

Editorial

Thanks to many contributors there is enough material for a mid-year issue of *Afring News*. Now send in more articles so that there can be an issue at the end of 2003!

This issue contains general articles and reports from southern Africa, one of a visit to Kenya, and one of a ringing trip to Papua New Guinea – just to give a different flavour of birds.

Note that the end of June is the time to submit all outstanding ringing records, even if it is one bird. More and more ringers now send electronic data. One of the most important things ringers can do is to send their old ringing data electronically. Some ringers have done so already, notably Gerrie Grobler who sent over 35 000 ringing records with hardly any errors! The electronic data can then be analysed. Many species' summaries are being added to our web page continually, so keep browsing <http://www.uct.ac.za/depts/stats/adu/safring/results/results-index.htm>

Travel

In addition to the usual courses at Lambert's Bay and Wakkerstroom late last year, I had some ringing trips early in 2003.

On Dyer Island I was fortunate enough to catch a Leach's Storm Petrel. I visited Namibia twice: first to ring seabirds on the offshore islands, and then to attend the Vulture Study Group meeting to ring with the Namibian ringers. A report of a recent trip to Inhaca Island is included in this issue. These travels are all illustrated on our web pages.

Obituaries

Manfred Schmitt was a ringer for several decades and sadly he passed away at the end of last year. Although I did not meet him, he phoned occasionally. I have written a short note but if any ringer knew him and would like to share some stories, please send them to me. Michael Byrnes passed away on 30 March this year. He had attended the first National Training workshop in Witsand in March 2000. He continued with his training and registered as a ringer, but unfortunately did not start ringing on his own due to ill health.

Dieter Oschadleus
23 June 2002

SAFRING Trust Fund

The SAFRING Trust, part of the BirdLife South Africa Trust, now has over R6000. Thanks to all who contributed, notably the Wits Bird Club and Ursula Franke. These donations need to continue, however. Why not consider a monthly debit order for a small amount? Remember that being part of most clubs requires membership fees in addition to cost of equipment. Ringers do not pay membership fees and receive *Afring News* for free. Please send single donations as cheques marked SAFRING Trust, or pay directly into the account and let me know about it.



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Garden ringing – a heap of information waiting to be harvested

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As ringers, we often spend large amounts of time and energy traveling to pristine areas which we view as being the best possible ringing sites in our areas. This is very rewarding, and often leads to large amounts of useful data being gathered. The purpose of this paper is to highlight the need for long term garden ringing projects. In a home environment, ringing can be done on a much more regular basis than other study sites, since it is so easy to carry on and watch television or spend time with the family while still catching birds at the same time!

We moved into a small cottage on a 2 ha plot in Ashburton, just outside Pietermaritzburg, in April 2001, just after getting married. Our little piece of garden measures about 15 m × 15 m and has mostly indigenous vegetation in it. On three sides it is surrounded by our landlords property, which is a typical suburban garden, but again loaded with indigenous vegetation. The other side has a vacant plot, mostly grassland with acacias and several exotics. Soon after moving in (day 3 in fact!) we began netting birds. I soon realized that installing many bird feeders increased my capture rate, particularly in the winter months.

Trapping has occurred in three ways, namely with mistnets (used on 37 days), walk-in traps (12 days) and springtraps (8 days). Normally two 12 m nets are used, with 3 or 4 nets being used on rare occasions. Between 3 and 10 springtraps baited with mealworms, and up to 2 walk-in traps, baited with either fruit or seed are used. Trapping

ranged from 2 to 10 hours per day.

Results

Trapping occurred in all months except October 2001, June 2002, and October 2002. In the two years since we moved in, we have caught and ringed 788 birds of 64 species over 55 days of trapping (Table 1). Table 1 also shows the number of birds caught in each trap method, and Table 2 presents data on primary moult and breeding. See also Fig. 1.

Discussion

Several interesting aspects can be drawn out of this small, two year ringing project in our garden. A few species were first recorded in the garden merely by being caught, such as Black Cuckooshrike, Lesser Honeyguide, Acacia Pied Barbet, Yellow Weaver, Lesser Masked Weaver, Grey Sunbird, Greenspotted Dove, Longbilled Crombec and Streaky-headed Canary. This indicates that ringing should be used to supplement other bird census techniques.

