

AVICULTURAL MAGAZINE



VOLUME 115

No. 3

2009

THE AVICULTURAL SOCIETY

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Membership subscription rates per annum for 2009 as for 2008: British Isles £18.00: Overseas £21.00 (plus £6.00 for airmail). (U.K. funds please). The subscription is due on **1st January of each year** and those joining the Society later in the year will receive back numbers of the current volume of the AVICULTURAL MAGAZINE.

THE HON. SECRETARY AND TREASURER, THE AVICULTURAL SOCIETY, ARCADIA, THE MOUNTS, TOTNES, DEVON TQ9 7QJ, UK.

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AVICULTURAL MAGAZINE

THE JOURNAL OF THE AVICULTURAL SOCIETY

Vol. 115 - No. 3 All rights reserved ISSN 0005 2256

2009

KEEPING AND BREEDING THE LESSER KISKADEE

Philohydor lictor

by Gary Bralsford

I have kept Lesser Kiskadees for the past four years. During that time I have bred 12 young. I had several enquiries from aviculturists wishing to obtain these birds and all went to other keen softbill breeders, who I know will try to continue breeding this species.

At the moment I have one pair and a friend has a further two pairs. So, there are a few Lesser Kiskadees being kept here in the UK and there are some others in Europe. Hopefully, we can all get in contact with one another to exchange and/or loan one another surplus birds to create further pairs.

My original pair, along with three young the pair had raised, came from Phil Lewis on the Isle of Wight. Later I managed to obtain a second pair of unrelated birds from an importer. I housed both pairs in indoor flights measuring 9ft long x 4ft wide x 6ft 6in high (approx. 2.7m long x 1.2m wide x 2m high). I put two half-open-fronted nest boxes, with hinged lids, in each flight. Various types of nesting material was provided, including coconut fibre, sisal string, animal hair, moss and dry grasses.

Both pairs were housed well apart, one in my birdroom and the other across the garden in my bird shed. Had I not done this, I am sure I would have had problems with both males clinging to the wire mesh with their wings outstretched, calling loudly.

I begin to get my kiskadees into breeding condition in early January. I do this by feeding them giant morio worms and steak cut into narrow worm-like strips. I also give them pinkie mice, which they can take whole.

When they are ready to breed, they begin calling loudly and the female becomes very dominant over the male. Nest building is a frantic affair accompanied by lots of wing displaying and calling. It is the female who builds the nest, with the male only helping with the final nest lining. The nest, which is a huge affair with a domed top that pushes open the nest box lid, is completed within three days and the first egg is laid 10 days or so later. The nest cup seems very small for the usual clutch of three eggs.

The fertility of one pair was fantastic, with the pair's eggs always being fertile. The second pair was not as prolific. For some reason each clutch consisted of just two eggs and the pair usually produced only two clutches, with the fertility being a bit hit and miss.

Having once witnessed a male throwing a four day old chick out of the nest, I now remove him once the eggs have been laid. The female always rears a nest of two or three chicks on her own without any difficulty. They are reared mainly on white-skinned mealworms, buffalo worms and black crickets. I no longer use waxworms as their mouthparts seem too hard for chicks to digest and they become compacted in the gut. Some keepers, I know, get around this problem by cutting off the waxworms' heads, I will though continue to steer clear of them when I have young in the nest and feed them only to adult birds. My female will also feed the young on minced (ground) meat and pinkie mice and (soaked) dog food is also taken. I always dust the livefood and softfood with powdered calcium. I also use a vitamin supplement.

The young leave the nest at 14 days old and hide away in a corner for a few days until they get stronger. I put a few branches and some cover at floor level for them and this seems to help and also decreases the likelihood of them trying to climb up the wire mesh in panic when I am in the shed.

At four weeks old they begin to feed themselves and are independent. I always remove the young at this time, as the female becomes aggressive towards them. I place the male back with the female a week later, so that the pair can nest again. I often get four clutches a year.

This year I intend to keep one or two of my youngsters and try to obtain an unrelated bird. My friend Bob Jewiss is finding it difficult to get his birds to settle down and breed. His two pairs are, however, only young birds and will, hopefully, eventually settle down and breed.

The Lesser Kiskadee is a stunning bird with its buttercup yellow breast and belly, which show up well in an aviary. When really excited it raises the 'streaky' yellow feathers along the top of its head. It is an aggressive bird and because of this is not usually suitable to keep in a mixed collection. It will almost certainly kill any birds smaller than itself and because it is so territorial will even try to drive away the occupants of adjoining aviaries.

The Lesser Kiskadee is one of the 435 species of Tyrant Flycatchers (Tyrannidae), as is the closely related Great Kiskadee *Pitangus sulphuratus*. Both species look very similar, however, the latter measures about 22cm (8½in) in length, whereas the Lesser species measures 18cm (7in) in length. A third similar looking species, the Boat-billed Flycatcher *Megarynchus pitangua*, measures 23cm (9in) in length and has a large, broad bill, especially in comparison to that of the Lesser species. I have seen the Great Kiskadee

offered for sale in the past (it was bred in the UK for the first time at Chester Zoo in 1965), but have never seen the Boat-billed Flycatcher offered for sale.

The latter is found from Mexico southwards through Central and northern South America and also on the island of Trinidad. The Great Kiskadee, which has a similar but slightly larger distribution, occurs from southern Texas southwards to Paraguay, central Argentina and Uruguay; it too also occurs on the island of Trinidad. The Lesser Kiskadee is found from eastern Panama southwards to Colombia, Ecuador, Perú and Bolivia, and eastwards to Venezuela, the Guianas and Amazonian and eastern Brazil. It is said to inhabit gallery forest (forest along rivers).

When Brian A. G. Hill (2007) visited Brazil, kiskadees turned out to be the most ubiquitous birds of his entire trip. The Great Kiskadee's loud call to action, mimicking its name, he heard soon after arriving in the city of Belém, and saw it perched on buildings and on overhead wires. The Lesser Kiskadee he saw many times during his voyage on the river.

The price and availability of small to medium-sized softbills is becoming an increasing problem nowadays. We often have to travel all over the UK and even to Europe in order to obtain the birds we require. With the costs and difficulties this entails, we would be foolish not to provide our birds with the best accommodation and food we can.

I try to ensure that all my young birds go to bird keepers who I know will attempt to breed them and thereby help secure the future of these species in aviculture.

Reference

Hill, B. A. G. 2007. Memoir, notes and anthology arising from a visit to Brazil - Part 2. *Avicultural Magazine* 113,2:49-56.

*Articles by Gary on keeping and breeding the Tropical Mockingbird *Mimus gilvus*, Formosan Yuhina *Yuhina brunneiceps*, Chestnut-backed Thrush *Zoothera dohertyi* (which he was first to breed in the UK) and Oriental, Chinese or Grey-headed Greenfinch *Carduelis sinica* will be published in future issues.*

THE DISTRACTION BEHAVIOUR OF A FEMALE KORI BUSTARD *Ardeotis kori*

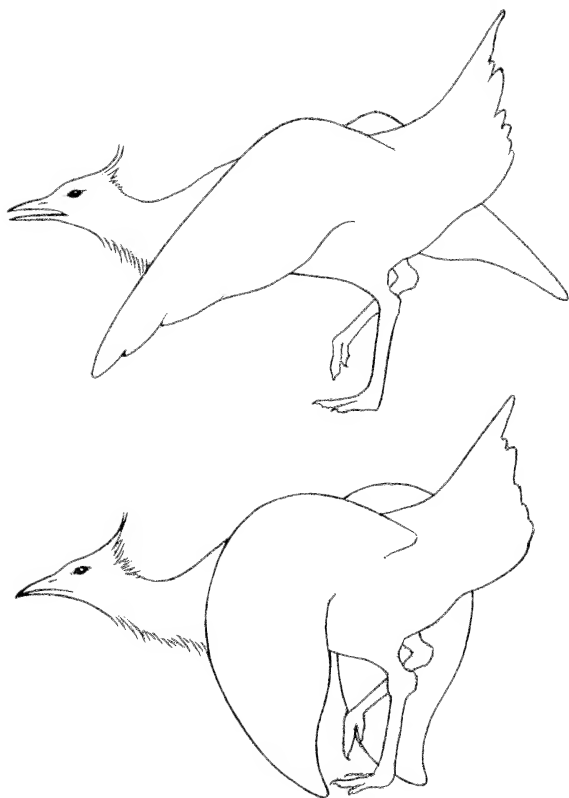
by Sara Hallager

The Kori Bustard *Ardeotis kori* is a large, mainly ground-dwelling bird of eastern and southern Africa. Numerous accounts describe the sexual display of the male (Astley-Maberley, 1937; Hoesch, 1938; Urban et al. 1986; Hellmich, 1988). However, little has been written about the incubation by the female and the behaviours associated with incubation. This is likely due to the secretive nature of the female during the incubation period. Only the female Kori Bustard incubates the eggs and rears the chicks. Like other bustards, female Kori Bustards lay their eggs on the ground in a shallow scrape. Nests are usually partly hidden by tall grass, small trees or bushes (Mwangi, 1988; Maozeka, 1993; Osborne & Osborne, 2002) and are near a natural feature such as a bush (Osborne et al. 1984) or rocks (Maozeka, 1993). Usually the first sign that a female has bred, is that she is accompanied by chicks. Because females are well camouflaged and are inconspicuous during the incubation period, it is not surprising that a thorough description of distraction behaviour has not been documented for this species.

On June 21st 2007, a female Kori Bustard at the Smithsonian's National Zoological Park in Washington DC, USA was displaced from her nest by the alpha male. At the time this happened the female Kori Bustard was 21 days into her 23 days incubation period. Upon displacement from the nest, she ran away with her head held high, barking as she fled from the male. Several seconds after the displacement, she lowered her head to a level below her back, erected her crest feathers, spread her wings horizontal to the ground and began fluttering her wings. Her wings were arched while held horizontally out with the tips of the primaries nearly touching the ground. Her tail was cocked (Fig. 1). She slowed her pace and while continuing to flutter her wings, altered her vocalization from a barking sound to a croaking sound. Her mouth was wide open as she uttered the croaks. She ran behind a bush from where she continued to croak and flutter her wings for the next several minutes. The male eventually located her behind the bush at which point she immediately ran back to the eggs. Incubation resumed approximately 10 minutes later.

Distraction behaviour has been documented for other species of bustard, including the Great Bustard *Otis tarda* (Schuster, 1927; Gewalt, 1959; Sterbetz, 1981; Goriup, 1982), Great Indian Bustard *A. nigriiceps* (Dharmakumarsinhji, 1955; Ali & Rahmani, 1982), Australian Bustard *A. australis* (Carter, 1921) and Denham's Bustard *Neotis denhami* (Uys, 1963).

Fig.1. Postures adopted by female Kori Bustard during distraction display.



The descriptions are similar in nature and describe females with outstretched wings either crouched on the ground or walking and fluttering their wings. A croaking noise made by a female Australian Bustard when driven away from her nest by approaching sheep was described by Carter (1921).

Behaviours ascribed as distraction behaviour in Kori Bustards have been reported by Morgan-Davies (1965) and Maozeka (1993). Both authors reported females with young chicks walking in a crouched position with

drooped, waving wings and barking. This paper is the first to thoroughly describe distraction behaviour by a female Kori Bustard.

Acknowledgement

My gratitude is extended to D. K. Talbott for her illustration of this behaviour.

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IRON STORAGE DISEASE (HAEMOCHROMATOSIS) IN LORIES

by Rosemary Low

Iron storage disease is well documented in toucans (Ramphastidae) and mynahs (Sturnidae). Less well-known is the fact that lories are often affected. However, most private owners of these birds do not have autopsies carried out when their birds die and most sudden deaths remain unexplained.

In June 2008 my 13-year old male Rajah Lory *Chalcopsitta atra insignis* died suddenly having shown no symptoms except difficulty in breathing just before death. A post-mortem examination was inconclusive. Because Black Lories seem to be susceptible to haemochromatosis I requested that further tests be carried out on the organs of this lory. It was found that iron had been deposited in his liver, suggesting that haemochromatosis was the cause of death. This happens when there is abnormal absorption of iron from the intestine, causing liver cells to die.

