chin and forehead, indicating that they were also foraging on nectar. In autumn, Blackcap was again the commonest species (Fig. 2c; see above). Several recaptures at this season showed increases in body mass and fat scores, indicating that they completed their preparation for crossing the Sahara at Dhleil. In autumn, most were observed and trapped in those orchards containing ripe apples, figs and pomegranates.

Chiffchaff *Phylloscopus collybita* is a winter visitor and migrant in Jordan, and many were caught during the first half of spring and second half of autumn (Tables 1–2). Willow Warbler *P. trochilus* was uncommon in spring and common in autumn (Tables 1–2, Fig. 2f). The migration patterns of these species were similar to those at Eilat (Morgan & Shirihai 1997).

Muscicapidae (see Table 1 for complete list)
Five species were trapped in spring, including one Red-breasted Flycatcher *Ficedula parva* (Table 1). Most common was Collared Flycatcher *F. albicollis*, with the main influx in late March–early April (pentads 18–20), followed by a smaller peak in late April (pentads 22–24; Fig. 1h). None was trapped in the same period at Azraq, suggesting that concentrations at stopover sites depend mainly on habitat quality. Even at Dhleil, there was an obvious pattern of distribution, with most individuals caught in and around the orchards and none along the edges of the plantation, where the vegetation consisted of scrub and Tamarix. *Ficedula* species are rarely trapped in Eilat in spring, and most are virtually absent in autumn (Morgan & Shirihai 1997). At Dhleil, Red-breasted Flycatcher was the only *Ficedula* caught in autumn, when it was more common than spring (Tables 1–2). The rarity/absence of other *Ficedula* in this region in autumn is probably due to differences in seasonal routes.

Oriolidae
Four Golden Oriole *Oriolus oriolus* were ringed between 23 April and 17 May, and 22 between 29 August and 30 September. The species appears to be more common in autumn, unlike the pattern observed at Eilat (Morgan & Shirihai 1997).

Laniidae
Masked Shrike *Lanius nubicus* was the most common shrike at Dhleil in spring (Fig. 1i), followed by the later-migrating Red-backed Shrike *L. collurio* (Table 1). In autumn, however, numbers of Masked Shrike were smaller, and it was outnumbered by Red-backed Shrike (Table 2). A similar pattern has been noted at Eilat (Morgan & Shirihai 1997).

Passeridae, Fringillidae and Emberizidae
Spanish Sparrow *Passer hispaniolensis* was recorded in the plantation in late February–late May, and at least 100 pairs were estimated to breed in the *Eucalyptus* trees. A total of 118 was ringed, in addition to 132 House Sparrows *P. domesticus*. All of the adult Spanish Sparrows had departed by August.

Chaffinch is a common winter visitor at the site and a scarce migrant. Twenty-two were ringed in spring, mainly in the first half (the last being on 14 April). Six were caught in autumn after 25 October. Two Common Rosefinch *Carpodacus erythrinus*, an adult female and a second-year, were trapped on 21 and 23 May at Dhleil, the second and third records in Jordan. The late record of two active migrants indicates that they originated from a population which breeds at high altitude or latitude.

Desert Finch *Rhodospiza obsoleta* is generally considered a resident but is included here as it probably undertakes seasonal movements. At Dhleil the first birds started appearing in March and by mid-April tens of pairs were breeding in the plantation. Twenty were ringed, including a few juveniles in

Table 1. Numbers of first traps in spring 2002 at Dhleil, Jordan, among the four principal bird families migrating through the region: Turdidae, Sylviidae, Muscicapidae and Laniidae.

Species	Total	First date	Last date	Median date
Rufous Bush Robin *Cercotrichas galactotes*	37	5 April	24 May	10 May
Robin *Erithacus rubecula*	36	28 February	5 April	
Thrush Nightingale *Luscinia luscinia*	118	7 April	12 May	27 April
Nightingale *Luscinia megarhynchos*	228	20 March	18 May	1 April
Bluethroat *Luscinia svesica*	3	5 March	5 April	
Black Redstart *Phoenicurus ochruros*	3	7 March	12 March	
Common Redstart *Phoenicurus phoenicurus*	168	4 March	9 May	12 April
Whinchat *Saxicola rubetra*	1	27 April		
Stonechat *Saxicola rubicola*	1	9 March		
Rock Thrush *Monticola saxatilis*	1	29 April		
Blackbird *Turdus merula*	107	28 February	24 May	
Song Thrush *Turdus philomelos*	45	28 February	16 April	

Grasshopper Warbler *Locustella naevia*	1	10 May		
River Warbler *Locustella fluviatilis*	15	6 May	17 May	8 May
Savi's Warbler *Locustella luscinoides*	8	17 March	28 April	
Sedge Warbler *Acrocephalus schoenobaenus*	8	24 April	17 May	
Marsh Warbler *Acrocephalus palustris*	4	16 May	17 May	
Reed Warbler *Acrocephalus scirpaceus*	35	1 April	24 May	8 May
Great Reed Warbler *Acrocephalus arundinaceus*	2	28 April	9 May	
Olivaceous Warbler *Hippolais pallida*	165	29 March	24 May	
Upcher's Warbler *Hippolais languida*	2	27 April	7 May	
Olive-tree Warbler *Hippolais olivetorum*	1	6 May		
Ménétries's Warbler *Sylvia mystacea*	1	5 April		
Sardinian Warbler *Sylvia melanocephala*	7	28 February	2 April	
Rüppell's Warbler *Sylvia rueppelli*	3	23 March	28 March	
Orphean Warbler *Sylvia hortensis*	43	15 March	8 May	13 April
Barred Warbler *Sylvia nisoria*	106	8 April	23 May	9 May
Lesser Whitethroat *Sylvia curruca*	298	8 March	24 May	11 April
Common Whitethroat *Sylvia communis*	32	15 March	19 May	11 April
Garden Warbler *Sylvia borin*	336	19 April	24 May	14 May
Blackcap *Sylvia atricapilla*	1959	5 March	24 May	5 May
Eastern Bonelli's Warbler *Phylloscopus* (*bonelli*) *orientalis*	22	21 March	21 April	1 April
Wood Warbler *Phylloscopus sibilatrix*	9	30 March	2 May	
Chiffchaff *Phylloscopus collybita*	126	1 March	19 April	
Willow Warbler *Phylloscopus trochillus*	36	10 March	20 May	14 April
Spotted Flycatcher *Muscicapa striata*	14	24 April	4 May	
Red-breasted Flycatcher *Ficedula parva*	1	20 April		
Semi-collared Flycatcher *Ficedula semitorquata*	5	23 March	4 April	
Collared Flycatcher *Ficedula albicollis*	63	27 March	2 May	1 April
Pied Flycatcher *Ficedula hypoleuca*	23	27 March	29 April	3 April
Red-backed Shrike *Lanius collurio*	28	15 April	18 May	7 May
Woodchat Shrike *Lanius senator*	1	14 April		
Masked Shrike *Lanius nubicus*	107	26 March	23 May	8 May

Table 2. Numbers of first traps in autumn 2002 at Dhleil, Jordan, among the four principal bird families migrating through the region: Turdidae, Sylviidae, Muscicapidae and Laniidae.

Species	Total	First date	Last date	Median date
Rufous Bush Robin *Cercotrichas galactotes*	25	25 August	16 September	30 August
Robin *Erithacus rubecula*	15	22 October	5 November	
Thrush Nightingale *Luscinia luscinia*	49	26 August	23 October	12 September
Nightingale *Luscinia megarynchos*	7	28 August	14 October	
Bluethroat *Luscinia svesica*	8	17 October	2 November	
Black Redstart *Phoenicurus ochruros*	2	23 October	3 November	
Common Redstart *Phoenicurus phoenicurus*	270	28 August	5 November	23 October
Whinchat *Saxicola rubetra*	1	17 September		
Stonechat *Saxicola rubicola*	1	21 October		
Blackbird *Turdus merula*	83	26 August	2 November	
Song Thrush *Turdus philomelos*	2	2 November	4 November	
River Warbler *Locustella fluviatilis*	19	24 August	24 September	30 August
Savi's Warbler *Locustella luscinoides*	4	5 September	11 November	
Sedge Warbler *Acrocephalus schoenobaenus*	2	1 October	2 October	
Marsh Warbler *Acrocephalus palustris*	17	25 August	12 October	12 September
Reed Warbler *Aceocephalus scirpaceus*	21	24 August	26 October	1 October
Great Reed Warbler *Acrocephalus arundinaceus*	2	12 October	14 October	
Olivaceous Warbler *Hippolais pallida*	27	25 August	2 October	30 August
Orphean Warbler *Sylvia hortensis*	16	25 August	13 September	4 September
Barred Warbler *Sylvia nisoria*	5	28 August	4 October	
Lesser Whitehroat *Sylvia curruca*	137	8 March	24 May	11 April
Common Whitethroat *Sylvia communis*	12	29 August	15 October	
Garden Warbler *Sylvia borin*	97	19 April	24 May	14 May
Blackcap *Sylvia atricapilla*	1180	5 March	24 May	5 May
Eastern Bonelli's Warbler *Phylloscopus* (*bonelli*) *orientalis*	1	1 September		
Wood Warbler *Phylloscopus sibilatrix*	2	22 September	22 September	
Chiffchaff *Phylloscopus collybita*	145	11 October	5 November	
Willow Warbler *Phylloscopus trochillus*	100	27 August	25 October	28 September
Spotted Flycatcher *Muscicapa striata*	38	4 September	24 October	21 September
Red-breasted Flycatcher *Ficedula parva*	9	1 October	5 November	
Red-backed Shrike *Lanius collurio*	26	26 August	22 October	14 September
Woodchat Shrike *Lanius senator*	1	29 August		
Masked Shrike *Lanius nubicus*	18	25 August	7 October	16 September

May. By August, the population had virtually disappeared from the plantation, though conditions were more suitable and water sources more available than in the surrounding desert. Thus, Desert Finch also behaved as a (local?) summer visitor (like Spanish Sparrow).

Ortolan *Emberiza hortulana* and Cretzschmar's Buntings *E. caesia* were trapped during spring at Dhleil, the former being common: a total of 124 was ringed between 13 April and 16 May. In autumn numbers trapped of both species were reduced.