This study gives some sort of measure of the changes in seasonal abundance of birds in a garden environment, with more birds being present in winter and spring (Figure 1), presumably when food resources are lower. Lower numbers in summer may also reflect territoriality and more even distribution during breeding.

The results show that different trapping methods are more effective for different species. While mistnets remain the most effective way of trapping birds, the use of spring-

Table 1. Number of birds caught, retrapped and recovered per species.

Species no. & Name		Number ringed	Number retrapped	Capture method		
				Mist-nets	Sping-traps	Walk-in traps
192	Helmeted Guineafowl *	8				
314	Redeyed Dove	3	0	3		
316	Cape Turtle Dove	2	0	1	1	
317	Laughing Dove	1	0	1		
321	Greenspotted Dove	1	0	1		
352	Diederik Cuckoo	1	0	1		
390	Speckled Mousebird	20	1	11	10	
402	Brownhooded Kingfisher	2	0		2	
418	African Hoopoe	5	0	5		
419	Redbilled Woodhoopoe	1	0	1		
421	Scimitar-billed Woodhoopoe	1	0	1		
431	Black Collared Barbet	2	1	3		
432	Acacia Pied Barbet	1	0	1		
439	Crested Barbet	6	0	5	1	
442	Lesser Honeyguide	1	0	1		
447	Gold-tailed Woodpecker	1	0	1		
450	Cardinal Woodpecker	1	0	1		
513	Black Cuckooshrike	1	0	1		
517	Fork-tailed Drongo	2	0	1	1	
521	Black-headed Oriole	2	0	2		
527	Southern Black Tit	3	0	3		
545	Black-eyed Bulbul	30	3	30	3	
551	Sombre Bulbul	4	1	5		
552	Kurrichane Thrush	7	2	5	4	
553	Olive Thrush	1	0	1		
581	Cape Robin	7	1	6	5	1
588	White-browed Robin	2	0	2		
621	Long-billed Crombec	1	0	1		
622	Barthroated Apalis	2	0	2		
627	Bleating Warbler	2	0	2		
649	Tawny-flanked Prinia	2	0	1	1	
654	Spotted Flycatcher	1	0		1	
664	Black Flycatcher	5	1	3	3	
665	Fiscal Flycatcher	5	1	3	3	
673	Chin-spot Batis	1	0	1		
682	Paradise Flycatcher	3	0	1		
686	Cape Wagtail	3	2	2	3	
707	Fiscal Shrike	2	1		3	
709	Southern Boubou	6	3	6	5	2
719	Orange-breasted Bush Shrike	2	1	3		
736	Plum-coloured Starling	1	0	1		
737	Glossy Starling	3	0	3		
763	Whitebellied Sunbird	5	0	5		
765	Grey Sunbird	1	0	1		
772	Black Sunbird	24	0	24		
775	Cape White-eye	15	3	16	4	
784	House Sparrow	7	4	12		

continued

Table 1 (continued). Number of birds caught, retrapped and recovered per species.

Species no. & Name		Number ringed	Number retrapped	Capture method		
				Mist-nets	Sping-traps	Walk-in traps
786	Cape Sparrow	19	2	13	8	
787	Greyheaded Sparrow	36	1	24	14	
791	Spectacled Weaver	13	3	11	6	
792	Lesser Masked Weaver	1	0	1		
797	Spottedbacked Weaver	378	24	399	3	4
799	Cape Weaver	2	0	2		
800	Yellow Weaver	1	0			1
804	Thickbilled Weaver	2	0	2		
808	Red Bishop	2	0	2		
814	Whitewinged Widow	14	1	1	14	
823	Bronze Mannikin	74	6	20		60
833	Bluebilled Firefinch	5	0	5		
839	Blue Waxbill	1	0	1		
846	Pintailed Whydah	24	3	26	1	
849	Black Widowfinch	4	0	4		
859	Yelloweyed Canary	2	0	2		
867	Streakyheaded Canary	1	0	1		

* Handraised and released

traps and walk-in traps is also successful (Table 1). Whitewinged Widows, Bronze Mannikins and Speckled Mousebirds in particular, are more readily caught in walk-in traps, and capture rates of Shrikes, Flycatchers and Robins are definitely enhanced by using mealworm-baited springtraps.