Margrethe Warden in the USA told me that the condition was found in five of her Black Lories in 1999. She wrote: "When evident, symptoms can include difficulty breathing, fluid in the air sacs, paralysis and distended abdomen. Actual diagnosis is usually made during necropsy. In living birds tests conducted on tissue retrieved from a liver biopsy can make a specific diagnosis. Radiographs and blood work on living specimens can indicate liver disorders that may include iron storage but will not accurately diagnose the disorder itself."

She went on to write that drawing blood equal to 1% of the bird's body weight on a regular basis is acceptable treatment - but is not always practical, especially with birds not used to being handled. Other treatments have been tried, such as the use of tannins - giving tea to toucans - chelation (treating with a chelating agent to remove heavy metals) and the use of a certain drug. None of these have been proved to be effective. However, it seems to me that one does not know that a bird is suffering from this disease until it is too late to treat it - even if a successful treatment is available - and, one would not want to use the suggested treatments as a prophylactic.

While it is usually suggested that iron in the diet is to blame, other factors might influence the condition. Haemochromatosis also occurs in humans and genetic factors have been isolated. It does seem strange that Black Lories in different collections have proved to be susceptible, even though the diets offered to them are entirely different. Therefore, I suspect diet is not entirely to blame.

However, we can do our best to feed our birds diets that are low in iron.

This might not be easy, as commercial preparations do not always show this information. Also, there are some badly formulated commercial preparations on the market that might be suitable for more omnivorous lorries, such as the *Trichoglossus* species, but entirely unsuitable for those, such as the Black and other *Chalcopsitta* and *Charmosyna* species, which take a very high proportion of nectar in their diet. Also, some people make up their own lorry nectar using such products as Complian and baby cereals which are relatively high in iron. I doubt whether many people would feed monkey chow to lorries, but this contains twice the recommended level. However, this might not be harmful to lorries that take nectar as only a small part of the diet. It is probable that animal protein (such as bone meal) is higher in iron than is plant protein, so this is another factor to consider.

It is suggested that lorry diets should contain under 100ppm (parts per million) of dietary iron and this seems to be the case with most commercial lorry foods, but where this figure originated from I do not know. After all, how much iron do lorries consume in their natural diets? Surely, almost none. The two products I use on a daily basis, Cédé (as one third of my lorry mixture) and, Nekton, are relatively low in iron. Cédé lorry food contains 61ppm and Nekton 71ppm. Kaytee hand-feeding formula, on the other hand, contains 374ppm. I have hand-reared lorries using nothing but Nekton when they are small and Cédé when they are older, or only Nekton, with excellent results.

I perused *Avian Medicine: Principles and Application* by Ritchie, Harrison and Harrison for references to haemochromatosis and found a photograph of the liver of a toucanet on necropsy. The caption stated: "The enlarged liver was orange and rough in appearance. Histopathology was suggestive of haemochromatosis, and the disease was confirmed using Prussian blue stain to demonstrate iron-laden hepatocytes."

Under iron storage disease the text states that abnormal storage of iron is usually seen in the liver but other organs may be involved and: "It has been suggested that excessive iron in the diet may be the cause of iron storage disease but this hypothesis has not been confirmed."

Rosemary's book *Why does my Parrot...?* is reviewed on pp.152-153.

HAND-REARING PIGEONS AND DOVES AT BRISTOL ZOO GARDENS

by Nigel Simpson

Introduction

Pigeons and doves have been successfully hand-reared in several institutions, but often with subsequent attempts these successes were not able to be repeated. Bristol Zoo has an extensive collection of pigeons and doves and has for many years successfully reared the young of several species, both by parent-rearing and the use of foster parents. On many occasions in the past hand-rearing was attempted but there were high rates of failure. Several diets and methods of rearing have been reported as having been successfully used to hand-rear Columbidae (Blanchard, 1992; Bell, 1981; Harrington et al. 1999). In 2004 a new diet and method used successfully by Chelle Plasse at Disney's Animal Kingdom¹, Florida, USA, which came with the suggestion that the method of feeding is more important than the actual content of the diet, were trialled at Bristol Zoo.

By following the Plasse diet and method of rearing, we succeeded in successfully rearing Victoria Crowned Pigeons *Goura victoria* and White-naped Pheasant Pigeons *Otidiphaps nobilis aruensis* at Bristol Zoo.

Method

The diet consists of Avi-Plus parrot breeder pellets (20% protein, 8% fat) that are soaked in water overnight until all of the water has been absorbed. They are then cooked in a microwave for approximately two minutes until the mixture has homogenised and become runny. An alternative method is to heat the mixture in a saucepan on a conventional hob until the mixture is of the required consistency. We have also used the formula uncooked, by liquidising the soaked pellets until they have reached the required consistency. In the latter stages of rearing, fruit can easily be added to the formula. The prepared formula can be stored in a sealable food container and kept in a fridge for up to 24 hours, after which any unused food should be discarded.

Newly-hatched squabs can be fed from day zero. If they hatch early in the day they can be given an initial drink of water and feeding with the formula can commence in the afternoon. Squabs that hatch late in the day

¹ This refers to a DVD produced by Chelle Plasse and Disney's Animal Kingdom. The author has also produced a DVD on the subject. Details on how to obtain copies of these DVDs are available from: Chelle.Plasse@disney.com and nsimpson@bristolzoo.org.uk

should receive only a drink of water on day zero and feeding with the formula should commence the following day (day one).

Squabs are fed using a 2.5ml pipette with the tip cut at an angle of forty-five degrees. Having it cut at an angle makes feeding easier and in the case of difficult squabs, means that it can also be used to gently prise open the upper and lower mandibles. The formula should be heated by standing it in a bowl in boiling water. It is important to test the temperature of the formula on the back of the hand before attempting to feed it to the squab. If it is too hot it will, of course, burn the squab and, if it is too cold, the squab may refuse to eat it.

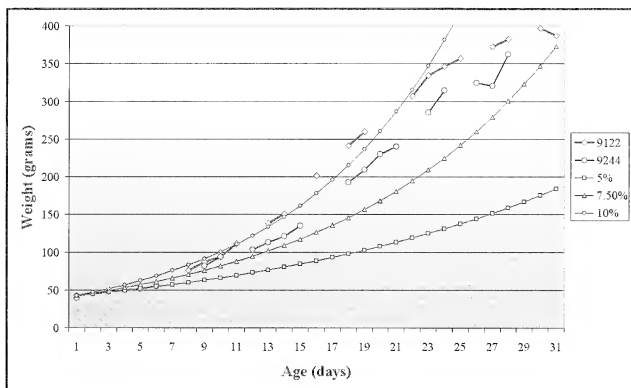
Squabs are fed initially by slightly prising open the mandibles and dribbling the formula into the lower mandible and allowing the squab to voluntarily swallow it. The formula needs to be fairly runny at this stage to enable it to flow into the squab's lower mandible. It is important to fill the crop to its maximum capacity in order to stretch the walls of the crop in preparation for the large volumes of food which will be eaten later. As the squabs grow larger and become accustomed to being fed by hand they begin to solicit food and open their beaks more easily. Also, as they continue to grow larger the thickness of the formula can be increased and the delivery method will need to be changed and the squabs fed from a syringe. Large syringes can have the end cut off and the squab will insert its entire beak into the end and take the formula from it. There will be little need to use the plunger at this stage, as the squab will suck out the formula for itself.

With most birds a good indicator that the rearing process is going well is that the chick's crop is emptying between feeds. With this method, however, the crop should be filled at each feed and should remain full throughout the day and be allowed to empty only overnight. When you go to feed the squab, it may seem unusual to discover that it still has some food in its crop, but it nonetheless needs to be filled again. It is felt that maintaining a full crop has the effect of getting sufficient food into the squab and helps the formula move through its system. Most squabs pass faeces after each feed and this is generally a good indicator that all is going well. If it appears that the squab is not digesting the formula and has stopped passing faeces, increasing the humidity in the brooder may help. The humidity level should be maintained at about 60% (rh).

The squabs are weighed each morning and their weights are plotted on Excel spreadsheets. Growth rates for parent-reared pigeons and doves are known to be over 20% per day. However, for hand-reared Victoria Crowned Pigeons it can be 10% per day (see Fig.1), but other taxa have been reared at higher levels, more like those of parent-reared squabs (Fig.2). The volume of food taken by squabs varies depending on the species and its age. Fig.3

shows the total volume of food consumed by a pheasant pigeon during the first 10 days of rearing.

Fig. 1. Growth rates of two hand-reared Victoria Crowned Pigeon squabs.



Rearing schedule for Victoria Crowned Pigeon.

Age (days)	Feeds per day	Average temperature	Average humidity	Comments
0-11	8	36°C (96.8°F)	65%	Fed using 2.5ml pipette with end cut at an angle.
12-19	6	32°C (89.6°F)	65%	Fed using 5ml syringe with end cut at an angle and allowing squab to fully insert beak and suck out food.
20-30	4	24°C (75.2°F)	65%	At 17 days heat turned off during daytime. Fed using 10ml syringe with end cut off. From 25 days onwards a 20ml syringe was used.
31-33	3	Ambient	Ambient	Fed using 20ml syringe. Formula changed to Avi-Plus pellets and liquidised fruit.
33-weaning		Ambient	Ambient	Squab begs for food and is fed small pieces of fruit and (Kaytee Exact) low iron pellets. These are placed in the beak and are swallowed by the bird. It was later moved into an enclosure with bleeding heart doves to encourage it to learn to feed itself.

Fig. 2. Growth rate of a parent-reared Pied Imperial Pigeon squab.

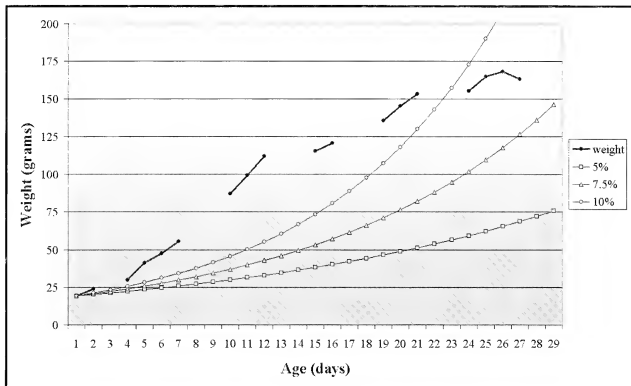
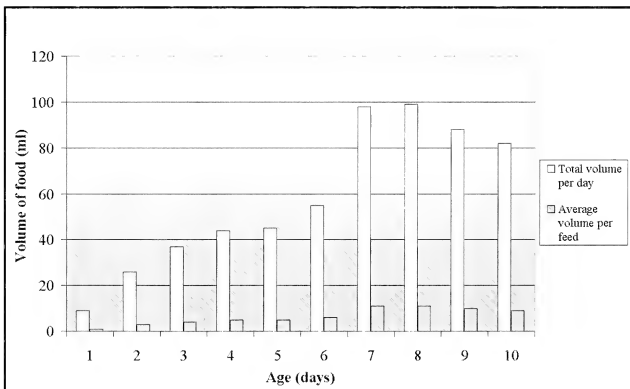


Fig. 3. Daily food intake of White-naped Pheasant Pigeon.



Weaning

As the squab grows, depending on the species, either fruit or grain can be added to the formula. Fruit should at first be puréed and then later cut into pieces and mixed in with the formula. As the squab continues to grow larger, small pieces of fruit can be placed in its open beak and a small bowl of food can be left with the bird to encourage it to feed itself. It is crucial to

monitor its weight at this time to ensure that it is eating sufficient food, and is not losing too much weight. If at any point it is felt that the squab is not eating enough, a single feed of the formula can be given in the morning, to ensure the bird is receiving sufficient nutrition.

Summary

Hand-rearing formula

Avi-Plus parrot breeder pellets (protein 20%, fat 8%)

Preparation

Quantity of pellets soaked in water overnight until the pellets have absorbed the water and swollen.

Soaked pellets cooked in a microwave on high setting for approximately two minutes until they have homogenised into a runny consistency.