CONCLUSIONS

Extensive agricultural projects in arid and semi-arid areas are important alternative stopover sites for migrants, provided they harbour sufficient cover for resting and food resources for refuelling. Central Jordan, although often overlooked by birdwatchers, lies on the route of a significant number of migrants. Most migrant passerines appear to have a (more or less) broad-front passage (Shirihai 1996). Nevertheless, marked differences exist between sites (e.g. Dhleil/Eilat/Azraq), which are attributable to different habitat types and quality. Many migrants may select more or less narrow routes, dotted with suitable habitat for stopover and refuelling. In Jordan, the issue of migration routes is quite complicated when considering the relative importance of a site for migrants. In addition to environmental factors mentioned above, there are considerations of local topography and the orientation of different populations passing through Jordan. To answer some questions concerning sites and migration strategies, ringing activities are to be continued and developed at Azraq. The establishment of a second permanent station in western Jordan will be considered once the scheme has sufficient support, particularly well-trained manpower.

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The first Siberian White Cranes *Grus leucogeranus* in Jordan

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ON 2 FEBRUARY 2001, NAH, Jihad Ahmad, Mahdi Qatrameezaq and Dr Zuhair Amr visited Qa' Khanna, a seasonally flooded mudflat 35 km north-west of Azraq, in the Eastern Desert of Jordan. While driving the edge of the flooded mudflat, NAH and JA saw three large birds roosting alone in shallow water near the edge of the qa'. They were clearly cranes, but the birds were white, not grey! Through 8x binoculars at a range of c. 200 m, they were quickly identified as cranes, rather than Spoonbills *Platalea leucorodia*, and further observation identified them as adult Siberian White Cranes *Grus leucogeranus*.

They were huge, larger than Common Crane *Grus grus*, with which the observers are familiar. Bill dark red, face red extended over the frontal two-thirds, and legs also red. The birds were unringed. After ten minutes, the observers approached to within c. 100 metres, when the group took flight without calling. In flight, the primaries were observed to be black and the upper third of the breast was rusty on all three birds, but their white bodies were otherwise unmarked. The birds were not seen thereafter.

Although this is the first authenticated record of the species in Jordan (having been accepted by the Jordan Bird Records Committee), there is some evidence to suggest that Siberian White Crane formerly occurred irregularly at Qa' al Azraq. Jihad Ahmad, a ranger with the Royal Society for the Conservation of Nature, from Azraq, observed white cranes, known by the common Arabic name 'hermel', there in the 1970s, but not since.

The conservation status of Siberian White Crane is considered Critical (BirdLife International 2000) with the western population consisting of at most 14 individuals, wintering at Fereidoonkenar and Esbaran on the southern Caspian Sea coast (Iran) since 1978, and breeding in Tyumen District, in Russia (Sadeghi-Zadegan 1999). In 2000/01, there were two (possibly three) groups each of three Siberian White Cranes in Iran. These birds use the Volga Delta as a stopover on spring (late March to mid-April) and autumn migration (August–September, sometimes later; Russanov *et al.* 1998), as the wildfowl that winter in Azraq are also thought to do (Nelson 1973).

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On the large gulls of the southern coast of Iran

PHILIPPE J. DUBOIS

IN THEIR PAPER concerning observations made in Iran in January–February 2000, Keijl *et al.* (2001) stated that Caspian *Larus cachinnans* and Heuglin's Gulls *L. heuglini* 'were present almost everywhere along the coast'. They further remarked that, 'apart from these taxa, no other large white-headed gulls were identified' (except for two possible Armenian Gulls *L. armenicus*).

I consider these statements to be not entirely accurate. Together with Marc Duquet, Serge Nicolle, Alain Perthuis and Henri-Pierre Roche, I visited Iran in February–March 2001 with the aim of paying particular attention to large white-headed gulls. Before our departure, I obtained as much information as possible concerning the identification of the main potential taxa in the region, because there were no reliable data for these species in Iran. My main sources were papers concerning observations made in the region (e.g. the Persian Gulf and especially Bahrain), namely Hirschfeld & Yésou (1997) and Jonsson (1998); my best secondary source was Martin Reid's website (http://www.martinreid.com/gullinx.htm), which contains very helpful photographs. Jonsson's paper provides very interesting material for the identification of Caspian and Baraba *L. c.* (?) *barabensis* taxa. Interested parties are referred to these sources for the detailed identification discussions therein.

Plate 1. Adult Baraba Gulls *L.* (*c.*) *barabensis* with adult Caspian Tern *Sterna caspia* on extreme left, Hara National Park, Qeshm Island, Islamic Republic of Iran, February 2000. The second bird on the right is very probably a Caspian Gull *L. c. cachinnans*, given that it has a slightly paler grey mantle, more white on the primaries and slightly larger size than the Baraba Gulls, which otherwise have a slender jizz and rather bright yellow bill. (*Philippe J. Dubois*)

Plate 2. Adult Baraba Gull *L.* (*c.*) *barabensis*, Hilleh/Bushehr, Islamic Republic of Iran, March 2000. Note the primaries with reduced white on p10 (absent on p9) and black on pp5–10 (some adults showing black onto p3 and the greater primary-coverts); also the absence of a subterminal white crescent (between the black tip of the primaries and the grey mantle) which is present in Pontic/Caspian Gull. (*Philippe J. Dubois*)

During our stay along the Iranian Persian Gulf coast, I carefully checked all of the gulls we saw in favourable conditions. The main concentrations where specific observations were undertaken were in Baluchistan (Chahbahar Bay, Beris harbour and the Sarbaz estuary/Govater), in the Bandar Abbas area and in the Hilleh/Bushehr areas (including Halileh harbour), thus overlapping with many of the areas visited by Keijl *et al.* (2001). Totals of c. 300 Heuglin's (including some 'light-backed Heuglin's Gulls' which are close to *taimyrensis*; M. Reid pers comm.; pers. obs.) and 180 'light grey-backed gulls' were seen. Of the latter group, I found that c. 87% (N=157) were Baraba Gulls whereas the others were Caspian (13%), of the eastern form, a pattern similar to the one found by Jonsson (1998) in Bahrain. Two individuals (one photographed) were clearly of the western form '*ponticus*' (an old name, given by Stegmann 1934 to those from the western part of Caspian Gull's range, which have a paler mantle and different primary pattern to populations breeding in the eastern part; see Jonsson 1998, Dubois 1998, Yésou 2002). A group of c. 2000 birds seen on 28 February east of Bandar Abbas probably comprised mainly Baraba Gulls.

Apart from the features mentioned by Jonsson (1998) and Reid, the Baraba Gulls we observed were mainly slightly smaller than Caspian, had a slimmer silhouette, an all-white head and a slightly greyer mantle than Caspian. The pattern of Baraba primaries was exactly as shown by Jonsson (1998) and Reid, especially the extensive black on pp10–8, which sometimes reached p3 and the outer greater coverts; p9 had a reduced white mirror. The best field feature in flight in good conditions was the absence of a small white 'ring' between the black of the tip of primaries and the rest of the feather, which is grey. Caspian Gulls almost always show these 'rings'.

Both taxa in the Persian Gulf have a subterminal black bar on the bill, but Baraba tends to have rather a bright yellow bill whereas Caspian has a paler, more greenish-yellow and slightly longer bill (but there is overlap). Caspian had dull yellow legs and Baraba bright yellow. The rather long bill and bright yellow legs mentioned by Keijl *et al.* (2001) point more towards Baraba than Caspian. Consequently, and contrary to Keijl *et al.* (2001) I consider that Caspian Gull is not the main 'light grey-backed' gull along the Iranian coast of the Persian Gulf (nor elsewhere in the region), rather Baraba probably is the dominant form (Jonsson 1988, Reid and *contra* Garner 1996 and Hirschfeld & Yésou 1997). Interestingly, at least on the basis of our counts, it appears that Caspian Gull is proportionately commoner in south-east coastal Iran (Baluchistan) than in the middle/western part (Persian Gulf), where *barabensis* dominates. It would be interesting to know more of taxa composition in western Pakistan, for example.

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A European Stonechat *Saxicola rubicola* in northern Iran

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EURASIAN STONECHATS consist of two quite distinct groups, currently best considered as two species (Wink *et al.* 2002), namely European Stonechat *Saxicola rubicola* and Siberian Stonechat *S. maurus*. (As the type-specimen of Stonechat *S. torquatus* is from South Africa, any taxonomy that recognises multiple species within this grouping must apply the name *rubicola* to European and west Asian birds; see Urquhart 2002.) The precise breeding and non-breeeding distributions of European Stonechat and the different forms of Siberian Stonechat (*S. m. maurus*, *S. m. variegatus* and *S. m. armenicus*) in the Middle East are relatively poorly known.

During a visit to the Islamic Republic of Iran, together with Raffael Aye, Reto Burri, Daniel Matti, Mathias Ritschard and Tobias Roth, I observed a female European Stonechat *Saxicola rubicola* in Parvar Protected Area (Semnan province; 35°57′N 53°35′E) in the Elburz Mountains, on 8 March 2001. The rump and uppertail-coverts were brown streaked dark, the breast and flanks were quite prominent orange-tawny, the bird had almost no pale supercilium and there was some dark feathering on the throat, features which exclude all forms of Siberian Stonechat *S. maurus* but are typical of female European Stonechat *S. rubicola* (Barthel 1992, Urquhart 2002).

Parvar Protected Area is within the breeding range of *S. m. armenica*. However, while in the Elburz range (in Mazandaran and Semnan provinces) in late February–early March 2001, we were unable to locate any other stonechats, suggesting that they had not returned from their wintering grounds in south-west Arabia, Yemen, Egypt and north-east Africa (Urquhart 2002), although Dubois *et al.* (unpubl.) observed *S. m. armenicus* in southern Iran during this period, a pair near Shiraz on 1 March 2001 and nine individuals near Bushehr on 5 March 2001.