This study shows a relatively high turn-

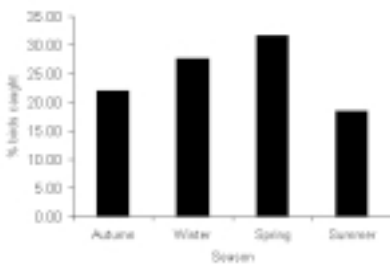


Fig. 1. The percentage of birds caught per season. Trapping effort did not differ drastically between the seasons.

over in individuals within a two year period for most species. Southern Boubous and Cape Robins, both insectivores, appear to have both territorial and non-territorial birds, with individuals being retrapped 3 and 5 times respectively. Frugivores appear to be nomadic, at least on a local scale, with only 1 of 20 Speckled Mousebirds, 0 of 6 Crested Barbets, 3 of 30 Blackeyed Bulbuls, and 3 of 15 Cape White-eyes being retrapped. Sunbirds appear to be even more so, with no recaptures of the 30 Sunbirds of three species being retrapped. Seedeaters show a variety of scenarios. Both Cape and Greyheaded Sparrows were caught in large numbers, with very few being retrapped. House Sparrows on the other hand seem more territorial. Over 50% were recaptured at least once. Only 24 of 378 Spottedbacked Weavers have been retrapped, and only 6 of 74 Bronze manikins, also suggesting significant localized movement.

Table 2 shows records of primary moult and breeding (indicated by brood patch presence) for several of the species caught during

Table 2. Primary moult and brood patches of trapped birds per species.

Spp. no. & name	Primary moult	Brood patch
314 Redeyed Dove	Apr.	Jul.
316 Cape Turtle Dove	Nov.	
317 Laughing Dove	Nov.	Nov.
321 Greenspotted Dove		Nov.
390 Speckled Mousebird	Jan., Mar., Jul., Aug., Nov., Dec.	
418 African Hoopoe		Apr.
419 Redbilled Woodhoopoe		Nov.
421 Scimitar-billed Woodhoopoe		Nov.
431 Black Collared Barbet	Mar., Apr.	Aug., Sep., Apr.
432 Acacia Pied Barbet		Aug.
439 Crested Barbet	Nov.	Nov., Dec.
450 Cardinal Woodpecker		Dec.
513 Black Cuckooshrike		Dec.
517 Forktailed Drongo	Dec.	
545 Black-eyed Bulbul	Jan.–Apr.	Dec., Mar.
551 Sombre Bulbul	Feb.	Feb.
552 Kurrichane Thrush		Nov., Mar.
581 Cape Robin		Sep.
627 Bleating Warbler		Feb.
682 Paradise Flycatcher		Nov., Dec.
686 Cape Wagtail	Mar.	
709 Southern Boubou	Dec., Jan.	Jun., Dec., Jan.
719 Orangebreasted Bush Shrike		Sep., Nov.
737 Glossy Starling		Mar.
763 Whitebellied Sunbird	Feb.	Jan.
772 Black Sunbird	Jan., Apr., May, Sep.	Sep., Nov., Jan.
775 Cape White-eye		Jun., Sep., Nov., Dec.
784 House Sparrow		Nov.
786 Cape Sparrow	Jan., Mar.–Jun.	Jun., Jul., Sep.
787 Greyheaded Sparrow	Mar.–May, Aug., Sep., Nov.	Mar., Aug., Nov., Dec.
791 Spectacled Weaver	May	Aug., Sep., Nov., Dec.
792 Lesser Masked Weaver	May	
797 Spottedbacked Weaver	Jan.–Jul., Sep., Dec.	Jan., Mar., Apr., Sep., Nov., Dec.
808 Red Bishop		Dec.
814 Whitewinged Widow	Jul.	
823 Bronze Mannikin	Mar., Jun.–Aug., Dec.	Dec.
833 Bluebilled Firefinch	Apr.	
839 Blue Waxbill	Dec.	
846 Pintailed Whydah	Sep.	

this study. Several species show unusual breeding times, e.g. Southern Boubou (June), Cape White-eye (June) and Cape Sparrow (June & July) while others show extended breeding seasons e.g. Blackcollared Barbet, Greyheaded Sparrow (August–March) and Spottedbacked Weaver (September–April). All of these species are typical urban adapted

birds, and seem to have adapted breeding seasons to a more abundant food supply in a garden setting.

In summary, we feel that long term garden ringing needs to be encouraged, as there are so many questions as yet unanswered, even with some of our more common species.