Formula stored in fridge and used as required. Any unused food is discarded after 24 hours.

The consistency of the formula can be varied by adding more or less water.

Feeding method

Hold the head between the thumb and forefinger and offer the tip of the pipette to the squab.

To encourage the squab to voluntarily swallow the formula, run it down the inside of the lower mandible.

Fill crop at each feed and do not allow it to empty during the day, but leave it to empty overnight. This is the most important part of the method and is crucial for successful hand-rearing. Do not overfill the crop as regurgitation may lead to aspiration and death.

Feed every two hours from 6.00am-10.00pm, i.e. eight times a day.

Monitor defecation and if problems arise increase the humidity and dilute formula by adding more water.

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BIRDWATCHING IN THE PHILIPPINES

by Graham Thurlow

In April 2008 I joined a group of five fellow enthusiasts on a three week birdwatching trip to the Philippines. Although a holiday, I suspect that many would not have classed it as such, as it involved a great deal of hard walking and much of our accommodation was very basic - at one camp there were no facilities whatsoever. As one of the group observed, the trip overall was a good example of 'extreme birding'!

We made our way to Manila (some having stopped in Singapore for a few hours birding en route), where we assembled before leaving for Mount Makiling, an inactive volcano situated a few hours drive to the south-east of Manila.

We stayed overnight at Trees Lodge, where we had a few hours sleep and then got up before dawn to walk along a nearby track in the surrounding forest and were rewarded with sightings of a Philippine Hawk-Owl *Ninox philippensis* and, following daybreak, views of Black-chinned Fruit Dove *Ptilinopus leclancheri*, White-browed Shama *Copsychus luzoniensis*, Philippine Trogon *Harpactes ardens*, Philippine Hanging Parrot (Colasisi) *Loriculus philippensis*, two species of malkohas *Phaenicophaeus* spp, as well as flowerpeckers and sunbirds.

The climate was hot and humid, but the sights and sounds of the forest distracted us from any discomfort. The large forest butterflies were particularly noticeable and there was the constant "churring" of cicadas which, from time to time ceased, only to return in a sound version of the Mexican wave. The "buzzing" would be heard from far off and would gradually come closer and would become louder before dying away again - it was quite an assault on the senses!

From there we drove to nearby Los Banos and visited the botanical gardens, where we had good views of Indigo-banded Kingfisher *Alcedo cyanopectus* and, along a track bordered on each side by fields, saw Spotted and also Barred Buttonquail *Turnix ocellatus* and *T. suscitator* respectively. The highlight for me, however, was a Hooded Pitta *Pitta sordida* watching us from a lower branch of a bush in nearby woodland.

Another start at an ungodly hour the next morning resulted in sightings of Tarictic Hornbill *Penelopides panini* and Philippine Serpent Eagle *Spilornis holospilus*. We then returned to Manila for a flight to Tuguegarao in the north-east of the island, where we were met by our guide for the next few days. He was driving a *jeepney*, a vehicle which passes for a bus in the Philippines. Open at the back and sides and with a canvas roof and wooden

benches running the length of the vehicle, it offers a natural form of air conditioning (albeit warm air) and a rather uncomfortable ride, exacerbated by the many unmade roads and tracks we encountered. Our guide took us to his home where we were met by a group of men who were to be our porters for the next leg of the journey. En route we passed fields in which maize was being harvested and laid out in the middle of the road on sheets to dry, regardless of any cars, lorries or *jeepneys* that might drive over it.

Our destination was a camp at Hamut, a remote birding site high in the Sierra Madre mountains of northern Luzon. We set off on foot for the foothills and our first camp in the late afternoon, taking three hours of very hard going to reach it, and arrived to find that the porters had already erected our tents. They were in the process of preparing our meal of rice and tinned tuna which, together with rice and omelettes, was to be our main diet for the next four days. How the porters managed to carry the loads, which they organised between themselves, I shall never know; it was desperately hot and the going was quite steep.

During the hike, as dusk approached, we had excellent views of Savanna Nightjars *Caprimulgus affinis* displaying and, at camp, fireflies glowing from a nearby tree gave it the look of a Christmas tree covered with fairy lights. The following morning we saw Rufous Coucal *Centropus unirufus* and both Luzon Striped and Golden-crowned Babblers *Stachyris striata* and *S. dennistouni* respectively in the vicinity of camp before setting off for Hamut. As we climbed higher we had good views of the surrounding countryside and saw the extent to which the lower elevations of this mountainous area had been cleared of trees to make way for agriculture.

It took us most of the day to reach the camp at Hamut and as the day wore on I began to wonder whether I would survive to see it. It was desperately hot, although the shade of the forest that we travelled through did give some slight relief, and birding became of secondary importance to the speed of my heartbeat and my aching legs. Pauses to catch breath did, however, provide an opportunity to observe and appreciate the countryside that we were travelling through, with huge trees covered in epiphytes and tree ferns and with a dense understory. It was the dense understory that made birding difficult - the birds could be heard but not seen - at least not by me. Those I did see included Yellow-breasted Fruit Dove *P. occipitalis*, Blue-throated Bee-eater *Merops viridis*, Rufous Hornbill *Buceros hydrocorax*, Tarsic Hornbill, Philippine Fairy Bluebird *Irena cyanogaster*, Blue-headed Fantail *Rhipidura cyaniceps* and Yellowish White-eye *Zosterops nigrorum*.

The camp proved to be very basic and entirely lacking in facilities. We slept in tents under a large canvas awning while the porters slept on poles lashed together and covered only by a blanket. Food was cooked on a camp

fire and anyone who wanted to wash had to resort to a nearby stream for a dip. I suspect we probably made quite an aromatic group by the end of our stay.

On the two mornings we were at Hamut a group of Rufous Hornbills flew into the tall trees surrounding the camp and made a welcome distraction from our regular breakfast of porridge. After breakfast we would set off into the surrounding forest or walk along the nearby mountain ridge looking for birds. Again, the dense vegetation made observing birds difficult - they certainly knew how to make the best use of the available cover - and I found it more productive to sit and wait in a particular spot, rather than being constantly on the move. On one such occasion, at a point on the ridge looking down onto the forested mountain slopes, a group of five Rufous Hornbills flew across the valley below me, their wings making a very audible "whoosh" as they flew. It was a truly memorable sight.

One bird that everyone wanted to see was the Whiskered Pitta *P. kochi* that inhabits the area and, although two members of the group did get a fleeting glimpse, it remained elusive. A popular method of enticing birds into view was to use a taped call of the bird in question - and we used this method for the pitta. It did respond and came quite close but remained annoying out of sight.

Our return to the lower camp was, from my viewpoint, welcome as the vegetation was less dense and the birds were easier to see. The journey down was almost as difficult as our ascent as the ground was quite slippery. Few birds were observed as we descended, although we did see a Peregrine Falcon *Falco peregrinus* and a number of hanging parrots.

The following day was perhaps the hardest I have ever endured. On setting off from camp we took a detour from our set route to look for Green-faced Parrot Finches *Erythrura viridifacies* but unfortunately the bamboo was not at the correct stage of growth to attract them, therefore, we drew a blank. We then had a three hour walk back through the foothills to our guide's home and, as the morning wore on, it became increasingly warm until we were walking in a temperature of 39°C (102.2°F), with virtually no shade. I came as close to heat exhaustion as I ever want to. There were, however, highlights even at this temperature, with good views of Pied Harrier *Circus melanoleucos* and I was delighted to see Scaly-breasted Munia or Spice Bird *Lonchura punctulata* and Blue-breasted or Chinese Painted Quail *Coturnix chinensis*. Seeing these well-known cage birds in such an environment really did make one reflect on how these birds manage to cope with our British climate.

Our next destination was Mount Polis in north-central Luzon. As we walked towards the birding area we passed some houses with half a dozen

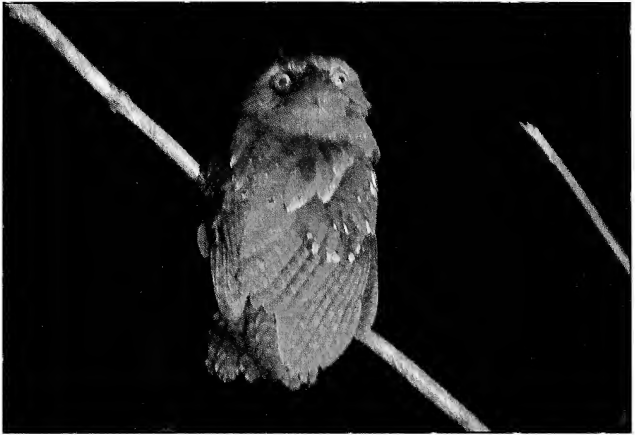
cockerels tethered outside, presumably destined as fighting birds, and also the only fat dog I saw in the Philippines. We saw a major passage of swiftlets *Collocalia* sp. while on the mountain, as well as, amongst other birds, Island Thrush *Turdus poliocephalus* and Chestnut-faced Babbler *S. whiteheadi*. We then drove a short way to where a swift flowing river bisected a valley and were lucky to see a Luzon Water Redstart *Rhyacornis bicolor*. The mountainous scenery was quite stunning with rice paddies terraced into the mountain sides and small villages of wooden huts clinging to the slopes. We then returned to Manila to accommodation best forgotten. On switching on the light in my room an army of cockroaches scuttled for cover and whoever was responsible for wiring the lights in the room was clearly unaware of health and safety. I was pleased to head off for Palawan the next day.

An early morning flight took us to Porta Princesa, Palawan, where we hoped to see the migratory Chinese Egret *Egretta eulophotes* and Palawan Peacock-Pheasant *Polyplectron emphanum*, amongst other species. Having seen the former at Garceliano Beach, we drove to Sabang, the gateway to St Paul's National Park on the west coast of the island, with the view to searching for the peacock-pheasant. Again the scenery was stunning with tropical beaches backed by forest or massive cliffs. It was also very hot and humid and when we eventually arrived at our beach-side villas, which were basic but very acceptable, the first item on the agenda was to raid the local bar for its cold bottled beer. En route we had sightings of Blue-headed Racquet-tail *Prioniturus platenae* (a species of parrot), Green Imperial Pigeon *Ducula aenea*, Blue Paradise-Flycatcher *Terpsiphone cyanescens* and Palawan Flowerpecker *Prionochilus plateni*.

To reach St Paul's we took a *banca* (small boat) along the coast and landed at the beach opposite the reception area, where we were greeted by a splendid male Palawan Peacock-Pheasant that had become habituated to visitors and came over to us hoping for titbits. We also saw the endemic White-vented Shama *C. niger* and some of us had a brief glimpse of a Tabor Scrubfowl *Megapodius cumingii*, before a very large Water Monitor *Varanus salvator* arrived and stole the show. This was also one of the few places where we had good views of monkeys - these were Long-tailed Macaques *Macaca fascicularis* which gather at the visitor centre for handouts.

Then it started to rain, monsoon style. It was to be a downpour that lasted into the next day, and resulted in all of us being soaked to the skin; it also did irreparable damage to the more sophisticated options on my camera, although thankfully it continued to take photographs. It was, apparently, caused by a typhoon off Mindanao.

The following day saw me dip (birding parlance for missing something others have seen) on Blue-naped Parrot *Tanygnathus lucionensis* (very



Philippine Frogmouth.

Graham Thurlow



Mountain White-eye.

Graham Thurlow

annoying), but later I was the only one to see a Philippine Cockatoo *Cacatua haematuropygia*, which raised one or two eyebrows. My record at identifying some of the small passerines was, I confess, not brilliant, but



Graham Thurlow

Male Palawan Peacock-Pheasant.

I do know a cockatoo when I see one. Other birds seen while on the island included Palawan Hornbill *Anthracoceros marchei* and the rare Little Curlew *Numenius minutus*.

Our final day on Palawan involved a visit to a penal colony where some trails within the prison grounds were said to be good birding territory. However, other than jail birds (scientific name unknown) we did not see a great deal, but just outside on some marshy ground spotted Long-toed Stint *Calidris subminuta* and Wood Sandpiper *Tringa glareola* and, in a nearby field, a large flock of Chestnut Munias or Black-headed Nuns *L. malacca* together with some Scaly-breasted Munias or Spice Birds.