In the Middle East, European Stonechat breeds throughout Turkey, except the montane east where it is replaced by *S. maurus armenicus*, and reaches its easternmost limits in Georgia, Azerbaijan and northern Armenia. During the non-breeding season it also reaches Cyprus, Israel, Jordan, Lebanon, Syria, the United Arab Emirates and, as a less common winter visitor, Saudi Arabia and Bahrain (Hirschfeld 1995, Richardson & Aspinall 1998, Urquhart 2002). In addition, there are old records in Iraq and it presumably occurs in Kuwait (Urquhart 2002). Due to low ornithological coverage in this region, it is possible that European Stonechat regularly winters in northern Iran, rather than our observation involving a vagrant. During the 1970s, when ornithological activity in Iran was perhaps at its peak, little attention was paid to the different forms of Stonechat (D. A. Scott *in litt.* to G. M. Kirwan 2003). Much is still unknown concerning the occurrence of European Stonechat and the different forms of Siberian Stonechat in the Middle East. Given increasing awareness of the different taxa among birdwatchers and illustrations of the majority in the major field guide to the region (Porter *et al.* 1996), it is to be hoped that these gaps in our knowledge can be filled in the near future.

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A new record of Long-tailed Tit *Aegithalos caudatus* in Syria

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ON 5 OCTOBER 2002, several Long-tailed Tits *Aegithalos caudatus* were observed in wooded hills above Slunfeh (50 km east-northeast of the coastal city of Al Lathqiyah) in the Jabal al Nusariyah range, western Syria. Initially, a few buzzy contact calls, typical of those given by small flocks/family groups, were heard in mid-morning on a west-facing slope just below the summit, at 1500 metres. Subsequently, three were seen at midday, at 1400 metres, within a small feeding flock also comprising several Coal Tit *Parus ater*. DSF compiled the following description: brown-grey mantle, blackish 'brows' on crown-sides and a pale creamy centre to the crown, a black throat patch that did not reach the upper throat, a slightly shorter tail than is typical of west European birds, and bold blackish streaks on the rear cheeks/neck-sides. The vocalisations were slightly different to west European birds, with the '*see-see-see*' call less persistent and the '*churrr*' note downward-inflected and deeper sounding. The flock was in woodland dominated by deciduous and evergreen broadleaf trees including at least four species of oak *Quercus* spp., two maples *Acer* spp., two whitebeams *Sorbus* spp., a hornbeam *Carpinus orientalis* and a cherry-like *Prunus* sp., mixed with a few conifers namely Cedar of Lebanon *Cedrus lebani*, Cilician Fir *Abies cilicia* and juniper *Juniperus* sp. shrubs. On 6 October, another flock of four Long-tailed Tit, with two Blue Tit *P. caeruleus*, was observed in a stand of mature oak *Quercus* sp., just below Slunfeh, at 1100 metres.

There appears to be only one previous record of *A. caudatus* in Syria, which is one of the most under-watched countries in the Middle East (Baumgart *et al.* 1995); Böcker (2001) observed four birds in Frouloq Forest, c.40 km north-east of Lattakia, on 5 April 1999.

There is extensive geographical variation in *A. caudatus* (Cramp & Perrins 1993) but those that we observed, unsurprisingly, conformed to the race *tephronotus*, fitting well descriptions presented by Harrap & Quinn (1996) and Roselaar (1995): essentially, a black lateral crown-stripe above the eye to the nape; a broad cream central crown-stripe extending onto the nape and adjoining the grey back, without a dark border to the upper mantle; ear-coverts heavily streaked dark grey/black; a small black bib with a narrow gorget of grey streaks on the upper breast; and pale buffish-grey underparts. Those we observed appeared, as noted above, slightly shorter tailed than west European races, e.g. *A. c. europaeus* and *rosaceus* (*tephronotus*

being substantially shorter tailed than many other races; Roselaar 1995). However, the tail length of those individuals we observed was variable; whether this may partially have been due to moult is unknown.

A. c. tephronotus is endemic to Turkey, where it reaches at least 2000 metres in the Pontics and 1500 metres in the Taurus, and breeds in the Aegean region, the Southern Coastlands including the Hatay, the Black Sea Coastlands, and very locally in East Anatolia, around Elazığ and Yüksekova. It is generally common over much of this range, with some winter intra-country dispersal (Roselaar 1995, Porter *et al.* 1996).

In Syria, Long-tailed Tit may occur as a resident breeding population along much of the wooded upland spine of the Jabal al Nusariyah, rather than our observations merely representing winter dispersal. Further observations are required to confirm this. It is possible that the Syrian population is isolated from the nearest known Turkish population in the Ziyaret Dağlari, as an area of semi-arid, heavily cultivated lowlands may separate these ranges. Further field work is necessary to establish whether the Syrian population is resident (as appears probable) or, perhaps, the result of autumn/winter dispersal from southernmost Turkey.

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Further observations and probable breeding of Mongolian Trumpeter Finch *Bucanetes mongolicus* in Armenia

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THE FIRST RECORD of Mongolian Trumpeter Finch *Bucanetes mongolicus* in Armenia involved 3–5 individuals in an arid gorge near Vedi, on 30 May 2001 (Beddard *et al.* 2002). The single juvenile observed did not appear to be proof that the species had nested in Armenia, but further observations in the area during May to July 2002 indicate that it does probably breed in the country.

The general characteristics of the Vedi gorge were described by Beddard *et al.* (2002). Typical passerines of the area are Finsch's Wheatear *Oenanthe finschii*, Upcher's Warbler *Hippolais languida*, Eastern Rock Nuthatch *Sitta tephronota*, Rock Sparrow

Petronia petronia, Pale Rock Sparrow *Carpospiza brachydactyla*, Trumpeter Finch *Bucanetes githagineus* and Grey-necked Bunting *Emberiza buchanani*.

During a visit to the area on 29 May 2002 at least three, and possibly six, Mongolian Trumpeter Finch were found, regularly visiting a small pool, even during strong dusty winds and rain showers, although they did so less frequently than other bird species in the gorge. Adult males, adult females and at least one juvenile with fully-grown flight feathers (Vinogradova *et al.* 1976) were observed. The species was seen on each subsequent visit to the site, on 3, 19 and 21 June and 10 July 2002. During continuous observation between 09.00 and 18.00 on 10 July 2002, parties and singles were seen visiting the pool to drink twice per hour for c. 1 minute and, occasionally, apparently to pick items from the ground, possibly grains of sand or grit to aid digestion. They were generally silent and only rarely called in flight, usually a disyllabic 'chik-chik' somewhat recalling a Linnet *Carduelis cannabina* but sharper in tone (see Beddard *et al.* 2002). Calls on the ground were a soft nasal 'vzhe' or disyllabic 'vzhe-vzhe'. No interspecific interactions with other species visiting the pool were noted. Once, adults were observed sand bathing. The juveniles appeared still dependent and usually 1–2 were observed accompanying an adult, although on several occasions on 10 July a group consisting of an adult and three juveniles was recorded.

Discussion

In the Western Palearctic, Mongolian Trumpeter Finch is restricted to eastern Turkey, north-west Iran and Nakhichevan (Cramp & Perrins 1994, Clement *et al.* 1993, Kirwan *et al.* 2000). Erroneous assertions concerning the species' occurrence in Armenia (Cramp & Perrins 1994, Clement *et al.* 1993) originate from the records of Bobrinsky (Leister & Sosnin 1942) from historical Armenia, which is now part of Turkey.

The species' discovery in Armenia is consistent with our knowledge of its distribution in Turkey (Kirwan & Konrad 1995, Kirwan *et al.* 2000). The nearest sites in the latter country are only 10 km from appropriate habitats in western Armenia, and c. 70 km from semi-deserts in the central-south of the country, including the Vedi hills. It is plausible that further ornithological field work will produce records in suitable areas of the extreme west and, in particular, the extreme south of Armenia; the species breeds sympatrically with Trumpeter Finch *Bucanetes githagineus* in adjacent Nakhichevan (Panov & Bulatova 1972) just 40 km west of the Armenian border. Observations in Turkey suggest that the species possibly lays more than one clutch per breeding season (Kirwan *et al.* 2000). In southern Transcaucasia (Nakhichevan), Panov & Bulatova (1972) found that Mongolian Trumpeter Finch has two broods per annum, with strong-flying juveniles from the first brood observed from 18 May, corresponding well with the timing of our observations in 2001 and 2002.

Plate 1. Mongolian Trumpeter Finch *Bucanetes mongolicus*, Vedi gorge, Armenia, 2002 (*Vasil Ananian*)

It is unknown whether the species was overlooked at Vedi prior to 2001 or whether, perhaps more likely, that it is a recent colonist. However, our observations may represent a 'temporary colonisation' or one of the 'irregular breeding' events described for the species elsewhere in its Asian range (Cramp & Perrins 1994), as none was found at Vedi gorge in 2003 during regular visits from 30 May to 24 June.

ACKNOWLEDGEMENTS

Guy Kirwan commented on earlier drafts of the note, Mark Finn and Zhanna Galian organised many of our trips, Jevgeni Shergalin and Pascal Wink provided some references, and Arthur Asrian drove and assisted us in the field.

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Second record of Swinhoe's Storm-petrel *Oceanodroma monorhis* at Eilat, Israel

REUVEN YOSEF, MARTIN RYDBERG-HEDEN AND REUBEN NIKOLAJSEN

AS A BREEDER Swinhoe's Storm-petrel *Oceanodroma monorhis* is restricted to the north-west Pacific Ocean, including the Sea of Japan and Russia (on Verkhovsky and islands off south-west Honshu, Shikoku and Kyushu). It may also breed in China and Korea (Enticott & Tipling (1997). However, the species has been reported as far away as the Pacific, Indian and Atlantic oceans (Harrison 1983, Shirihai 1996, Enticott & Tipling 1997, Svensson *et al.* 1999). It is normally pelagic, but also occurs in coastal waters, although little is known concerning diet or conservation status (del Hoyo *et al.* 1992).

In the Middle East, Swinhoe's Storm-petrel is considered a vagrant to the Arabian Sea, with most recent reports from the region coming from the eastern extremities of the Arabian Peninsula, particularly Oman (Kirwan 1999a,b, 2001). In Israel, the only record was one found dead on the North Beach, at Eilat, on 13 January 1958, following a severe southerly storm (Paz 1987).