A new ringer and a ringing visit to Kenya

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As a trainee ringer you are exposed to bird ringing in a particular way and until you have the opportunity to join other ringers in other parts of the country you do not get to see how other ringers operate. I learned my ringing habits in Gauteng with the Pretoria Bird Club (PBC) ringing group and qualified in September 2002.

In the latter part of 2002, a visiting ringer from Kenya, James Ndungu, joined us on a number of PBC ringing outings and he impressed with his knowledge and enthusiasm. While on these outings he was able to extend his list of ringing lifers even though many of these would generally be regarded as 'junk birds' by most of the Gauteng ringers. So when I had the opportunity to undertake a business trip to Kenya and Uganda in the latter part of 2002, I took time to consult with James before asking my hosts to make arrangements for a little birding in my free time.

As a result of this, I was well equipped for a trip to Lake Naivasha situated some 80 km northwest of Nairobi. During a walk around the grounds of the Country Club and along

the shores of the lake I saw a number of species which were new to me. These included African Golden Oriole, Rufous Sparrow and a large group of Blacktailed Godwits.

The following morning I joined the Nairobi Ringing Group on one of their regular outings in the Nairobi Museum gardens. This is one of their regular ringing sites and they apparently record a retrap rate of about 70%. The nets were erected in riverine bush below the museum. In the period I was with them, they must have caught and processed about 20 birds, including many Baglaffeht (or Reichenow's) Weaver. However, they did have one Nightingale for me to see – another lifer for me.

However, it was here that I saw how different it is to learn ringing in Kenya. The group that morning was 12 strong, and I believe most of them were trainees. They were Nicodemu Nalianya, Rufus Miring'u, Simon Musila, James, Martin Kahindi, Moses Kinuthia, Ann Okelo, Rosemary Bahati, Shailesh Patel, Nickson Otieno, Irene Kinuthia, Mercy Njeri and Elias. They had one book in which to record data, and one set of rings, so each bird was carefully handled by a number of trainees before being released. Apparently a day's catch at this site would be about 30 to 40 birds and one can imagine that it would take substantially longer to qualify under these circumstances than in South Africa. I understand that this is one of the difficulties that ringers face in Kenya.

Mercy Njeri has expressed an interest in visiting the PBC in November this year to extend her practical exposure to ringing and we are trying to make appropriate arrangements for such a visit.



Ringing in the Nairobi Museum gardens.

Ringling and birding experiences in paradise: a trip to Papua New Guinea

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New Guinea, the second largest island after Greenland, is situated just south of the equator north of Australia. It is incorporated as part of the Australasian zoogeographic region, lying east of Wallace's Line. It has a unique avifaunal assemblage and is home to approximately 42 species of birds of paradise (Paradisaeidae) (Frith & Beehler 1998). Parrot species are plentiful with approximately 46 species found in New Guinea (Beehler *et al.* 1986). The larger, conspicuous and charismatic species include the Palm Cockatoo *Probosciger aterrimus*, the sexually dichromatic Eclectus Parrot *Eclectus roratus*, the Vulturine or Pesquet's Parrot *Psittichas fulgidus* and the Sulphur-crested Cockatoo *Cacatua galerita*. It is a wonderland of strange and obscure creatures, many of them sharing close affinities with the Australian mainland. Tree kangaroos *Dendrolagus* spp. occur throughout most parts of the country and include some recently discovered species. It is devoid of large predators with possibly the most 'dangerous' being pythons and the New Guinea Harpy Eagle *Harpyopsis novaeguineae*. Although large predators are absent a stroll through the jungle is no 'stroll in the park'. Malaria is common at lower and warmer altitudes and leeches abound. Together with the rugged terrain and drenching humidity these factors try the hardest of field researchers.

In April 2002 I arrived in this mysterious country to conduct a seven-month study on the effects of homegarden practices on bird communities in the Eastern Highlands Province. I set up a base at Haia, a village centred around a small airstrip about 80 km south of the Eastern Highlands Province capital, Goroka. Haia has a population of approxi-

mately 1000 people and is only accessible from Goroka by small plane (Igag 2002). The airstrip acts as an entry into the Crater Mountain Wildlife Management Area, a 2700 km² region dedicated to sustainable utilisation of the environment and natural resources (Igag 2002, Igag & Murphy 2002). Through the support of the Research and Conservation Foundation of Papua New Guinea (RCF) local communities are encouraged and advised in maintaining a sustainable environment. This is done by encouraging ecotourism and promoting research opportunities in the region (Igag & Murphy 2002).