From Palawan we flew back to Manila and then to Davao on Mindao, from where we had a long drive to Bislig, on the east of the island, which was to be our base for a couple of days. We arrived at midnight and were up again at 4.00am (not an unusual occurrence on this trip) and drove to an area known as PICOP which is, in fact, an area of forest that is being logged by the PICOP Resources Co-operation. We wanted to look for Steere's Pitta *P. steerii* and the Mindanao Wattled Broadbill *Eurylaimus steerii*. We succeeded in seeing both species, though it meant sitting or standing for hours and, much as I enjoy watching and waiting for wildlife to appear, forest birding in which very little happens for long periods, can be very like watching paint dry. We also saw a White-eared Dove *Phapitreron leucotis* in

a small wicker cage hanging from the roof of a wooden shack. It was used, apparently, as a decoy to attract others that were caught using bird lime and were a source of food for the owner.

Other birds seen in the area included Amethyst Dove *P. amethystena*, Silvery Kingfisher *A. argentata*, Writhe Hornbill *Aceros leucocephalus*, a lovely Blue Fantail *R. superciliaris*, Asian Glossy Starling *Aplonis panayensis*, Guaiabero *Bolbopsittacus lunulatus* (a small parrot common in forested areas) and Coletto *Sarcops calvus*.

While driving around this area I was struck by the very basic standard of living of many Filipinos, particularly those living in the countryside. Houses built of bamboo poles and placed on stilts contrasted with the ultramodern shopping mall, with shops selling the latest fashions and electronic equipment, seen in Manila.

One of the highlights for me on this trip was the couple of evening visits to a disused airfield outside Bislig. We sat on the roof of our jeep and had excellent views across fields of rough grass and a pond with a reedbed around it. In the grassland large flocks of Chestnut Munias were clearly visible and Black Bittern *Dupetor flavicollis*, Yellow Bittern *Ixobrychus sinensis* and Cinnamon Bittern *I. cinnamomeus* at the water's edge, together with Philippine Duck *Anas luzonica*, Watercock *Gallicrex cinera* and White-browed Crake *Porzana cinera*. A Lesser Frigatebird *Fregata ariel* flew overhead and we saw a Grass Owl *Tyto longimembris* in the distance.

Further birding in this area of Bislig resulted in us seeing Blue-crowned Racquet-tail *P. discurus*, Philippine Dwarf Kingfisher *Ceyx melanurus*, Everett's White-eye *Z. everetti* and Philippine Frogmouth *Batrachostomus septimus*, the latter sitting on a branch close to the roadside and appeared to revel in having its photo taken.

Our final destination was Mount Kitanglad, an active volcano in the Kitanglad Mountain Range, reached by driving to Malaybalay in Bukidnon Province to the north-west of the island. There we met up with a local official to obtain a permit and for the chicken sacrifice ceremony to ensure that all went well on our trip up the mountain.

We stayed at the Del Monte Lodge, which by the standards we had become used to, turned out to be quite acceptable. The ground floor was open on three sides and was where we ate. It also had a toilet and cold shower. The sleeping accommodation was above, on the floor in sleeping bags. Thankfully, there were no rats.

Birding entailed quite an uphill walk to our main observation point, en route passing through forested areas and cultivated fields in which we saw large flocks of Yellow Wagtails *Motacilla flava*. The observation point overlooked a valley with thickly forested slopes opposite and on our second

walk up the mountain we had clear, but distant, views of a Philippine Eagle *Pithecophaga jefferyi*, a 'must see' bird for the trip and quite splendid. Others species seen included Mountain Shrike *Lanius validirostris*, Black-and-cinnamon Fantail *R. nigrocinnamomea*, Apo Mynah *Basilornis miranda*, Short-tailed Starling *A. minor*, Plain Bush-hen *Amaurornis olivaceus*, Mindanao Racquet-tail *P. waterstradti*, flowerpeckers, Mountain White-eye *Z. montanus* and Red-eared or Mount Katanglad Parrot Finch *E. coloria* feeding on some flowering shrubs.

The above are but a few of the 304 species that were seen during the trip, in many cases hard won but well worth the effort

Avicultural Society Council Member Graham Thurlow retired last year from the post of Chief Advisor to DEFRA's (Department for Environment, Food & Rural Affairs) Animal Welfare Division.

* * *

UK BREEDING RECORDS

Members who successfully bred birds in the UK this year (2009) are invited to list the birds they bred on the Foreign Bird Federation (FBF) Breeding Record Form that accompanies this issue of the magazine and return the completed form to: Reuben B. Girling, 11 Deramore Drive, Badger Hill, York YO10 5HW. Using the information supplied, Reuben will collate the Avicultural Society UK breeding records and these will be published in the magazine (but with the names of the individual breeders omitted).

The results will also, as usual, be forwarded to the FBF, which will publish the results in the *FBF Breeding Register*, with the names of the breeders published in a separate list at the end of the register. Breeders can, however, request anonymity and have their names omitted (no addresses are published).

The completed forms will ultimately give Reuben hours of "enjoyment" and, who knows, might lead to an article containing some real and encouraging surprises!

HORNBILL FAMILY ADOPTION REPORT

In 2008, the society again adopted two pairs of hornbills, a pair of Great Hornbills *Buceros bicornis* and a pair of Rhinoceros Hornbills *B. rhinoceros*, as part of the Hornbill Research Foundation's Hornbill Family Adoption Programme in Thailand.

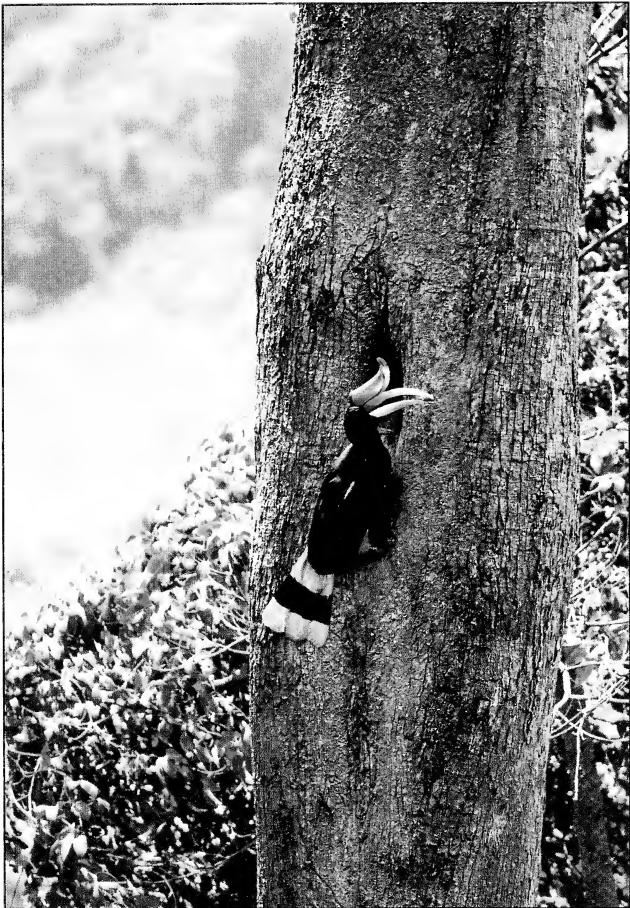
The female of our adopted pair of Great Hornbills on Budo Mountain, part of Budo Sungai-Padi National Park, Bacho District, Narathiwat Province, was imprisoned in the nest cavity on February 1st and emerged 96 days later on May 7th. One chick fledged successfully on June 16th. A massive 99.6% of the food brought to the nest, which was observed by Dohha Panoh and Gorseem Dhauree of the Pacho team, consisted of fruit, especially figs.



Male Great Hornbill bringing fruit to the nest 20m (approx. 65ft) above the ground in a *Dipterocarpus* tree.

The female of our adopted pair of Rhinoceros Hornbills, also on Budo Mountain, was imprisoned in the nest cavity on May 27th and emerged 45 days later on August 26th. One chick fledged successfully on October 6th. Over 90% of the food brought to the nest, which was observed by Dohha Panoh and Jehsoh Bueraheng of the Pacho team, consisted of fruit, again

mostly figs.



Male Rhinoceros Hornbill bringing fruit to the nest 11m (approx. 36ft) above the ground in a *Shorea faguetina*.

There follows a summary of hornbill nestings on Budo Mountain along with, for comparison, summaries of nestings at the project's north-eastern research site at Khao Yai National Park and its western research site at Huai Kha Khaeng Wildlife Sanctuary in Thailand.

The study area on Budo Mountain, which covers an area of 189sq km (approx. 73sq miles), was formerly covered by tropical rainforest, but is experiencing heavy encroachment and the clearance of forest to make way for fruit and rubber plantations. Approximately 40% of the remaining forest supports six species of hornbill: Great, Rhinoceros, Helmeted *B. vigil*, Wreathed *Aceros undulatus*, Bushy-crested *Anorrhinus galeritus* and White-crowned *Berenicornis comatus*.

Species	No. of existing nests	No. of nests sealed	No. of successful nests	Success of sealed nests
Great Hornbill	51	18	16	89%
Rhinoceros Hornbill	38	6	3	50%
Helmeted Hornbill	9	1	1	100%
Wreathed Hornbill	11	1	1	100%
Bushy-crested Hornbill	11	2	2	100%
White-crowned Hornbill	9	0	0	0%
Total	129	29	23	79%

Khao Yai National Park covers an area of 2,168sq km (approx. 875sq miles). Approximately 90% of forest cover (evergreen forest) supports four species of hornbill: Great, Wreathed, White-throated Brown Hornbill *Anorrhinus* or *Ptilolaemus austeni* and Oriental Pied Hornbill *Anthracoceros albirostris*.

Species	No. of existing nests	No. of nests sealed	No. of successful nests	Success of sealed nests
Great Hornbill	43	29	29	100%
Wreathed Hornbill	35	16	15	94%
White-throated Brown Hornbill	24	13	13	100%
Oriental Pied Hornbill	51	29	29	100%
Total	153	87	86	99%

Huai Kha Khaeng Wildlife Sanctuary, situated in the western part of Thailand, covers an area of 2,780sq km (approx. 1,075sq miles). Approximately 75% of the various forest types, including monsoon

evergreen, hill evergreen, mixed deciduous forest and secondary growth, are utilised by six species of hornbill: Great, Rufous-necked *A. nipalensis*, Plain-pouched *A.* or *Rhyticeros subruficollis*, Tickell's Brown Hornbill *Anorrhinus* or *Ptilolaemus tickelli*, Oriental Pied Hornbill and Wreathed Hornbill.

Species	No. of existing nests	No. of nests sealed	No. of successful nests	Success of sealed nests
Great Hornbill	21	18	12	67%
Rufous-necked Hornbill	10	4	4	100%
Plain-pouched Hornbill	7	5	5	100%
Tickell's Brown Hornbill	8	6	6	100%
Oriental Pied Hornbill	25	21	20	95%
Total	71	54	47	87%

Flocks of Wreathed Hornbills were recorded, but no nests were found during the survey.

Incidents of unrest in the southernmost provinces rendered some areas unsafe and work had to stop for a while, leaving some of the 2008 data incomplete. Work was also hampered by prolonged periods of heavy rain.

The Hornbill Research Foundation, headed by Pilai Poonswad, is based at the Faculty of Science at Mahidol University in Bangkok. Its Thailand Hornbill Project has received the overwhelming cooperation of local villagers in the southern provinces of Pattani, Yala and Narathiwat, who previously earned extra money by robbing hornbill nests and selling the chicks. Now, villagers are employed as field assistants who, along with staff of the Thailand Hornbill Project, collect biological data, monitor hornbill populations and safeguard the hornbills throughout the year.

As noted above, the Hornbill Research Foundation also has research sites at Khao Yai National Park in the north-east of the country and at Huai Kha Khaeng Wildlife Sanctuary in the western part of Thailand.

Pilai Poonswad has expressed the programme's gratitude to the Avicultural Society for its support in helping to conserve these fascinating birds in Thailand and, she says, it both needs and welcomes our continued support.