Under similar weather conditions, i.e., in the aftermath of a strong southerly storm in the Gulf of Aqaba, a storm-petrel was recovered after flying into the window of a shoreline hotel in Eilat. It was brought alive to the International Birding & Research Center Eilat (IBRCE) on the morning of 8 September 2001. The bird died within three hours and after a period in deep-freeze at the IBRCE was transferred to the Zoological Museum, Tel Aviv University Zoological Collection, Tel Aviv, Israel (accession number AV15980). We identified the corpse as a Swinhoe's Storm-petrel due to its overall dark greyish-brown, almost black, plumage and moulted body feathers, with slightly paler

greater coverts forming an indistinct wingbar, white primary shafts contrasting with the rest of the flight feathers (Plate 2; Harrison 1983) and the black rump. The bird was moulting pp8–10 (8—¼, 9—½, 10—⅘). The length of p1 was 99 mm and the wing formula was as follows: p2 +4, p3 –1, p4 –6, p5 –13, p6 –15 and p7 –14. The biometrics were: wing chord 149 mm, tail length 80 mm, tail fork 12 mm, tarsus 26 mm, bill (to skull) 16 mm, total head length 39 mm, breadth of bill at nostrils 8 mm, and depth at base 6 mm. The only other species with which confusion is possible are Leach's Storm-petrel *O. leucorhoa*, which sometimes has very little white on the rump, and Matsudaira's Storm-petrel *O. matsudairae*. However, the former species was eliminated, as in the hand the Eilat individual could be seen to have an all-dark rump and possessed distinct white shafts to the primaries, as well as a heavy looking bill, although the tail fork was unusually shallow for *O. monorhis* (M. Carter *in litt.* to G. M. Kirwan 2003; see Enticott & Tipling 1997). *O. matsudairae* should typically show more conspicuous white primary shafts and a deeper tail fork than exhibited by the Eilat bird.

Following the 1958 record, this is the second record for Israel, although while the paper was under review a third was reported, again at Eilat, on 19 April 2003 (Barak Granit, Rami Mizrachi, Nir Sapir, James Smith and Arnon Tsairi *in litt.* to MEBirdNet). This bird, too, was subsequently taken into care and died (see *Birding World* 16: 150). Neither of these records has presently been circulated among the members of the Israel Rarities & Distribution Committee.

ACKNOWLEDGEMENTS

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Plates 1–2. Dead Swinhoe's Storm-petrel *Oceanodroma monorhis*, Eilat, Israel, September 2001. (*Reuven Yosef*)

REVIEWS & Recent Literature

Urquhart, E. (2002) *Stonechats: a guide to the genus Saxicola*. A. & C. Black, London. pp 320, 14 colour plates, 16 pp of colour photographs, maps, line drawings and sonograms, £37.

This is the second among the explosion of commercial avian monographs to be devoted to a single genus (the first, covering the *Sylvia* warblers was reviewed in *Sandgrouse* 23: 152). In common with the latter volume, it combines in-depth text, colour plates and photographs, quality maps and some original DNA research, albeit not by the author. Unlike the *Sylvia* tome, *Stonechats* offers a welterweight of detail (where available) concerning life history, breeding biology and other subjects purposely avoided by the authors of the former guide because they had generally been well covered by *BWP*. The present work is also, with the exception of the plates, photographs and genetic analysis mentioned above, the product of one devotee, rather than a team. In addition, *Stonechats* treats even fewer species, just 14 to be precise, despite considering *Saxicola torquata* as three species, one in Europe, one in Africa and the other in Asia, in line with the latest mitochondrial-DNA work (Urquhart tentatively predicts that this complex may undergo even further 'splitting' in the years ahead). If I may be permitted to dip a toe into the stormy sea of English names, I do wish that the author had employed a new name, perhaps Eastern Stonechat, for the *S. maurus* species group, rather than the one that has gained common currency in recent years. As Urquhart notes, Siberian Stonechat is a complete misnomer for four of the six forms he considers to comprise this grouping, and the breeding ranges of both of the others, *stejnegeri* and *maurus*, encompass large areas of the Asian landmass which are most definitely not part of Siberia.

I liked this book: the plates are attractive, the photographs constitute an extra (and welcome) dimension, the text appears to have been a clichéd labour of love and has the feeling of exhaustiveness, and the cartography is excellent. I will be amazed if it does not prove to be the 'last word' on the genus during my lifetime. Nonetheless, I did note some surprising omissions of relevance to this readership.

Urquhart appears to have consulted no literature on Turkish birds published since the late 1970s. Thus, Roselaar's (1995) invaluable discussion of the respective limits of *rubicola* and *armenicus* in that country goes unmentioned, which is especially remarkable if one is going to recognise these as members of different, rather than the same, species, as Urquhart does. It is surely worthy of note that Roselaar, one of Europe's foremost taxonomists, grappled unsuccessfully with the problem of which form breeds in a broad swathe of the eastern half of Turkey, whereas Urquhart apparently considers the situation to be quite clear-cut, and certainly maps it as such. He has searched, unsuccessfully, for concrete evidence of intergradation between *rubicola* and *armenicus* in this region, but the only modern work he cites on the issue is mis-referenced, and certainly far less authoritative a source than Roselaar. Just across the border, Urquhart suggests that *armenicus* may breed in Syria (citing two mid-20th-century references), but overlooks Baumgart's (1995) checklist which demonstrates, with reasonable confidence, this to be untrue. I noticed quite a number of examples of incorrect referencing, even in a moderately cursory perusal, possibly the most commonly recurring being mention of Shirihai's *The birds of Israel* having been published in 1995, when the correct date is 1996. Thus, I hope that other data have been better researched than the very few I specifically investigated.

Of course, these are minor hiccups and will do little, if anything, to detract from the work's usefulness to most users. However, it is difficult to be sure exactly who the readership of such a work will be. Like the *Sylvia* monograph, it offers far greater detail than the average birdwatcher could ever require. Equally, the end result is a super-looking product, and on that basis alone I hope that *Stonechats* finds its way onto as many Western Palearctic birders' shelves as possible.

Guy M. Kirwan

Wetlands International (2002) *Waterbird population estimates*. Third edn. Wetlands International (Global Series No. 12), Wageningen, The Netherlands. pp 226, many colour maps and colour photographs, no price available. Details from post@wetlands.agro.nl.

The latest edition of this important publication summarises the populations of 868 species and includes information on their conservation status, breeding range, population estimate and recent trend. Information on waterbird populations has been gathered from a wide range of sources, such as the International Waterbird Census, and regional and national census schemes and atlas projects from many parts of the world.

The introductory chapters explain the methodology used, define 'waterbirds', discuss Ramsar criteria and presents clear information on how to use the book. The summary chapter near the start of the book presents waterbird population totals in each of the world's six Ramsar regions (Africa, Europe, Asia, Oceania, the Neotropics and North America) and shows that the largest number of waterbird populations (687) occurs in Asia, followed by Africa (611) and the Neotropics (540). The best-researched populations are in Europe, where estimates are available for 97% of populations, and Africa (91%). Colourful pie charts summarise population trend (increasing, stable, decreasing, extinct etc.) in each of the Ramsar regions. The heart of the publication clearly presents the population estimates, species-by-species, enhanced by distribution maps and colour photographs. A colour-coding system is used to indicate the threat status of each species, an approach that works well. This will be an important reference for the designation of sites under international conventions and agreements, and for identifying Important Bird Areas.

Dawn Balmer

Yosef, R., Miller, M. L. & Pepler, D. (eds.) (2002) *Raptors in the new millennium. Proceedings of the World Conference on Birds of Prey & Owls*. International Birding & Research Center in Eilat. pp 276, several line drawings, 10 Euros (including post & packing) available direct from the International Birding & Research Center in Eilat (e-mail: ryosef@eilatcity.co.il).

This volume is the result of a joint meeting of the Raptor Research Foundation and the World Working Group on Birds of Prey held in Eilat, Israel, in April 2000. Reports covering a total of 109 research topics are presented here, most (79) as abstracts, the rest as full manuscripts. They are grouped according to the following broad themes: General & Techniques (ten), Diet & Foraging (four), Reproductive Ecology (16), Migration & Wintering Ecology (18), Population Status & Ecology (30), Genetics & Taxonomy (nine), Ecotoxicology & Diseases (13), and Conflicts & Solutions (nine). Few papers cover owls, and, geographically, Middle Eastern (especially Israel) and Eurasian studies are well represented. Thus, there should be plenty of interest to *Sandgrouse* readers. Australasian and South American research is particularly under-represented. In all, this is a substantial volume which serious raptor-philes will definitely want to own.

Guy M. Kirwan

Munira, G. (2002) *Looking at birds in Kyrgyz Republic, Central Asia*. Bishkek. ISBN 9967-424-07-9. Available for US$15 or €15, plus postage, from Blom, Abdumomunova Street 328, KGNU, room 105, Bishkek, Kyrgyzstan.

This useful little guide is in both Russian and English, and treats all species known from the country. The introduction covers the main habitats and places of interest for the birdwatcher. Over 400 species are detailed in the systematic list, with some additional notes on taxonomy. In addition, there are chapters on crane migration and waterbird populations and counts from Issyk Kul, one of main wetlands in the country. This clearly fills a useful gap for a country with little published information in English and, although the status notes are brief, the section on where to watch birds in the country should provide both resident and visiting birders with plenty of good birding.

Andrew Grieve

Around the Region

compiled by
Dawn Balmer and Keith Betton

Records in *Around the Region* are published for interest only; their inclusion does not imply acceptance by the records committee of the relevant country. All records relate to 2003 unless otherwise stated.

Records and photographs for *Sandgrouse* 26 (1) should be sent by 15 January 2004, to Around the Region, OSME, c/o The Lodge, Sandy, Bedfordshire SG19 2DL, UK; or atr@osme.org

Bee-eaters
Merops apiaster
by D. Powell

ARMENIA

At least two pairs of **Spoonbill** *Platalea leucorodia* were apparently nesting at Armash Fishponds in spring 2003, the first breeding record for 50 years. A visit to Lake Sevan, on 11–14 January, produced 21 immature **Mute Swan** *Cygnus olor*, the fifth record for Armenia, and 35 **Bewick's Swan** *C. columbianus*, the second record. A count of 94 **Goldeneye** *Bucephala clangula* was the third record. The highest national counts of **Smew** *Mergus albellus* (229+) and **Goosander** *M. merganser* (160+) were also made. On 5 April, 200 **Demoiselle Crane** *Anthropoides virgo* were observed in Yerevan. At Armash Fishponds, on 19 May, two **Grey Plover** *Pluvialis squatarola* (eighth record), two **Terek Sandpiper** *Xenus cinereus* and a first-summer **Caspian Tern** *Sterna caspia* (fourth record) were present. A record 1413+ **Great Black-headed Gull** *Larus ichthyaetus* were at Lake Sevan, on 11–14 January. A first-summer **Mediterranean Gull** *L. melanocephalus* at Armash Fishponds, on 19 May, was the second record. A few adults and a juvenile **Red-tailed Wheatear** *Oenanthe xanthoprymna chrysopygia* in the Urts Mountains, on 9 and 24 June, were more than 300 km north-west of previously known breeding areas. A singing male **Moustached Warbler** *Acrocephalus melanopogon* at Armash Fishponds, on 9 June, was the second breeding-season record in the last 70 years. The latest-ever spring arrival date of **Pale Rock Sparrow** *Carpospiza brachydactyla* was recorded, with the first males arriving on 20 June.