In 2009, we have again adopted two pairs of hornbills, this time choosing a pair of Wreathed Hornbills and a pair of White-crowned Hornbills.

IS PRINCE RUSPOLI'S TURACO THREATENED BY HYBRIDIZATION WITH THE WHITE-CHEEKED TURACO?

by Luca Borghesio, Tolera Kumsa, Jean-Marc Lernoald and
Afework Bekele

The Ethiopian plateau is home to two endemic species of turaco, the widespread White-cheeked Turaco *Tauraco leucotis*, with two subspecies *T. l. leucotis* and *T. l. donaldsoni*, and Prince Ruspoli's Turaco *T. ruspolii*, which has a small and restricted range on the southern part of the plateau. The ranges of *T. ruspolii* and *T. l. leucotis* abut along a narrow strip of land along the north-western edge of the former's distribution (see Fig.1). While the White-cheeked Turaco remains relatively abundant and is therefore not considered to be a threatened species, Prince Ruspoli's Turaco has for many years been on the Red List of globally threatened species.

In 1995, one of us carried out a survey of *T. ruspolii* and concluded that it remained reasonably common (population about 10,000 mature individuals) and was most abundant in the north of its small range of just 7,700sq km (approx. 2,975sq miles) (Borghesio & Massa, 2000). Although *T. ruspolii* and the closely related *T. leucotis* both occur in the same region, they were separated by their choice of habitat (*T. ruspolii* choosing woodland and the forest edge, with *T. leucotis* preferring closed-canopy forest); no evidence was found of hybridization.

In 2002, however, the first observations were reported of *T. ruspolii* x *T. leucotis* hybrids (Lernoald & Seitre, 2002), whose hypothesis was that hybridization might have been the result of habitat barriers separating the two species having become blurred due to rapidly occurring habitat destruction. Hybridization might, therefore, be a new threat to the survival of one of Ethiopia's most charismatic endemic birds.

In 2007-2008, Tolera Kumsa (a student at Addis Ababa University) undertook a pilot survey of the northern part of the range of Prince Ruspoli's Turaco, to investigate the co-existence and hybridization of these two species of Ethiopian turacos. Here we briefly summarize his results and highlight the need for further research:

1. November 2007-March 2008 a total of 374 points were surveyed in an area of approximately 50km x 10km (roughly 30 miles x 6 miles), where the ranges of the two species abut (Fig.2).
2. At each point, recordings of vocalisations of Prince Ruspoli's Turaco and the White-cheeked Turaco were played for 10 minutes. The recorded

Fig. 1. Distribution of turacos on the Ethiopian plateau.

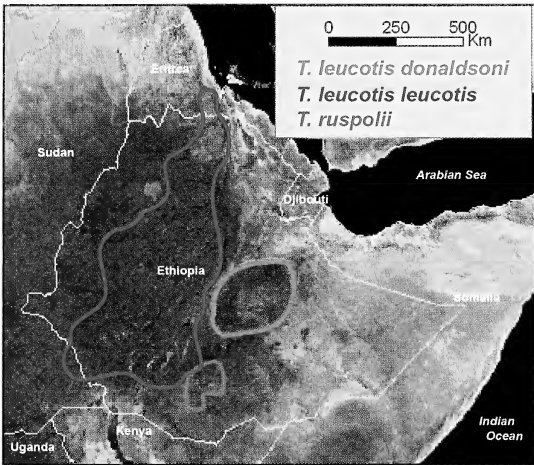
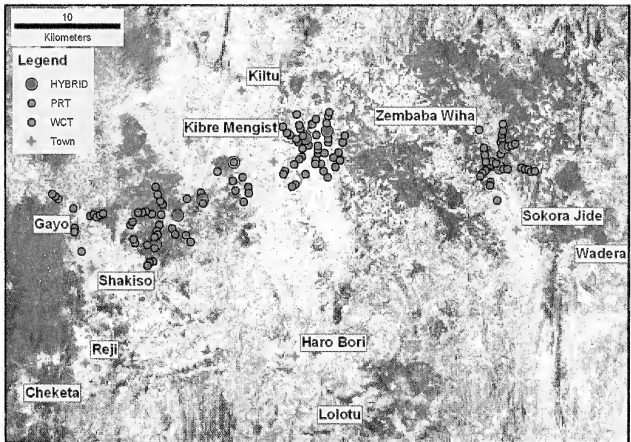


Fig. 2. On this satellite image of the survey area, forest appears as deep red, mainly agricultural areas are pinkish and bush/woodland is pale grey.



calls elicited the vocal responses of nearby turacos, the presence of which would otherwise have been difficult to detect, had they remained silent.

3. Contact was made with the White-cheeked species at 112 points, with Prince Ruspoli's Turaco at 59 points and with hybrids at eight points. The distance in metres between the observer and the birds was measured in each instance in order to obtain an estimate of the abundance of each of the turacos (for a given number of observed individuals, estimated density per unit area increases if detection distances decrease, because the same number of individuals are located in a smaller area).

4. Despite the relatively low number of observations, hybrid turacos were found in the entire area, suggesting that hybridization is a widespread phenomenon.

5. The White-cheeked Turacos were usually a greater distance from the observer (average distance 125m (approx. 400ft)) than the Prince Ruspoli's Turacos (average distance 52m (approx. 170ft)). This was a consequence of the much louder calls of the White-cheeked Turacos, compared to those of Prince Ruspoli's Turacos, and suggests that the apparent greater abundance of the White-cheeked Turaco (as indicated by the higher number of birds detected) was a consequence of the larger area ($(125/52)^2=5.8$ times larger) around the census point, in which White-cheeked Turacos could be detected. In synthesis, Prince Ruspoli's Turaco and the White-cheeked Turaco remain widespread and numerous in the study area.

6. Hybrids had by far the shortest detection distances (only 36m (approx. 118ft)). This suggests that hybrids are more difficult to detect and identify. As a consequence a substantial number of hybrids were probably missed or mistaken for pure individuals of one of the parent species. Only hybrids seen at close distances can be reliably identified. Thus, the apparent low prevalence of hybrids (eight individuals at 374 sample points) is, judging by other evidence, a substantial under underestimate.

7. There are differences in the habitat preferences of the White-cheeked Turaco, Prince Ruspoli's Turaco and hybrids. The White-cheeked species occurs in more forested habitat than Prince Ruspoli's Turaco, which reaches high densities in woodland and along the edges of forest. Hybrids tend to occur in similar habitats to Prince Ruspoli's Turaco but usually with a greater preponderance of crops and plantations, which suggests that human-driven habitat change might be one of the causes of hybridization between *T. ruspolii* and *T. leucotis*. Unfortunately, due to the small sample size - only eight hybrids were observed - this is at present a very weak hypothesis and much more fieldwork is needed to test

it properly. The differences in habitat selection between Prince Ruspoli's Turaco, the White-cheeked and hybrids can be seen in Fig.2, in which the study area is shown in infrared satellite visualization. This offers support to the hypothesis that habitat degradation in the area is leading to hybridization between Prince Ruspoli's Turaco and the White-cheeked species.

The survey yielded a number of interesting - albeit preliminary - findings. Firstly, the suggestion that hybrids are widespread and probably abundant in the study area is worrying and might call for a revision of the conservation status of Prince Ruspoli's Turaco. Secondly, the data seem to suggest that habitat degradation is indeed increasing the chances of hybridization between Prince Ruspoli's Turaco and the White-cheeked species. Thirdly, it is unusual for a forest species to apparently be invading the range of a non-forest relative. We would have expected the reverse to happen. The questions arise: how is this happening and what is the role of human-driven habitat change in this process? A possible explanation is that increasing afforestation with exotic trees (*Eucalyptus* spp. and *Curpressus lusitanica*) may be providing *T. leucotis* with the 'stepping stones' by which it can invade the range of its relative Prince Ruspoli's Turaco.

Unfortunately, the importance of these preliminary findings is reduced by the fact that they are based on such a low data sample - just eight hybrids - which means that no definite conclusions can be reached on the prevalence of hybrids and their habitat selection. Therefore, a follow-up survey is a high priority. We are now in the process of selecting a new Ethiopian student at the University of Addis Ababa, to continue the work begun by Tolera. The task of the new student will be to undertake a survey of the areas around Kibre Mengist, Zembaba Wiha, Haro Bori and Lolotu that Tolera was unable to visit. These sites vary from those in which the natural vegetation remains largely untouched (Haro Bori and Lolotu) to others where there has been a marked human impact (the vicinities of Kibre Mengist and Zembaba Wiha). This will allow us to test the hypothesis that hybridization between these two species of turacos in southern Ethiopia is driven by human impact on their habitats. Based on this hypothesis, we expect that the prevalence of hybrids will be greatest in man-modified habitats, especially those in which large plantations of exotic trees are found, and lowest in areas in which the natural vegetation remains dominant.

Acknowledgements

The above research was funded by Conservation des Espèces et Populations Animales (CEPA), France, Zoologische Gesellschaft für Arten-

und Populationsschutz (ZGAP), Germany, Chester Zoo, International Turaco Society (ITS), The Avicultural Society (UK) and Al Wabra Wildlife Preservation (AWWP), Qatar. We gratefully appreciate the support of these sponsors.

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The Avicultural Society gave £300 (approx. US\$495/€360) towards the cost of the above survey and, at the Council Meeting held at Colchester Zoo on March 28th, agreed to give a sum of €500 (approx. £415/US\$680) towards the cost of a follow-up survey. This matches the sum given by the International Turaco Society.

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FORTHCOMING INTERNATIONAL PARROT CONVENTIONS

In 2010, the Loro Parque Fundación is organising the 1st International Convention on the Conservation of Psittacidae - Science, Policy and Practise, which will be held September 20th- September 22nd, followed by the VII International Parrot Convention, which will take place September 22nd-September 25th, both at Tenerife, Canary Islands, Spain. To learn more about these events, including the objectives of the conventions, the speakers, registration and accommodation information, etc., you can visit the Loro Parque Fundación Website: www.loroparque-fundacion.org or E-mail: congreso2010@loroparque.com

SEARCHING FOR THE BLACK-COLLARED LOVEBIRD *Agapornis swindernianus* IN UGANDA

by René Wuest

I have for more than 15 years been keeping and breeding virtually all of the *Agapornis* species occurring in aviculture, although it must be said, not all at the same time. I have tried all the various ways of keeping them – in pairs, in flocks and in breeding colonies. I have also harboured an interest in the countries of origin of the birds in my care. However, it was to other continents that I travelled, even though I always had the desire to travel to Africa one day.



Black-collared Lovebirds live high in the trees and are rarely photographed.

The only *Agapornis* species about which there is very little information is the Black-collared Lovebird *A. swindernianus*. Lovebird enthusiasts will readily understand why the Black-collared Lovebird has such a special allure. After a lengthy preparation time spent reviewing the sparse literature that is

available on this lovebird, with the help of atlases I searched for the places where museum specimens had been collected and, eventually, decided upon a new travel destination – Uganda.

Once referred to as the “Pearl of Africa” by Winston Churchill, Uganda is situated in the north-east of the “Dark Continent” by Lake Victoria, the second largest freshwater lake in the world. Uganda has many natural wonders, such as the White Nile and its various rapids, and the Rwenzori Mountains and the famous Mountain Gorillas *Gorilla g. berengei*. As well as various species of apes and monkeys, there are more than 1,000 species of birds. Six or seven of them are species of parrot, two of which are lovebirds.

The nominate form of the Black-collared Lovebird *A. s. swindernianus* was first described in 1820 by Heinrich Kuhl (1784-1821) and named in honour of his teacher Prof. Theodor van Schwinderen (1784-1851) of the University of Groningen. In 1895 the subspecies *A. s. zenkeri* was described by Anton Reichenow (1874-1941) and named after Georg Zenker (1855-1922), who zealously collected specimens and made botanical discoveries at the research station at Jaoundé in the Cameroons and sent them to Reichenow at the Natural History Museum in Berlin. In 1908, a third subspecies, *A. s. emini*, was introduced to science by Oscar Neumann (1867-1946). However, with the only morphological difference being a more curved bill, the validity of this subspecies has been questioned by many scientists. A similar situation probably applies to the Uganda Red-faced Lovebird *A. pullarius ugandae* which, in 1908, was also described as a new subspecies by Neumann. The examples I have seen to date did not show a clear difference in the colour of the rump – but that is a topic for another day.

The Black-collared Lovebird does not have a white periophthalmic ring, but a black one with a yellow iris. The bill is black. The general plumage is green with a narrow black collar on the nape, below which the plumage of the Uganda birds is tinged with orange-red, which partly extends onto the breast.

The exact distribution of the Black-collared Lovebird is unclear. However, on the basis of museum specimens, it is known to occur in: Liberia, Ivory Coast, Ghana, Cameroon, Gabon, Democratic Republic of Congo and Uganda. It has yet to be established whether the Congo, Central African Republic, Nigeria, Benin and Togo should be included.

There is also Sierra Leone, where in February 2007, Dowsett-Lemaire and Dowsett (2008) heard its characteristic calls over the canopy of primary forest near Konella in the Gola Forest, close to the border with Liberia. It confirms, they believe, that Black-collared Lovebirds were the unidentified species of lovebird seen in the same area and elsewhere in the Gola Forest

by Allport et al. (1989). It had not previously been recorded in Sierra Leone and is the westernmost record for this species.

There was originally an enormous belt of rainforest stretching right across the Equator and the Black-collared Lovebird's future distribution will, of course, depend on there being large connected areas of primary and secondary forest. However, as elsewhere in the world, there is rampant deforestation and, in most African countries, all that remains are varying-sized fragments of the forests that once existed.

According to present scientific knowledge the Black-collared Lovebird occurs only in forested areas. For this reason we wanted to begin our search in the Semliki National Park in Uganda. However, the day before our departure I received an e-mail from the Tourist Office there warning us that it was closed to visitors. Congolese rebels had apparently entered the park, which is located on the border with the Democratic Republic of Congo and, as a result, the area was considered unsafe.

We therefore decided to restrict our search to the Budongo Forest Reserve. The reserve covers about 793sq km (495sq miles) and lies 700m-1,270m (2,300ft-4,200ft) above sea level. It is located in the districts of Hoima and Masindi near Lake Albert in the west of the country. The reserve is made up of primary and secondary forest and is the last remaining large connected forested area which changes to grassland and savannah. The temperature is on average more than 25°C (77°F) and the precipitation is between 100mm-1,000mm (4in-40in) during the year.

Some 470,000 people live in Masindi District, as well as 84,000 head of cattle, 314,800 goats and 502,700 chickens. You can imagine therefore what pressures there are on the last untouched areas. The district is, of course, considerably larger than the reserve. There are not only some 366 species of birds, but also more than 250 butterfly species and several primates including Chimpanzee *Pan troglodytes*. The so-called "Royal Mile" is known worldwide amongst ornithologists. This road with its large trail system provides excellent access to the forest and its fascinating flora and fauna.

We were based in the nearby grounds of Nyabyeya Forestry College, which is on a hill. There was no running water, no electricity and our choice of meals was restricted to rice or potatoes. We started out early each morning before dawn. It was very eventful as the first Grey Parrots *Psittacus erithacus* flew over while it was still dark (!) and others followed later in the half-light. One could see pairs flying from the forest down into the valley. During one evening expedition we observed our largest flying flock of up to 50 birds.

But back to the Black-collared Lovebird. On March 17th 2007, the second day of our stay, two pairs of Black-collared Lovebirds flew over

our heads. As they fly quite rapidly, we had to remain very alert. However, one can tell very quickly from their shrill cries that they are Black-collared Lovebirds. On the first occasion we succeeded in recording their cries and replayed these daily. We managed twice to entice birds in our direction, but they never flew lower than 50m-60m (165ft-200ft) above the ground.

We succeeded in taking our first photographs on April 6th 2007. We observed a pair with four young. Another pair with just one youngster made a brief stop in a 60m (200ft) tall Muhimbi tree, otherwise known as the Uganda Ironwood *Cynometra alexandri*. Unfortunately it was not possible to entice these extremely shy birds any lower.

On April 13th 2007 we saw a pair with two young, again at a height of about 60m (200ft), on this occasion in a silk tree *Albizia* sp. Unfortunately, we did not find any feeding trees, which might have provided better opportunities for observation. The birds we saw were obviously just passing through and did not stay long. My supposition is that the birds roost in primary forest and also breed there, but in the mornings forage in secondary vegetation. The fields of the local people, just outside the reserve, are within easy reach of the secondary forest and, if danger threatens, the birds can quickly disappear back into the forest.

With the support of our guide Martin Okot, I was able to question local farmers. If, we managed to elicit a response, it was that they only ever saw Red-faced Lovebirds. According to Bates (Schwichtenberg, 1982) *A. s. zenkeri* was often observed with Red-faced Lovebirds. Both species feed on fruits in the crowns of wild fig trees. If it is difficult enough for an expert to tell a female Red-faced Lovebird from a Black-collared Lovebird in the field, then I would not like to rely on the evidence of local people, who mostly responded to our questions about the Black-collared Lovebird with a shrug of the shoulders.

The possibility that Black-collared Lovebirds visit the fields cannot be discounted. On the contrary, I believe it to be highly likely as, in addition to fig seeds, maize, insects and millet have been found in the crops of specimens that have been collected (Forshaw, 1989). Unfortunately, we were not there during the harvest period.

The Belgian missionary, Pater Hutsebout, who worked in what is now called the Democratic Republic of Congo, is probably the only person to have kept Black-collared Lovebirds alive in captivity. He had to provide them with fresh figs every day, as they would not eat substitute foods. Without fresh figs they would die within three to four days (Bouet in Forshaw, 1989).

We closely examined the large fig trees *Ficus* spp. The Sycamore Fig *F. sycomorus*, which has fruits of up to 4cm (1½in) in diameter, is amongst the species that occur in eastern Africa. However, according to the literature

the Black-collared Lovebird appears to specialise in feeding only on small figs. Our efforts to search for these fig species were very arduous and made more difficult because we could not move freely in the forest. The Budongo Conservation Field Station Chimpanzee Conservation Project area surrounds the "Royal Mile" and meant that we had to obtain a range of permits, firstly from the national forest authorities and, then local permits, after having submitted proof that we had received various inoculations. I could obtain these only through ZGAP (the Zoological Society for Species and Population Conservation, Munich), as no private individuals are allowed access to the area. The food plants of the tree types *Harungana* and *Rauwolfia*, mentioned in some of the literature, do not occur in Uganda.

We also searched for nesting hollows and termite mounds in which, according to some of the literature, the nests of Black-collared Lovebirds can be found. We were, however, unsuccessful. In the Budongo Forest the termites are mainly ground-living, which leads me to suppose that the Black-collared Lovebirds do not breed in their deserted mounds, but in tree hollows.

It is interesting to note that we observed young with their parents in early April and succeeded in photographing a juvenile with its parents, because July is often mentioned as the breeding time, although this is based on a single observation. At the present time there is no other reliable information on the breeding period, the fledging time and how long the young remain with their parents after fledging. Further investigation is needed.

According to Dr Wolf Gatter (pers. comm.) the nominate form of the Black-collared Lovebird *A. s. swindernianus* was last seen in the Taï National Park in the Ivory Coast in 2005. The original distribution areas in Liberia are under serious threat.

Even if the subspecies *A. s. zenkeri* is supposed to be of least concern because of its large area of distribution, I would like to point out that in all African countries much of the forest is being removed and, as already mentioned, this will lead to that which remains being restricted mostly to just a few connected fragments of forest.

Acknowledgements

I would like to thank my expedition team: Christina Hester, Schwäbisch Hall; Vincent Odama, Masindi; Martin Okot and Medi Lwere, Kampala; as well as the African Bird Club (ABC) and Dr Nigel Collar, Cambridge. I would also like to thank Tony Pittman for translating the original German text into English.

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THE SOCIETY'S VISIT TO EXMOOR ZOO

by Philip Schofield

Avicultural Society members and their guests visited Exmoor Zoo in September last year and after lunch were taken on a conducted tour of the public and off-show exhibits by Head Keeper Derek Gibson.

The zoo began life as a bird garden in 1982. Over subsequent years additional land was added and it now occupies 5 hectares (approx. 12 acres) plus 3 hectares (approx. 7 acres) which remain undeveloped. It has been under the current ownership of Danny Reynolds (who is Director/Curator) and Lynn Reynolds (who is Commercial Director) since 1993.

A few reptiles occupy well-laid out compartments in a small tropical house as one enters the zoo. These include one of the smaller crocodylians, identified as Cuvier's Dwarf Caiman. Mammals on view include a selection of smaller primates, from marmosets and tamarins to gibbons and howler monkeys.

Hoofstock in the collection include Blackbuck (sharing their paddock with Maras) and two male Sitatunga. The latter inhabit a marshy enclosure containing a pond, which they share with Whooper Swans and a Capybara. A group of Asian Short-clawed Otters (a pair with its two five-year old daughters) is fed six times every day, the aim being to keep the group active and interested in life by providing a succession of small meals throughout the day. Other mammals include Tree Porcupines (which are bigger than I had expected), Bat-eared Foxes (two males) and a group of Bennett's Wallabies.

A pair of Cheetahs, excluded from conservation breeding plans because of genetic defects, nevertheless look good in their hillside enclosure, from which the pair has a wide view of the surrounding landscape, something that can provide much in the way of enrichment for zoo carnivores. Exmoor's other large cat is a female black Leopard, one of only a few such panthers currently in UK collections. This animal, housed in a high and well-planted enclosure, is promoted as the 'Beast of Exmoor,' a reference to the many reported sightings of feral large cats in the area. Leopard, Puma and Lynx have all been reported on the moor and there has been some interaction with the collection's Leopard. Much has been written about the supposed presence of large cats living wild in the British countryside, without much supporting evidence. However, a very tame female Puma was caught in Scotland some years ago and Jungle Cats and Lynx have been recorded as road casualties.

Smaller predators have made their presence felt at Exmoor Zoo, with

a female White-naped Crane having been killed on the nest by a family of Stoats, putting an end, at least temporarily, to Exmoor's run of success with this crane. While one might expect crane chicks to be at risk from this versatile little predator, an adult crane might be expected to be safe. It seems that Stoats hunting in a family group are a force to be reckoned with – and almost impossible to keep out of open paddock-style enclosures. Demoiselle Cranes have been bred at Exmoor and a number of home-bred birds were on view. Other paddock birds include Rheas and White Storks, while a pair of Black Storks occupy a tall aviary which incorporates telegraph poles as uprights.

As a result of recent breeding activity, Crowned Plovers had chicks and we saw a group of three Superb (Spreo) Starlings and a hand-reared White-crowned Robin Chat, while Southern Ground Hornbills had fertile eggs in an incubator at the time of our visit and Quaker Parakeets were among other birds which had bred successfully. White-throated Laughingthrushes and Buffleheads had both laid eggs but failed to hatch them and the trio of Red-rumped Caciques had attempted to nest, but had been unsuccessful. Ringed Teal, which share an aviary with smaller birds, have never laid, which is unusual for this normally prolific little duck. A pair of Montserrat Orioles had hatched young but failed to rear them. This species, rescued from the Caribbean island of Montserrat by the Durrell Wildlife Conservation Trust, after most of the mountain forest was destroyed by volcanic activity, appears now to be well established at Jersey Zoo and has been distributed to a few other collections with a view to building up a captive population for conservation purposes.

The first of the New World orioles to have anything approaching a self-sustaining captive population, it reminds one of the other species from this family that used to be commercially imported, that nobody ever bothered to try to breed. Some of the hangnests and troupials, as we used to call them, might have been as adaptable to captive breeding as the Montserrat Oriole appears to be. Exmoor Zoo was first in the UK to breed the White-browed Coucal and we saw the latest streaky-plumaged chick sitting in sun; the parents had eggs again. The zoo's success with these coucals (the White-browed being only the second species of this aviculturally neglected family to have been bred in the UK) and with Blue-throated Conures, that we also admired, have been described in recent issues of the *Avicultural Magazine*.