BAHRAIN

A pair of **Western Reef Heron** *Egretta gularis* was observed copulating at Ras Tubli, on 11 May. At Al Rakkiyah Farm, Mukinas, a juvenile **Long-legged Buzzard** *Buteo rufinus* was observed on 18 January.

CYPRUS

At Polemidhia Dam, four adult **Night Heron** *Nycticorax nycticorax* and five fledged juveniles and two further nests were observed on 26 July; the first confirmed breeding since 1982. Five adult **Squacco Heron** *Ardeola ralloides* at Phassouri reedbeds on 26 July was an unusual number for the summer. Two adult and four immature **Mute Swan** *Cygnus olor* were at Zakaki marsh, in January, then at Akrotiri salt

lake until 1 March. Up to 13 **Ruddy Shelduck** *Tadorna ferruginea*, an unusually large flock, were in the Larnaca area in January/February. At Larnaca sewage works in June, 260 predominately juvenile **Mallard** *Anas platyrhynchos* were recorded, an unprecedented breeding number. Also at Larnaca sewage works were seven **Ferruginous Duck** *Aythya nyroca* on 23 February, and a male and two females were at Phassouri marsh until at least 25 March, a late date. A first-winter **White-headed Duck** *Oxyura leucocephala* remained in the Larnaca area from January until 9 March. Also there was a **White-tailed Eagle** *Haliaeetus albicilla* from 17 January until 4 March, the seventh record and the first since 1978. A **Rough-legged Buzzard** *Buteo lagopus* in the Paphos area, on 26 January, was also the seventh record. A second-calendar-year **Golden Eagle** *Aquila chrysaetos* was seen in the Troodos, on 2 April; the second accepted record (the first was in 1973). A **Hobby** *Falco subbuteo* on Mount Olympus on 25 July and another at Polemidhia Dam, on 26 July, were in unusual locations. At Spiros beach, an **Oystercatcher** *Haematopus ostralegus* was present on 5 March. A **Cream-coloured Courser** *Cursorius cursor* at Akrotiri, in April, was an excellent record (not yet accepted).

An adult **Audouin's Gull** *Larus audouinii* on 27 June at Larnaca sewage works was unseasonal. On 18 April, an adult **Caspian Tern** *Sterna caspia* was at Larnaca sewage works and probably the same bird was at Kiti Dam an hour later. For the second consecutive year **Common Tern** *S. hirundo* attempted, unsuccessfully, to breed at Larnaca sewage works. Three pairs of **Little Tern** *S. albifrons*, including a pair with three fledged juveniles, were there on 27 June; the first successful breeding by this species since 1946. Late records of **Pied Kingfisher** *Ceryle rudis* at Evretou Dam, on 10 May and 6 June, were made. The highest-ever number of **Blue-cheeked Bee-eater** *Merops persicus* was recorded in April, involving perhaps over 50 individuals. The first breeding for many years of **Short-toed Lark** *Calandrella brachydactyla* involved a pair nest-building in the Larnaca area, on 3 June and still present on 27 June. Single **Red-tailed Wheatears** *Oenanthe xanthoprymna* at Akrotiri, on 6 April, and at Paphos lighthouse, on 18 April, will be the 2nd–3rd records, if accepted. There was a noticeable influx of **Rüppell's Warbler** *Sylvia rueppelli* during March, whilst a **Desert Warbler** *S. nana* in the Paphos area, on 29 January, was unusual (possibly the same bird was also seen on 3 March). **Rose-coloured Starling** *Sturnus roseus* was seen at Oroklini marsh, on 2 May, and two were at Coral Bay, on 6 May. **Trumpeter Finch** *Bucanetes githagineus* is less than annual on Cyprus, thus one at Paphos, on 17 April, and another (not yet accepted) at Spiros Pool, on 11 May, were noteworthy.

EGYPT

A **Three-banded Plover** was reported at El Gouna golf course on 13 March; the fourth Egyptian and Western Palearctic record. A count of 41 **White-tailed Plover** *Chettusia leucura* was made along the River Nile between Luxor and Aswan, in January. At least three, possibly four, **African Pied Wagtail** *Motacilla aguimp* were at Abu Simbel, in January. A male **Cyprus Warbler** *Sylvia melanothorax* was at Wadi Hagul road, on 3 January.

GEORGIA

Eleven **Red-throated Diver** *Gavia stellata* at sea between Tsikhisdziri and Batumi, on 17 December 2002, was the highest recent day count. Around 220–225 **Pygmy Cormorant** *Phalacrocorax pygmeus* were at Lake Jandari, Kvemo Kartli province, on 22 November 2002, with 560 on 27 December 2002, and an adult on 11 May. A **Black Stork** *Ciconia nigra* near Samtredia, in the River Rioni floodplain, on 2 November 2002, was very late. An adult **Lammergeier** *Gypaetus barbatus* at Goderdzi Pass, Ajaria, on 26 August 2002, was significant. A single **Black Vulture** *Aegypius monachus* was near Rokîti, Baghdadi district, on 7 September 2002, the first record for the area. Five **Caucasian Black Grouse** *Tetrao mlokosiewiczi* were in the Kazbegi area (northern Georgia), on 6–11 May, and at least ten pairs/calling male **Caucasian Snowcock** *Tetraogallus caucasicus* were in the same area. Three **Dotterel** *Charadrius morinellus* at the Kura River, near lower Khashuri town, on 9 November 2002, was a significant record. A **White-tailed Plover** *Chettusia leucura* at Khanchali Lake, on 30 August 2002, was the fifth record since 1973, but the second in the area. On 1 December 2002, six **Great Black-headed Gull** *Larus ichthyaetus* were at the Kura River, lower Gori, a high number for the site; a third-calendar-year was at Jandari Lake on 11 May. Twenty-five **Güldenstadt's Redstarts** *Phoenicurus erythrogastrus* were in the Kazbegi area, on 6–11 May. A **Red-breasted Flycatcher** *Ficedula parva* in Batumi Botanical Garden, on 29 October 2002, was very late. On 11 December 2002, four **Great Rosefinch** *Carpodacus rubicilla* were at the Thethri Aragvi River, near Zemo Mlethi, which was an unusual location for the species.

ISRAEL

One of the **Little/Audubon's Shearwater** *Puffinus assimilis/lherminieri* complex was off Eilat on 18–19 April. One, possibly two, **Streaked Shearwater** *Calonectris leucomelas* were off Eilat north beach, on 2 February; the third country record if accepted. Continuing the excellent run of seabirds, the third record of **Swinhoe's Storm-petrel** *Oceanodroma monorhis* was one found exhausted at Eilat, on 19 March, which later died (see also Yosef *et al.*, this issue). An adult **Brown Booby** *Sula leucogaster* off Eilat, on 19 April, was the first since 1999. At least 23 **Crested Honey Buzzards** *Pernis ptilorhynchus* migrated over Eilat and the southern Arava during mid-March to mid-May, and a second-calendar-year **Tawny Eagle** *Aquila rapax* over Yotvata, on 18 March, will be the fifth record if accepted. An adult **Red-necked Stint** *Calidris ruficollis*, the first for Israel, was well watched at Eilat sewage works and km 20 saltpans, on 15–22 April. **Long-tailed Skuas** *Stercorarius longicaudus* were off Eilat on 26 April and 3 July. A summer-plumaged adult **Franklin's Gull** *Larus pipixcan* at Eilat, on 3–5 June, will be the first for the Middle East, if accepted. A first-winter **Audouin's Gull** *L. audouinii* at Rehafim, Bet Shean Valley, on 24 January, and one at Eilat, on 18 February, were unusual winter records. The first winter record of **Lesser Crested Tern** *Sterna bengalensis* was one at Eilat, on 2–4 February. A count of 24 **Bridled Terns** *S. anaethetus*

at Eilat, on 21 July, was impressive. Two **Saunders's Tern** *S. saundersi* at Eilat, on 15–16 July, will be the fourth record if accepted. A record 20 **Striated Scops Owls** *Otus brucei* were scattered in wadis over the southern Arava Valley and Eilat Mountains, during the midwinter census between November 2002 and mid-February, with most in the Lotan–Yahel area. A remarkable invasion of **Thick-billed Larks** *Rhamphocoris clotbey* into the Arava and southern Negev involved up to tens daily in late February to late March. There were also may **Hoopoe Larks** *Alaemon alaudipes* and **Temminck's Horned Larks** *Eremophila bilopha* in the area. A **Brown-throated Sand Martin** *Riparia paludicola* was at Eilat, on 1 July, the third record if accepted. A pair of **Black-headed Wagtails** *Motacilla flava feldegg* bred at Neot Hakikkar, southern Dead Sea, in early June; this subspecies is known to regularly breed in Israel only in the Hula Valley. During mid-March to mid-April four different **Black Bush Robins** were at Eilat and another two at Yotvata and one at Quetura. On 2–3 May a female **White-throated Robin** *Irania gutturalis* was on Mount Gilboa and an adult male was ringed at Mount Hermon on 18 July. Five **River Warblers** *Locustella fluviatilis* were ringed at Jerusalem Bird Observatory, on 8–9 May, with several more in the southern Arava. A **Ménétries's Warbler** *Sylvia mystacea* overwintered at Wadi Zihor, southern Negev; the third January record. Also overwintering was a **Yellow-browed Warbler** *Phylloscopus inornatus* near Be'er Sheva, and a **Hume's Yellow-browed Warbler** *P. humei* and a **Rose-coloured Starling** *Sturnus roseus* at Jerusalem Bird Observatory.

Space prevents us from mentioning the large number of records recently accepted by the Israel Records & Distribution Committee, which can be viewed at: http://www.geocities. com/ birdingisrael/RC/Rarities_ Committee.html.

JORDAN

A **Merlin** *Falco columbarius* was seen daily in February–March near Hashemite University, Zarqa. On 2 February, over 100 **Pallid Swifts** *Apus pallidus* were at Ghor Safi. A **Fan-tailed Cisticola** *Cisticola juncidis* singing near Karamah Reservoir, Jordan Valley, on 4 March, was the first evidence of breeding for several decades. On 7 March, 68 **Jackdaws** *Corvus monedula* were at Pella, Jordan Valley; previously there were fewer than five pairs in this area. In January to late February, up to 200 **Starlings** *Sturnus vulgaris* wintered near the Hashemite University, Zarqa.

KUWAIT

The second breeding record of **Little Bittern** *Ixobrychus minutes* was confirmed when a recently fledged juvenile was observed at Judailiyat, on 31 May 2002. Three **Caspian Plovers** *Charadrius asiaticus* at Khor Ala'ma, on 16 August 2002, were slightly unseasonal. On 29 November 2002, four **Great Black-headed Gulls** *Larus ichthyaetus* at Raz Az Zor was an early winter record. A male **Pin-tailed Sandgrouse** *Pterocles alchata* at Judailiyat, on 14 June 2002, was the only record that year, although 'hundreds' were reportedly shot in the north of the country between January and April. A **Redwing** *Turdus iliacus* near Jahra, on 20 December 2002, was the first since 9 December 1994. **Orphean Warbler** *Sylvia hortensis* is a scarce autumn visitor to Kuwait, thus one at Raz Az Zor, on 20 September 2002, was significant. Five **Red-breasted Flycatcher** *Ficedula parva* near Jahra, on 1 November 2002, was a record day tally for the species. An expedition to Kubbar Island (Kuwait's largest seabird colony), in June, found a pair of **House Crow** *Corvus splendens* nesting on the communication tower; the birds presumably arrived by ship.

The following have been accepted by the Kuwait Ornithological Records Committee: **Black Vulture** *Aegypius monachus* (Wafra oil field, 27 September 2002; the seventh record), **Little Swift** *Apus affinis* (Abu Halifa, 1 April 1997, the fourth record, and one at Jahra Pool, 5 March 1999, the fifth record) and **Yellow-browed Warbler** *Phylloscopus inornatus* (Jahra area, 20 December 2002; the ninth record).

OMAN

Two **Intermediate Egrets** *Egretta intermedia* were at Khor Rouri, on 16 May, and six **Abdim's Storks** *Ciconia abdimii* at Al Qurm Park, on 2 January, followed by six at Raysut, on 2 May. The first record of **Whooper Swan** *Cygnus cygnus* involved six at Al Ansab lagoons, on 2 January, one of which remained until 5 January. A single was then at Quriyat, on 10 and 31 January. A **Greylag Goose** *Anser anser* was at Hilf, on 12 February, and three at Sohar Sun Farms, on 20 February, and two **Red-crested Pochards** *Netta rufina* were at Quriyat on 3 January. A **Griffon Vulture** *Gyps fulvus* was north of Barr al Hikman, on 17 January. A **Shikra** *Accipiter badius* at Sohar Sun Farms, on 21 March, was only the eighth record. Impressive numbers of raptors were at Salalah lagoons, on 3 January, with a minimum 20 **Greater Spotted Eagles** *Aquila clanga*, 160 **Steppe Eagles** *A. nipalensis* and 30 **Imperial Eagles** *A. heliaca*. A **Lanner** *Falco biarmicus* was at Ash Shuwaymiyah, on 2 February. Twenty-four **Common Cranes** *Grus grus* at Dibab, near Quriyat, on 24 January, was a new record count of an uncommon migrant. A **Water Rail** *Rallus aquaticus* was at Al Qurm Park, on 3–4 January, and a **Red-knobbed Coot** *Fulica cristata* at Khor Sawli, on 22 May. A single **Spur-winged Plover** *Hoplopterus spinosus* was at Al Buraymi sewer, on 7 February. A **Great Snipe** *Gallinago media* at Montasar, on 9 February, would be only the 11th record if accepted. Three **Little Terns** *Sterna albifrons* were at East Khor, Salalah, on 10 April, followed by 20 at Al Qurm Park, on 11 April. An impressive 2800 **Chestnut-bellied Sandgrouse** *Pterocles exustus* were at Ayn Najir, on 7 March. Three **Rufous Turtle Doves** *Streptopelia orientalis* were at Hilf, on 12 February, the same day that six **Koels** *Eudynamys scolopacea* were present. Two **Hume's Tawny Owls** *Strix butleri* were at Ash Shuwaymiyah, on 4 February. A new country record involved an adult and immature **Wire-tailed Swallow** *Hirundo smithii* at Sohar Sun Farms, on 7 February, and again on 20–21 February. Three **Meadow Pipits** *Anthus pratensis* at Hilf would be only the seventh record if accepted, and two **Grey Hypocolius** *Hypocolius ampelinus* at Montasar, on 9 February, only the ninth record if accepted. It was a good spring for **Ring Ouzels** *Turdus torquatus*, with a single at Sayh on 9 January, followed by two at Sayq Plateau on 20 February, with one on 27 February

and another at Sayh the same day. The third record of **Dusky Thrush** *T. naumanni* was of two at Qatbit, on 3 January and still present on 8 February, with one remaining until 10 February. Two **Mistle Thrushes** *T. viscivorus* at Hilf, on 12 February, and a single at Sayq Plateau, on 20 and 27 February, represented the 5–6th records. A **Savi's Warbler** *Locustella luscinioides* was at Al Ansab lagoons, on 15 February, with it or another there on 4 April (both records under review, but would be the 8–9th if accepted). Single **Great Reed Warblers** *Acrocephalus arundinaceus* were at Jarziz Farm, on 12 February and another was at Al Ansab lagoons, on 15 February, and two **Plain Leaf Warblers** *Phylloscopus neglectus* were at Al Qurm Park, on 2 January. An **Eastern Bonelli's Warbler** *P. orientalis* at Ayn Najir, on 7 March, was the first record. A **Hume's Yellow-browed Warbler** *P. humei* was at Al Weem Gardens, Khasab, on 11 April (not yet accepted). A **Hume's Lesser Whitethroat** *Sylvia* (*curruca*) *althaea* at Qatbit, on 13 April, was the second record (not yet accepted). Two **Bay-backed Shrikes** *Lanius vittatus* were at Ar Rawdah, on 10 April (the sixth record), and a **Long-tailed Shrike** *L. schach* (first seen in October 2002) remained at Al Qurm Park until 24 February. A flock of **Bank Mynahs** *Acridotheres ginginianus* at Buraymi, on 2 May, was only the fourth record, although the species is evidently spreading. An **Amethyst Starling** *Cinnyricinclus leucogaster* at Al Beed Farm, on 6 February, would be a new record for Oman, if accepted, and the first in the Middle East away from breeding areas in Saudi Arabia and Yemen. A **Grey-necked Bunting** *Emberiza buchanani* was at Sayh, on 10 April (second record), and a **Little Bunting** *E. pusilla* at Jabal Hareem, on 21 April—only the 2nd record if accepted. Large counts involved 30 **Black-headed Buntings** *E. melanocephala* at Ar Rawdah, on 10 April, and 20 **Spanish Sparrows** *Passer hispaniolensis* at Al Qurm Park, on 23 January.

SAUDI ARABIA

Records from the Jubail area included c. 80 **Black-necked Grebes** *Podiceps nigricollis* off Abu Ali Island, on 13 November. A **White-breasted Kingfisher** *Halcyon smyrnensis* was in Deffi Park, from 20 February to 6 March. A singing **Tawny Pipit** *Anthus campestris* was over coastal sand dunes, on 22 April (but not subsequently), and a **Red-breasted Flycatcher** *Ficedula parva* was present on the early dates of 14–18 September. A **River Warbler** *Locustella fluviatilis* was ringed on 12 October; there are few Arabian records away from Kuwait, where it is an occasional passage migrant. An **Isabelline Shrike** *Lanius isabellinus* of the race *phoenicuroides* was present on 16–17 July (the first record for that month). Up to 1200 **Starlings** *Sturnus vulgaris* were at the Sanitary landfill, on 19 December. A **Common Rosefinch** *Carpodacus erythrinus* was seen on 20 March, one having been present on 16 March 2002. Single **Black-headed Buntings** *Emberiza melanocephala* were at two different locations on 25 April; there are just two previous April records in Eastern Province.

A number of records were made at Sabkha al Fasl, Jubail (an artificial wetland). A **Black Stork** *Ciconia nigra* was present on 9 April and an immature **Bewick's Swan** *Cygnus bewickii* on 3 January; the first record for eastern Saudi. **Shelducks** *Tadorna tadorna* were present on 15 November–4 April: the main influx was in early December and numbers peaked at 2335 on 9–17 January. **Greater Spotted Eagle** *Aquila clanga* was present on all visits between 1 November and 25 April, with a maximum 12 on 7 December. **Avocet** *Recurvirostra avosetta* is resident and a winter visitor, with up to 100 pairs breeding in most years; up to 1600 were present on 29 November–7 December. Late-summer and early-autumn 2002 estimates of **Kentish Plover** *Charadrius alexandrinus* included 5000 on 26 July and 2000 on 16 August. A **Pintail Snipe** *Gallinago stenura* was present on 4–11 October, with three on 21 February and one still present on 7 March. A flock of 60 **Green Sandpipers** *Tringa ochropus* was there on 16 August. A **Richard's Pipit** *Anthus richardi* was found on 7 December.