The aviaries at Exmoor are mostly tall and well-planted. A particularly attractive enclosure, utilising the semi-circular framework more commonly used for large, polythene greenhouses, houses a collection of wading birds including, what was said to be, the only Chinese Pond Heron in the UK.

This is not the moment to discuss the ethics of the commercial importation of wild birds; however, individuals like this heron remind one of the many species one is unlikely to see again. Also in this enclosure was a single Oystercatcher, for which a mate had just been received and was being held off-exhibit. I always think that this species is unfairly neglected from an avicultural point of view, in favour of the more delicately built (and more delicate in constitution), though surely no more attractive, Avocet.

One of the world's most numerous and maligned avian species is the Red-billed Quelea, enormous numbers of which are destroyed in Africa as an agricultural pest, and which was formerly imported as a cage and aviary bird in almost equally large numbers. When it was freely available, nobody seemed much interested in it. Sharing a large aviary with other birds at Exmoor, I saw a male Red-billed Quelea and another bird which looked as so it might belong to a related species. It was not easy to make a positive identification in the high and well-planted aviary. Had I known beforehand that they were there, I could have taken along a widowed female from my own collection to join them.

A magnificent pair of Lady Amherst's Pheasants attracted much attention. Pure-bred examples have become more available in recent years, following San Diego Zoo's importation of wild stock from China, and the origin of the Exmoor pair looked as so it could be traced back to this source. This magnificent pair apart, however, pheasants were not much in evidence.

Corvids are represented by a group of Azure-winged Magpies and a very tame Red-billed Blue Magpie. The latter is imprinted on humans and cannot be trusted with a female; a true pair is housed off-exhibit. Birds of prey are represented by a pair of Palm-nut Vultures and there are pairs of African Spotted Eagle Owls and White-faced Scops Owls. Among the parrots, we admired the Red-fronted and Blue-throated Macaws, also the groups of Patagonian, Golden-crowned and Jendaya Conures, the last two species living together. Pigeons include Wonga, Common Bronzewing and Chestnut-naped Imperial. This is the only collection I know in which Humboldt Penguins share a lake with waterfowl. They appear to thrive in this setting; a similar arrangement succeeded well over many years at Rode Tropical Bird Gardens (now sadly closed). Among the waterfowl at Exmoor are two male Goosanders.

It is impossible in these brief notes to do justice to this little gem of a zoo. Belatedly, I realise I have not mentioned the Bali Starlings, Speckled Mousebirds, Black-headed Caiques and Smew, all of which caught the eye. It was an enjoyable day out on which we saw well-kept and well-chosen species in an attractive setting. It is a zoo that is certainly worth visiting again in the future.

BOOK REVIEWS

WHY DOES MY PARROT...?

Written by the renowned parrot expert and author Rosemary Low, *Why does my Parrot...?* is one of a series of such books published by Souvenir Press. Rosemary's book is aimed at pet parrot owners and offers answers to frequently asked questions on various aspects of parrot behaviour. Rosemary's love of parrots and her concern for the highest standards of welfare are clearly evident in her writing.

The book is divided into three main parts. Listed on the contents page as All About Behaviour, Part One is re-titled Behaviour Therapy for Parrots, further into the book. This section comprises two chapters: the first, What Affects Behaviour, emphasises that the personality and behaviour of the owner have an enormous impact on the behaviour of a pet parrot. Rosemary pulls no punches in stating that loud and threatening people and those with no real interest in wildlife should not keep parrots. She then goes on to consider other factors that may influence parrot behaviour, these include health and diet, the age of the bird, its physical and social environment, whether it is wild-caught or captive-bred, if it was hand-reared and the conditions under which it was reared. The second chapter looks at causes of what are considered to be unacceptable behaviours in pet parrots. Past history and changes in the people in the household, as well as developmental changes as the parrot enters adulthood, are considered and case histories are discussed.

Part Two, What is a Parrot?, again comprises two chapters. The first considers how parrots live in the wild and the second is a brief review of parrot species and their behaviour and stresses that not all are equally suitable as companion birds. Not everyone, and in my experience, not everyone's landlord, close neighbours or family, will tolerate the loud screaming of a macaw or cockatoo. When recently married and living in a very small ground floor town flat, I was green and naive enough to buy a nervous Goffin's Cockatoo that I thought we could offer a good home. Once home he screamed very loudly from dawn, which as it was midsummer, meant he screamed from very early in the morning! I had no choice but to return him to the seller after only a few weeks and feared it might not be the first or last change of home for this unfortunate parrot. As Rosemary warns would-be owners, one should think very carefully before purchasing a parrot. Neither the parrot or purchaser benefit from mistakes and perhaps if I had thought more carefully before 'rescuing' the cockatoo I would, given my personal circumstances, not have bought him. I still feel sad about this and would

not want to make such a mistake again.

In Part 3, which comprises the bulk of the book, an A-Z format is used to consider and discuss many aspects of parrot behaviour, often with reference to relevant case histories. Screaming by parrots is treated well by Rosemary, who gives suggestions as to its causes and offers possible solutions. Another common problem encountered with pet parrots is feather plucking and again causes and suggestions are given on how best to prevent this. Sadly, in the case of some individual parrots, both screaming and feather plucking may become entrenched and prove extremely difficult, if not impossible, to prevent. Too many parrots have suffered as a result of our desire keep them as caged companion birds in the comfort of our own homes. If this book helps prevent or reduce that suffering and leads to an improved rapport between parrot and owner, it will be of great value to both pet parrots and their owners.

Why Does my Parrot...? (ISBN 978-0-285-63840-2) by Rosemary Low was published earlier this year in this revised 208 page paperback edition by Souvenir Press, 43 Great Russell Street, London WC1B 3PD. Price £9.99.

Roger Wilkinson

INTERNATIONAL ZOO YEARBOOK

The 2009 *International Zoo Yearbook* Volume 43 has three papers of special interest to aviculturists. In the first section, Sustainability of Activities in Zoos and Aquariums, O. Walter, J. A. Ellis and L. Bingaman Lackey attempt to answer the question: Will the EU ban on bird imports mean the demise of bird populations in EAZA collections? In the second section, The Developing Zoo World, J. Cornejo describes the breeding programme for the Horned Guan at Africam Safari in Mexico and a veterinary team report on the long-term monitoring of endoparasites in birds-of-paradise at Al Wabra Wildlife Preservation in Doha.

Will the EU (European Union) ban on bird imports (which became permanent on July 1st 2007) mean the demise of bird populations in EAZA (European Association of Zoos and Aquaria) collections? The answer to this question must surely be yes. Undoubtedly many species are likely to disappear, but deciding which these are likely to be is, at this early stage, difficult to say with any great certainty. The authors chose six families: toucans, turacos, hornbills, corvids, Estrildidae finches, true finches, weavers and white-eyes/zosterops for closer analysis in the belief that the pre-2007 populations contained a relatively high proportion of wild-caught birds. Then using data entered onto the International Species Information

System (ISIS) by EAZA zoos (83% of which are members of ISIS), they considered which of these families are most vulnerable due to a reliance on commercially imported birds obtained from dealers. The feeling that the ban will cause the demise of EAZA bird populations was not upheld by the data used, they concluded, except in the case of the white-eyes. The authors question the quality of the data available to them which they used to reach their surprising conclusion, but do not let any of this prevent them remaining remarkably optimistic about the future. They believe that EAZA zoos “might” increasingly turn to private collections to obtain many of their birds and, therefore, will in future work more closely with private aviculturists (perhaps through “Accredited Associate schemes and EEP procedures”), although they concede that the latter will be hardest hit by the ban. There is a derogation, so far largely untested, which will allow some birds to be brought into the EU by EAZA zoos for approved conservation projects.

In the second of the aforementioned papers, Juan Cornejo describes the diet (mainly avocados¹, grapes and bananas), housing, breeding (2002-2008 a total of 33 chicks were hatched from 66 eggs produced by five different pairs), the nest, eggs, the natural and artificial rearing of chicks and chick growth (including the growth of the horn) of the Endangered Horned Guan at Africam Safari, a private zoological institution at Puebla in Mexico. The paper includes a number of photos, graphs and tables. Table 1 lists the institutions in the *Horned Guan International Studbook* holding this species, the number each holds and the number hatched from 1990-2007 (about 50 more birds are held in non-participating institutions in Mexico and Guatemala). The list includes two pairs at Vogelpark Walsrode in Germany, a pair at St Louis Zoo in the USA and 30 birds (13.12.5) at Africam Safari. Sadly, the author concludes that current breeding levels are not sufficient to maintain a viable population in the long-term, without a number of improvements.

The authors of the paper on endoparasites in birds-of-paradise at Al Wabra Wildlife Preservation (AWWP), evaluated the results of over 4,400 documented faecal parasitological examinations of 90 individuals of six species of birds-of-paradise. At the beginning of 2007, the collection included: 1.1 Magnificent, 16.9 King, 24.16.2 Greater (4.5.1 from mainland New Guinea, 18.9 from the Aru Islands and 2.2.1 hybrids), 2.3.1 Lesser, 2.2 Red and 6.1.1 Twelve-wired. The last named, the most insectivorous of those listed and one that has been known to search for prey by digging in the ground in the wild, showed the greatest susceptibility to parasite infections. The prevalence of endoparasites was found to vary between the different species

¹ It should be noted that some varieties of avocado can be highly toxic to some birds (see *Birds and Avocados Avicultural Magazine* Vol.108, No.1, pp.37-38 (2002)).

and also between the sexes, as well as according to the type of housing, e.g. whether or not the aviary had a soil or concrete or tiled floor and whether or not the floor might have been contaminated by the droppings of wild birds. Table 2 provides a detailed dosing and treatment plan.

The *International Zoo Yearbook* Volume 43 is published on behalf of The Zoological Society of London by Wiley-Blackwell, 9600 Garsington Road, Oxford OX4 2DQ, UK. Visit: www.interscience.wiley.com/journal-info for the price and other information.

Malcolm Ellis

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FOSTERING PIGEONS AND DOVES

In an attempt to increase the number of pigeons and doves being bred, Paul Boulden is planning to compile a database of information on which methods of fostering work best and which do not. He would appreciate the following information, including on failed attempts, from those who have fostered pigeons and doves.

Which species have you fostered?

Which species was used as foster parents?

At which stage was the switch made, was it at the egg or chick stage?

Were the foster parents at the same stage of the breeding cycle?

Was it a success? If not, at which stage did it fail?

Did the chicks go on to breed successfully?

Information should be sent to: Paul Boulden, Hon. Secretary/Treasurer, The Avicultural Society, The Mounts, East Allington, Totnes, Devon TQ9 7QJ, UK. Tel:01548 521203/E-mail: Paul@pboulden.fsnet.co.uk

The results will be made available on the Avicultural Society website - www.avisoc.co.uk - and will be published in the magazine, but names and addresses and other personal details will remain confidential.

* * *

2010 SUBSCRIPTION

The time has come around again to remind members and other subscribers that the 2010 subscription will become due on January 1st. Those who would prefer to make the payment in US dollars will again be able to send checks or money orders (US\$38.00 for receiving magazines by regular mail or US\$50.00 by air mail) to: The Avicultural Society, c/o Jane Cooper, 12650 Hearst Road, Willits, California 95490-9231, USA. All checks and money orders should be made payable to The Avicultural Society.

NEWS & VIEWS

NOTABLE BREEDING RESULTS

Another Purple-throated Fruitcrow *Querula purpurata* has been hand-reared at Wuppertal Zoo in Germany. The 2008 Annual Report lists among the birds bred there last year: 12 Elegant Crested Tinamous *Eudromia elegans*, 1.1 Red-crowned Cranes *Grus japonensis*, 0.1 White-naped Crane *G. vipio*, 46 Avocets *Recurvirostra avosetta*, two Bateleurs *Terathopius ecaudatus*, a Hyacinth Macaw *Anodorhynchus hyacinthinus*, 2.1 Andean Cocks-of-the-Rock *Rupicola peruvianus*, two Yellow-rumped Tinkerbirds *Pogoniulus bilineatus*, two House Wrens *Troglodytes aedon* and six Brazilian Tanagers *Ramphocelus bresilius*.