On the west coast there were three **Richard's Pipits** at the Holiday Inn, Yanbu al-Bahr, on 11–14 February, with two on 15 February. At Dhahran sewage effluent lake a pair of **Great Crested Grebes** *Podiceps cristatus* reared four young by early May, the fourth consecutive year the species has bred successfully in Arabia. A **Ruddy Shelduck** *Tadorna ferruginea* was there briefly on 27 February. A **Spotted Crake** *Porzana porzana* was present on 8–11 May at least; another was nearby on 15–16 May. The highlight, however, was a **European Golden Plover** *Pluvialis apricaria* in spray-field margins on 3–4 January; there are three just previous country records. A **Black Kite** *Milvus migrans* was there on 20 May, the third spring record from Dhahran in the last eight years. A juvenile **Greater Spotted Eagle** was seen on 21 March. Other sightings around Dhahran included two **Blue-cheeked Bee-eaters** *Merops persicus* on 25 April and 18 May, with a single on 22 May, two **European Rollers** *Coracias garrulus* on 1–4 May, a **Black-crowned Finch Lark** *Eremopterix nigriceps* at the effluent lake on 9 May, three **Thrush Nightingales** *Luscinia luscinia* on 24 March, four **Crag Martins** *Ptyonoprogne rupestris* on 4 May, and five records of **White-throated Robin** *Irania gutturalis* between 22 April to 6 May. A **Savi's Warbler** *Locustella luscinioides* was at the effluent lake on 22 March, and of particular note there was a **Basra Reed Warbler** *Acrocephalus griseldis* on 18 April, followed by two on 9 May. A **Black-eared Wheatear** *Oenanthe hispanica* was present on 18 April, and single **Red-tailed Wheatears** *O. xanthoprymna* were noted at Dhahran Hills on 9 March and 20–21 March. Individual **Golden Orioles** *Oriolus oriolus* were seen on 2 and 8 May. Two male **Semi-collared Flycatchers** *Ficedula semitorquata* were noted on 28 March.

Researchers have discovered that **Peregrine Falcons** *Falco peregrinus* and **Saker Falcons** *F. cherrug* fitted with microchips in the Taimyr Peninsula and Mongolia have turned up in Dubai and Riyadh. This suggests a significant movement of these falcons within and between UAE and Saudi Arabia. Unfortunately, it is unclear whether the movements are a result of trapping or natural migration.

SYRIA

Following the discovery of **Iraq Babbler** *Turdoides altirostris* along the Euphrates in 1999, observations near Assa'weh (10 km north of Mheimideh) on 27 September 2002, represent its

northernmost locality to date. At Deir ez-Zor, other species included four **White-cheeked Bulbuls** *Pycnonotus leucogenys* on 27 September and a **Little Crake** *Porzana pusilla* on 28–29 September. At Mheimideh there were maximum counts of 22 **White-headed Duck** *Oxyura leucocephala*, 35 **Marbled Teal** *Marmaronetta angustirostris*, 12 **Ferruginous Duck** *Aythya nyroca*, c. 65 **White-tailed Plovers** *Chettusia leucura* and 47 **Slender-billed Gulls** *Larus genei*, all on 28 September. During a two-day visit, on 30 September and 1 October, to the desert south of Palmyra, highlights included a flock of ten **Red-footed Falcons** *Falco vespertinus*, at least 46 **Pallid Harriers** *Circus macrourus*, an adult **Greater Spotted Eagle** *Aquila clanga*, an immature **Imperial Eagle** *A. heliaca*, five **Bar-tailed Desert Larks** *Ammomanes cincturus* and a **Red-tailed Wheatear** *Oenanthe xanthoprymna*. In wooded hills around Slunfeh, in western Syria, at least two small flocks of **Long-tailed Tits** *Aegithalos caudatus tephronotus* on 5–6 October represent the second country record (see Showler & Farrow, this issue), whilst a single **Nuthatch** *Sitta europaea* on 5 October and numerous **Coal Tits** *Parus ater*, may represent only the second Syrian records. **Chiffchaffs** *Phylloscopus collybita brevirostris*—presumed to be wintering birds—were abundant.

Six adult **Bald Ibis** *Geronticus eremita* returned to the nesting site, near Palmyra in central Syria, and reared seven chicks; the birds departed on 10 July. A ten-day visit in mid-June discovered 10–20 new breeding species for the country, notably **White-headed Duck** *Oxyura leucocephala* at Mheimideh and a colony of **Yellow-throated Sparrows** *Petronia xanthocollis* (first Syrian record) breeding atop telegraph poles at Deir ez-Zor. Other new species included **Namaqua Dove** *Oena capensis* and **Dunn's Lark** *Eremalauda dunni* near Palmyra (possibly the northernmost records of either species). Other interesting records included **Black-necked Grebe** *Podiceps nigricollis* at Sed Jebel Abied (first breeding-season record), many breeding **Purple Herons** *Ardea purpurea* and **Squacco Herons** *Ardeola ralloides* at Baath Reservoir (first breeding records for many years), four **Glossy Ibis** *Plegadis falcinellus* at Lake of Homs (first breeding-season record for many years) and **Shoveler** *Anas clypeata* in suitable breeding habitat at Jazara (first breeding-season record). Approximately 50 **Marbled Teal** (including first proven breeding) were at Mheimideh, and this site also held **Pochard** *Aythya ferina* (first breeding-season record), several broods of **Ferruginous Ducks** and **Purple Gallinule** *Porphyrio porphyrio* (supposedly extinct as a breeder). **White-tailed Plover** and **Spur-winged Plovers** *Hoplopterus spinosus* bred at several sites in the Euphrates Valley. Three pairs of **Grey Wagtail** *Motacilla cinerea* (first breeding records) were in the Aqra Mountains, singing **Savi's Warblers** *Locustella luscinioides* were at Baath Reservoir, breeding **Olive-tree** *Hippolais olivetorum* and **Rüppell's Warblers** *Sylvia rueppelli* at Kassab, and **Ménétries's Warbler** *S. mystacea* was widespread. **Long-tailed Tits** (the first breeding records) were at Kassab. Large numbers of **Chough** *Pyrrhocorax pyrrhocorax* (supposedly extinct) were located in the desert mountains and at least four pairs of **European Serin** *Serinus serinus* (first breeding records) were at Kassab. **Trumpeter Finch** *Bucanetes githagineus* (first proven breeding) was common near Palmyra and **Dead Sea Sparrow** *Passer moabiticus* was present throughout the Euphrates Valley.

TURKEY

The following records include several sightings from late 2002. **Red-necked Grebe** *Podiceps grisegena* is a very scarce winter visitor, making one at Terkos Gölü, on 14 December, and seven at Kızılırmak Delta, on 7 December, of note. At least 3050 **Great Crested Grebes** *P. cristatus* at Sarıyer Baraji, on 23 February, were at one of the few sites currently supporting such numbers. **Black Stork** *Ciconia nigra* is scarce in winter, being only found regularly at Gediz Delta, where 11 were present on 29 December; additionally, two were at Nallihan Kuşcenneti, on 5 December. Four **Mute Swans** *Cygnus olor* were at Birecik on 29 December. Three **Bean Goose** *Anser fabalis* were at Seyfe Gölü on 22 February, but a **Barnacle Goose** *Branta leucopsis* at Büyükçekmece, on 5 January, was only the third record in Turkey. Eighty-nine **Garganey** *Anas querquedula* at Tuzla, Çukurova, on 22 December, was significant for the season. An impressive 10,000 **Red-crested Pochard** *Netta rufina* were at Beyşehir Gölü, on 2 February, and up to 130,000 **Pochard** *Aythya ferina* at Sodaligöl, on 10 October; the latter a huge post-breeding flock. **Scaup** *Aythya marila* is a very local winter visitor, thus 12 at Mert Gölü, Iğneada, on 23 January, were notable. Three **Eider** *Somateria mollissima* were at Riva, Istanbul, on 8 September and one at Terkos Gölü, on 8 December; the 4–5th records. A **Goosander** *Mergus merganser* at Küçükçekmece, on 27 December, was only the third record in the last six years. A **Bar-tailed Godwit** *Limosa lapponica* was at Tuzla, Çukurova, on 25 April. A very large passage of **Sociable Plovers** *Chettusia gregaria* involved 115 through eastern Turkey on 20–30 October. A single **White-tailed Plover** *C. leucura* was at Mogan Gölü, on 29 September, and there were at least 300 **Dotterel** *Charadrius morinellus* at the southern part of Tuz Gölü, on 30 April. Of particular note was a **Grey Phalarope** *Phalaropus fulicarius* at Birecik, on 3 May, which is only the third record. Five **Kittiwakes** *Rissa tridactyla* were at Gökova, on 14 February. A **White-breasted Kingfisher** *Halcyon smyrnensis* at Gediz Delta, on 28 February, was the first record for some years at a locality where the species was presumed to be locally extinct. This species has been absent from the area for several years. A **Blue-cheeked Bee-eater** *Merops persicus* at Akyatan Gölü, Çukurova, on 3–6 April represents the earliest-ever sighting in the country. A **Tengmalm's Owl** *Aegolius funereus* in the Aktaş Valley, on 7 April, was only the ninth record.

UNITED ARAB EMIRATES

A **Sooty Shearwater** *Puffinus griseus* off Fujeirah beach, on 3 April, was the seventh record. A **Lesser Flamingo** *Phoenicopterus minor* at Wimpey Pits, from 20 March to 29 May, was the second record (the first was in November 1999 to early 2000). Three immature **Mute Swans** *Cygnus olor* remained at Wimpey Pits from 24 December 2002 until 16 March (the fourth record), whilst six **Whooper Swans** *C. cygnus* were there on 1 January–16 March (one remaining to 18 April); the first record. A **White-fronted Goose** *Anser albifrons* at Dubai pivot fields and Wimpey Pits area, on 17 December 2002–4 March, was the

15th record. A **Lesser Spotted Eagle** *Aquila pomarina* reported at Wimpey Pits, on 9 March, will be the 13th record if accepted.

A **Black-winged Kite** *Elanus caeruleus* was in the Abu Dhabi area, on 31 January, the 16th record. A pair of **Shikra** *Accipiter badius* nested at Safa Park, Dubai, and reared three young; the first breeding record. Single **Merlins** *Falco columbarius* were at Al Wathba camel track, on 7–10 February, 28 March and 18 April. Single **Amur Falcons** *F. amurensis* were at Shahama, on 7 April, and Abu Dhabi airport, on 8 June; the 5–6th records. A **Red-knobbed Coot** *Fulica cristata*, which arrived at Wimpey Pits in June 2002, remained there until at least 9 March. Single **White-breasted Waterhens** *Amaurornis phoenicurus* were at Safa Park, on 4 January and the Emirates golf course, on 9 March–21 April. A **Purple Gallinule** *Porphyrio porphyrio* at Wimpey Pits, on 2 January–29 May, was the ninth record. The third record of **Oriental Pratincole** *Glareola maldivarum* was one at Al Wathba camel track, on 3–6 April, whilst a **Little Pratincole** *G. lactea* at Wimpey Pits, on 2 January–1 February, and at Khor Dubai, on 24 February (thought to be the same bird), was the tenth record. A **Common Gull** *Larus canus* was at Kalba on 28 January, with another on 3 April, bringing the number of records to 14. A **Koel** *Eudynamys scolopacea* at Safa Park, on 21 March, was only the seventh record. A surprise was four **Long-eared Owls** *Asio otus* roosting in Mushrif Park, Dubai, on 17 February–4 March; only the seventh record. A **Sykes's Nightjar** *Caprimulgus mahrattensis* was at Al Wathba camel track, on 28 January, and is the third record; the first two were in 2001. A **Pale Martin** *Riparia diluta* (formerly treated as a race of Sand Martin *R. riparia*) was at Al Wathba camel track, on 17 March, and was the ninth record. Single **Wire-tailed Swallows** *Hirundo smithii* were at Dubai pivot fields, from 27 December 2002 to 10 January, Wimpey Pits, on 28 March, and Al Wathba camel track, on 11 April; the 7–9th records. Up to five **Buff-bellied Pipits** *Anthus rubescens* were at Dubai pivot fields, from 7 February, rising to six, from 14 February to 4 March, with four remaining to 20 March. One was at Abu Dhabi Health Club gardens, on 25 February–4 March; these are the 6–12th records. A **Forest Wagtail** *Dendronanthus indicus* was at Mushrif Palace Gardens, Abu Dhabi, on 25 February–18 March, and a white-headed **Yellow Wagtail** *Motacilla flava leucocephala* was at Dubai pivot fields, on 11 April; the first record of this form, which breeds in north-west Mongolia. Single **Ring Ouzels** *Turdus torquatus* were in Abu Dhabi's Mushrif Palace gardens area, on 2–5 January, Jebel Hafeet, on 2–31 January and another at a different location in Abu Dhabi on 3 January; the 11–13th records. A **Mistle Thrush** *T. viscivorus* was in Jebel Hafeet hotel gardens, on 1 January–10 February and another was at Giyathi, on 13 February; the 12–13th records.

A **Blyth's Reed Warbler** *Acrocephalus dumetorum* was at Bateen on 6 May, whilst in Abu Dhabi there were four records on 6–9 May. Additionally, one was at Safa Park, on 7–8 May, and another was in Dubai, on 9 May, comprising an impressive series of records, given that the species had only been seen twice previously in the country, although some might have been overlooked as Marsh Warblers *A. palustris*. A **Hume's Lesser Whitethroat** *Sylvia* (*curruca*) *althaea* was in Safa Park, on 20–28 March. A **Yellow-browed Warbler** *Phylloscopus inornatus* was in Jebel Ali hotel gardens, on 3 January; the seventh record since 1996. A **Hume's Yellow-browed Warbler** *P. humei* was in Mushrif Palace Gardens, on 17 May; there are fewer than 20 previous records. A **Pied Flycatcher** *Ficedula hypoleuca* at the same site, on 14 May, was the fourth record. Finally, a **Long-tailed Shrike** *Lanius schach* was in the garden of the Airport Hotel, Dubai, on 3–21 March; only the second record (the first was in September 1999). A **Sykes's Warbler** *Hippolais rama*, which was collected near Ras Al Khaimah, on 16 June 1972, was originally identified as an Olivaceous Warbler *H. pallida*. The bird has recently been determined to be Sykes' Warbler. As it was a singing male with enlarged testes the possibility of local breeding is strong. There appear to have been no other records suggestive of breeding away from Khor Kalba.

YEMEN

Red-billed Tropicbirds *Phaethon aethereus* were observed entering sea-cliff crevices (likely nest sites) near Shoab, on Socotra, on 26 March 2002. Ten **Olive Pigeons** *Columba arquatrix* were at c. 1500–1800 metres, near Al

Plate 1. Crossbill *Loxia curvirostra*, Kyzyl-Kum, 250 km west of Bukhara, Uzbekistan, 26 May 2003. (*Steve Rooke*)

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TURKEY BIRD REPORT CORRIGENDA

A number of errors of fact slipped into the recent Turkey Bird Report (*Sandgrouse* 25: 8–31), and the editors are grateful to Kerem Ali Boyla and José Copete for alerting us to the some of the following corrections. Additionally, the opportunity is taken to publish a number of significant records relating to years prior to those covered by the last report (1997–2001). For names of observers, referred to here by their initials, please consult the last report (p. 27).

Gannet *Sula bassana*
The Southern Coastlands record of two off Anamur on 11 March 2001 is incorrect and should be replaced by the following text. Anamur: 5 Mar 01; 3, 6 Mar 01; 7 Mar 01 (KB, BK). Additionally, there was a further record from Tuzla Gölü, Çukurova: 4, 11 Mar 01 (KB).

Red-breasted Goose *Branta ruficollis*
The record from Yedikır Baraji is in Black Sea Coastlands.

Smew *Mergus albellus*
The following records are additional to those already published.
Black Sea Coastlands: 2, Sapanca Gölü 16 Jan 95 (KB, GM, MY) has not previously been mentioned in these reports.
Thrace: Rumelifeneri: 3 Dec 89 (KB *et al.*); 27 Dec 92; 3 Jan 93; 6, 9 Jan 93; 50, 22 Jan 95 (KB *et al.*) have not previously been mentioned in these reports. Büyükçekmece: 26 Dec 91; 2, 23 Feb 92; 5, 24 Dec 93 (KB); 30, 9 Jan 93; 79, 23 Jan 93 (KB *et al.*); 23 Feb 94 (KB) have not previously been mentioned in these reports. Küçükcekmece: 17, 3 Feb 91; 22, 5 Feb 91; 14, 23 Jan 93 (KB *et al.*) have not previously been mentioned in these reports. 2, Meriç Delta, 24 Jan 93 (KB *et al.*).
Western Anatolia: Uluabat Gölü: 7, 25 Jan 93 (KB, GS); 248, 17 Jan 95 (KB, GM, MY) have not previously been mentioned in these reports.
Central Plateau: Mogan Gölü: 11 Dec 94 (KB *et al.*) has not previously been mentioned in these reports; 10 Feb 01 (KB, EU). Eymir Gölü 22 Feb 96 (KB *et al.*) has not previously been mentioned in these reports. Ankara 2 Jan 98 (KB, OC, OK).

Demoiselle Crane *Anthropoides virgo*
The record of 20 at Haçli Gölü referred to the incorrect date, which should have read 11 Aug 88.

Little Bustard *Tetrax tetrax*
East: Male, Erzurum Ovası 2 Oct 89 (LJD *et al.*); this record has previously been overlooked.

Pomarine Skua *Stercorarius pomarinus*
The following record is additional to those already published.
Thrace: Between Demircikoy and Kilyos, Istanbul, 20 August 1995 (KB).

Arctic Skua *Stercorarius parasiticus*
The following records are additional to those already published.
Southern Coastlands: 2, Tuzla beach, Çukurova 1 Feb 97 (NS). South of Tarsus, Çukurova 11 Feb 97 (NS).

Black Woodpecker *Dryocopus martius*
The following record is additional to those already published.
Central Plateau: Kızılcahamam 20 Aug 88 (JC, RA).

Grey-headed Woodpecker *Picus canus*
The following record is additional to those already published.
Southern Coastlands: Between Akseki and Cevizli 5 Aug 88 (JC, RA).

White-backed Woodpecker *Dendrocopus leucotos*
The following records are additional to those already published.
Southern Coastlands: North of Akseki 4–5 Aug 88 (JC, RA).

Desert Lark *Ammomanes deserti*
The locality cited should read Nusaybin.

Pied Wheatear *Oenanthe pleschanka*
The following record is additional to those already published.
South-East: Male, north of Birecik 9 Aug 88 (JC, RA).

River Warbler *Locustella fluviatilis*
The following record is additional to those already published.
Black Sea Coastlands: Riva 11 May 91 (KB *et al.*) has not previously been mentioned in these reports.

Booted Warbler *Hippolais caligata*
Beyşehir Gölü is in Southern Coastlands, not as stated.

Great Grey Shrike *Lanius excubitor*
The following record is additional to those already published.
Central Plateau: ODTU campus, Ankara 24 Feb 98 (KB).

Trumpeter Finch *Bucanetes githagineus*
The following record is additional to those already published.
East: 3 females/first-winters, Nemrut Dağı, Tatvan 10 Aug 98 (JC, RA).

In the list of observers that closes the report, R. Armada should have been listed for 1998, as should J. Copete.

Guy M. Kirwan, on behalf of the Turkey Bird Report editors, 74 Waddington Street, Norwich NR2 4JS, U. K.

SANDGROUSE

GUIDELINES FOR AUTHORS

The Editorial Committee of *Sandgrouse* will consider for publication original papers which contribute to knowledge on the birds of the Middle East and related zoogeographical regions: their distribution, breeding biology, behaviour, identification, conservation, etc. The Middle East for this purpose includes Turkey, Cyprus and Libya in the west to the Palearctic fringes of Pakistan and the western border of China in the east, including Afghanistan and to the southern border of Russia between the Black and Caspian Seas and between the Caspian Sea and Mongolia in the north, and the Arabian Peninsula and the Palearctic limits in Sudan and Ethiopia in the south.

Submissions are considered on the understanding that the work has not been previously published and is not being offered for publication elsewhere.

Papers should be in English, but non-English-speaking authors who are unable to obtain translations of their work may apply to the Editor for help. Submissions should be typed on A4 paper , double-spaced, unjustified (ragged right), with two wide margins, and on one side of the paper only; two copies are required (or only one if a disk is supplied as well; see below). Authors should consult the current issue of *Sandgrouse* and follow conventions for layout, headings, tables, captions, references, abbreviations, etc. Full-length papers must include a factual summary not exceeding five per cent of the length of the text. Scientific names and sequence of bird species should follow Porter, R. F. *et al.* (1996) *Field guide to the birds of the Middle East.*

Figures should be drawn without lettering in black ink on good-quality white or translucent paper. The original artwork must be supplied, plus one copy with rough lettering in place; the text of lettering should also be supplied on a separate sheet of paper (and on disk if possible; see below). In preparing figures authors should have regard to the page size and format of Sandgrouse. Figures will ideally be drawn about 50 per cent larger than final size; if they are much larger than this care should be taken to avoid use of fine detail that will be lost in reduction. Areas of fine Letraset tint should be avoided and uniform half tones (e.g. pencil shading) are not usually acceptable.

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