* * *

SEVENTEENTH AND EIGHTEENTH CHICKS

When Josef Lindholm wrote from Dallas World Aquarium at the beginning of June, the seventeenth and eighteenth Andean Cock-of-the-Rock chicks *Rupicola peruvianus* had hatched two weeks earlier and another female was on two eggs that were due to hatch four days after he wrote. Dallas World Aquarium also has phenomenal success breeding members of the toucan family, with the Many-banded Aracari *Pteroglossus pluricinctus* and Fiery-billed Aracari *P. frantzii*, amongst the latest species to be bred there, both probably for the first time in captivity.

* * *

CLOSED AFTER 25 YEARS

Umgeni River Bird Park in Durban, South Africa, has closed after 25 years. A spokesman for Tsogo Sun Gaming, which owned and operated the park, said it had supported it for the past 10 years, but the cost of running the park had continually increased and, sadly, it had not been sustainable as a tourist attraction due to its location and efforts to relocate it had failed. Most of the birds have been relocated to Montecasino Bird Gardens in Johannesburg and other institutions.

* * *

STILL LOOKING

Dick Jaquest - Tel:01273 584737/E-mail:d-jaquest@toucansurf.com - is still trying to locate a female Lilac-breasted Roller *Coracias caudatus* and would appreciate any help and advice on where he might find one.

FIRST BRED SEVERAL YEARS AGO

Here in Cornwall two White-crested Turacos *Tauraco leucolophus* have been bred at Paradise Park, the collection which is credited with having bred this species for the first time in the UK back in 1982. A Red-crested Turaco *T. erythrolophus* has also been bred and a Violet Turaco *Musophaga violacea* which has gone to the Cotswold Wildlife Park. Great Blue Turacos *Corythaëola cristata* have produced several clutches of eggs but, to date, no chicks have been reared.

* * *

TWO SPECIES OF HORNBILL BRED

The Silvery-cheeked Hornbill *Ceratogymna (Bycanistes) brevis* and the African Grey Hornbill *Tockus nasutus*, have been bred at Attica Zoological Park at Spata in Greece. The pair of Silvery-cheeked Hornbills from Tanzania, obtained in 2000, nested for the first time last year. The female emerged from the nest after 153 days, followed the next day by a single youngster. A week later a second youngster emerged, this one much smaller than the first. It had, it was estimated, hatched three weeks after the first one, which probably explains why the female remained in the nest for so long. Five Grey Hornbills fledged from the first nest and four from the second nest in 2008. The pair nested again earlier this year and at least three young were thought to be preparing the fledge.

* * *

NEWS FROM LORO PARQUE, TENERIFE

By the beginning of July, 735 young parrots of 136 species and subspecies had been ringed (banded) and, in August, Curator Dr Matthias Reinschmidt was delighted to announce that four Lear's Macaws *Anodorhynchus leari* had been hatched. It was the result of two pairs again having nested. Two of the young were being raised by a pair of Green-winged Macaws *Ara chloroptera* and the other two by a pair of Blue-and-yellow Macaws *A. ararauna*. It means that Loro Parque now has 15 Lear's Macaws.

Two Yellow-lored Amazons *Amazona xantholora* and two Marajó Yellow-crowned Amazons *A. ochrocephala xantholaema* had been reared. These Amazons are seldom kept in Europe and, therefore, these young are crucial in helping promote self-perpetuating captive populations. The subspecies of Grey Parrot *Psittacus erithacus timneh* was having an extraordinarily productive season. Eight pairs had bred and were raising young or had gone on to incubate a second clutch of eggs. A Short-tailed Parrot *Graydidascalus brachyurus* was being reared by its parents. It is five years since this species last bred at Loro Parque. The male of the pair

has lived at Loro Parque since 1996 and has previous breeding experience, the female who is now five years old was first fostered by a pair of Red-shouldered Macaws *Diosittaca nobilis* and then hand-reared. This year she laid four eggs, of which only one was fertile and hatched.

Housed in a new recently opened jungle-like riverscape at the entrance to the aquarium are four Crimson-bellied Conures *Pyrrhura p. perlata*, a pair of Toco Toucans *Ramphastos toco*, four Blue-grey Tanagers *Thraupis episcopus* and four Ringed Teal *Calloneta leucophrys*.

Loro Parque Fundación is currently looking for responsible breeders in all countries, prepared to buy pairs of Loro Parque-bred parrots and breed them on a long-term basis and transfer all revenues from the sale of the birds they breed to the Loro Parque Fundación to help conserve threatened parrots around the world. To obtain further information you can go to the Website: www.loroparque-fundacion.org or E-mail: papageien@loroparque-fundacion.org

* * *

FLEDGED AFTER 34 DAYS

The July 23rd issue of *Cage & Aviary Birds*, p.5, included a photo of a pair of Black-spotted Barbets *Capito niger* with one of three young hatched in one of Bob Jewiss's aviaries here in the UK. The three young fledged at the end of June after having been in the nest log for 34 days. The pair fed the young about 17,000 crickets and on one day shortly before the young fledged a whole punnet of blueberries was consumed. This medium-sized northern South American barbet was first bred in the UK at Winged World in 1971. The breeding was described by Bryan S. Ward in the *Avicultural Magazine* Vol.77, No.6, pp.194-195. On that occasion two young, a male and a female, were reared and left the nest after 34 days.

* * *

BLUE CRANES AND BLACK OYSTERCATCHERS

World of Birds Wildlife Sanctuary, Hout Bay, South Africa has, wrote Walter Mangold in its *Newsletter* No.299, March/April 2009, p.8, the largest flock of Blue (Paradise or Stanley) Cranes *Anthropoides paradisea* anywhere in the world. At one time it had more than 40 birds, but now the species is no longer considered to be endangered, the number of birds is being drastically reduced. Adventure Farm, home of the African Crane Breeding Centre, has been sold and the 30 adult and juvenile cranes, plus seven young from the last breeding season, during which 10 were bred, have been found temporary accommodation at the World of Birds. Four or five pairs will probably be retained for breeding and all remaining birds and future surplus stock will

go to other zoological institutions.

On p.13, Walter Mangold wrote that the Pan African Association of Zoos and Aquaria (PAAZAB) was considering establishing a captive breeding programme and studbook for the African Black Oystercatcher *Haematopus moquini*, but was advised to drop the plan by a seashore expert, who claimed that this bird is difficult to keep in captivity due to its specific dietary requirements. The response from the World of Birds was that oystercatchers are commonly bred in overseas zoos, moreover, oystercatchers have been hand-reared at the World of Birds and have been kept there for many years on a very simple diet which they share with plovers, egrets and ibises, and - will even eat fruit!

* * *

SEXING BLUE-FRONTED AMAZONS

Male Blue-fronted Amazons *Amazona aestiva* can be distinguished from females by their larger size and the fact that they have more yellow on the head, according to the authors of a paper published in *Emu* Vol.109, Issue 3, pp.192-197, 2009. They took a number of measurements and noted the percentage of yellow on the heads of 202 birds (of the subspecies *A. a. xanthopteryx*) captured in north-western Argentina. They found that males were on average larger and heavier than females and had a higher percentage of yellow on the head. Bill depth was the most accurate single measurement for sexing this species, classifying correctly 80% of the individuals, all of which had been DNA sexed. It is suggested that the difference in bill size may be important, as during most of the year they travel together in pairs and can therefore exploit food sources slightly differently and without competing with each other.

* * *

A LATER RECOLLECTION

Following Nigel Hewston, Philip Schofield and Dave Cole's recollections of the pair of Black-and-white Laughingthrushes *Garrulax bicolor* (formerly *G. leucolophus bicolor*) owned by Raymond Sawyer in 1987 (see Vol.114, No.3, p.132 (2008) & Vol.115, No.1, p.40 (2009)), Paul Irven has written to say that he had the pleasure of looking after the pair when the birds were housed in an off-show aviary at Chessington World of Adventures and Zoo, the pair having arrived there on September 22nd 1989. He recalls that they were very lively birds that were in first-class condition and were the first of their kind he had ever seen. Subsequently, Paul moved onto another section at the zoo, and does not know what became of the pair.

MODEL WHITE-EYE BRED

Sedgwick County Zoo at Wichita, Kansas, in the USA, has achieved the first captive breeding of the Saipan Bridled White-eye *Zosterops conspicillatus saypani*, as part of the Mariana Avifauna Conservation (MAC) programme. This white-eye is not currently endangered, but was chosen as a model for other species that may require intensive management.

* * *

SECOND CHICK HATCHED

Following the publication of our 64-page special issue devoted to Dr Quinque's work with the Kagu *Rhynochetos jubatus*, I found a second record of a Kagu chick having been hatched here in the UK. I found it in the correspondence section of the *Avicultural Magazine* Fifth Series, Vol. II, No.1, January 1937, where on p.30, A. Martin, Curator of the collection at Keswick Hall, Norwich, described how a pair of Kagus nested there and succeeded in hatching a chick. However, because the Kagu persists in nesting during the northern winter, the chick survived only a very short time.

The pair of Kagus was purchased in April 1936 and housed in a large aviary with a small shelter attached. The pair quickly settled down and during the summer underwent a perfect moult and became quite tame. In late August the male commenced his loud and curious call, which to the letter writer sounded like the barking of a dog and could be heard a long way off. In early October the male was seen carrying dried leaves and grass and placing them under a small bush. The nest was completed on October 14th and the egg was laid the next day. Both birds took turns to incubate the egg, the female sitting during the day and the male at night. After sitting for close to 36 days a fine chick hatched, but by then the weather was bitterly cold and the chick died after about an hour - before it and its parents could be driven into the warm shelter.

* * *

ACCESS TO EARLIEST ISSUES OF MAGAZINE

As a research scientist associated with the University of Michigan Museums of Zoology and Paleontology, Janice L. Pappas has access to a complete set of the *Avicultural Magazine*. If at any time a member needs a copy of an article published in some of the earliest issues that may not be readily available, Janice will, if requested, be happy to obtain a photocopy of the required article. Requests should be addressed to: Ms J. L. Pappas, Museum of Paleontology, The University of Michigan, 1109 Geddes Road, Ann Arbor, Michigan 48109-1079, USA.

AVIAN REARING RESOURCE WEBSITE

For generations aviculturists have been hand-rearing birds and over the years protocols have been refined and improved; however, this information is not always easily accessible and sometimes it is an art (albeit a time consuming one) tracking down the most up-to-date information.

Only limited work has been done to measure the success of these protocols and the long-term effects on the health and breeding success of species that have been hand-reared; and at a time when it is vital that we all work together in an attempt to establish self-sustaining captive populations, it is more important than ever that if the decision is taken to intervene and hand-rear, it is done with the knowledge that the resulting individuals will be healthy and valuable additions to the captive populations.

Therefore, a new website - www.avianrearingresource.co.uk - has been created to compile hand-rearing protocols, measure success rates, highlight problems and the potential for research into improving protocols, as well as look into the long-term survival and breeding success of hand-reared birds.

Aims of the site

The aim of this site is to compile current hand-rearing protocols for all species of birds, to highlight any problems rearing individual species and to make the site accessible to all and simple to navigate. Over time it is hoped that by sharing information we can work together to improve the quality of hand-reared birds and minimize mortality.

Using a rating system the success of each protocol is measured and there is a star-rating system for: the success rate, whether the protocol has been used successfully by two or more institutions/individuals, points and criteria for minimizing imprinting, whether the birds go on to produce fertile eggs and whether the birds go on to successfully parent-rear their own young.

Site content

There can be as many as four or five different hand-rearing protocols for each species, giving users a better idea as to which may be the best option for them. A protocol template can be found on the home page, along with the e-mail contact for any feedback etc. A hand-rearing decision tree is included to encourage aviculturists to take the decision to hand-rear responsibly.

Additional information is also included, such as general information on species, articles about hand-rearing and husbandry guidelines.

The site is at present in its infancy and with help and input will evolve. All are welcome to submit protocols, which along with any comments or other feedback can be sent to Louise Peat at: avianrearing@googlemail.com



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