My research involved censusing birds in different habitat types; from pristine forest to active gardens and clear felled areas. An extensive survey was covered in a wide area around Haia and Soliabedo, a settlement approximately 2–3 days walk west of Haia. It was near Soliabedo, during the late 1960s, that Jared Diamond conducted some of his early avifaunal research in the region (Diamond 1972). He appeared to have accessed Soliabedo from Karamui in the north, and although Soliabedo is now abandoned and two new settlements have been formed, I became familiar with his descriptions of the region. The second part of my study involved censusing on a local scale, with more detailed data collection in a 2.5 × 0.5 km grid established north of Haia. Maintaining data collection in a climate where seven metres of rain falls a year was difficult, but by the end of my stay in October, I had completed most of my work. Although not part of my study, I did hope to do some bird ringing and observe close-up some of the elusive forest birds I'd detected while censusing.

In the late 1980s a study of the Dwarf

Cassowary *Cassuarius bennetti* was initiated by Drs Andy Mack and Debra Wright. They established the Crater Mountain Biological Research Station (CMBRS) at Wara Sera and initiated a long-term bird-ringing program. During 1989–1993, 170 species were observed at the CMBRS and 1787 individuals captured (Mack & Wright 1996). I spent about 10 days at the station and caught 19 species of eight families. Of the 46 birds caught 26 (56.5%) were recaptures (Table 1). This high recapture rate gives some indication of the high site fidelity of many understorey forest species. On Mt Albert Edward (PNG) during a two-day trip (11–12 August 1969) Jared Diamond recaptured 5 of 17 birds that Harry Bell had ringed almost two

years previously, indicating high site fidelity for those species (Bell 1971). During the four days I ringed for a total 1945 minutes (32.4 hrs). The length of the net erected ranged from 120 to 200 m and capture rate was calculated at 1.24 birds.100 m-net⁻¹.hr⁻¹. This was slower than at two montane forests in KwaZulu-Natal where I'd ringed previously (2.23±0.34 and 2.92±0.35 birds per 100 m-net per hour) (Symes *et al.* 2001). A Dwarf Kingfisher *Ceyx lepidus* was released without a ring as no rings of the correct size were available. An additional two Sulphur-crested Cockatoos *Cacatua galerita* were colour-ringed at Haia. These were two juveniles that had been removed from a nest, were relatively tame, and allowed to fly freely around

Table 1. List of bird species captured at CMBRS indicating number of individuals caught and number of recaptures. * indicates not ringed.

Common name	Scientific name	Captures	Recaptures
Alcedinidae (kingfishers & kookaburras)			
Dwarf Kingfisher *	<i>Ceyx lepidus</i>	1	0
Acanthizidae (Australian warblers)			
Rusty Mouse-Warbler	<i>Crateroscelis murina</i>	4	4
Pale-billed Scrub-wren	<i>Sericornis spilodera</i>	2	1
Rhipiduridae (fantails)			
Sooty Thicket-Fantail	<i>Rhipidura threnothorax</i>	1	0
Black Fantail	<i>Rhipidura atra</i>	1	0
Eopsaltriidae (Australian robins)			
White-rumped Robin	<i>Peneothello bimaculatus</i>	1	1
Pachycephalidae (whistlers, pitohuis & allies)			
Rusty Whistler	<i>Pachycephala hyperythra</i>	3	2
Little Shrike-thrush	<i>Colluricincla megarhyncha</i>	5	3
Rusty Pitohui	<i>Pitohui ferrugineus</i>	1	0
Crested Pitohui	<i>Pitohui cristatus</i>	1	0
Dicaeidae (flowerpeckers & berrypeckers)			
Black Berrypecker	<i>Melanocharis nigra</i>	1	0
Meliphagidae (honeyeaters)			
Long-billed Honeyeater	<i>Melilestes megarychus</i>	2	1
Slaty-chinned Longbill	<i>Toxoramphus poliopterus</i>	4	2
Dwarf Honeyeater	<i>Oedistoma iliolophus</i>	4	1
Spot-breasted Meliphaga	<i>Meliphaga mimikae</i>	10	9
Obscure Honeyeater	<i>Lichenostomus obscurus</i>	3	0
Tawny-breasted Honeyeater	<i>Xanthotis flaviventer</i>	1	1
Ptilonorhynchidae (bowerbirds)			
White-eared Catbird	<i>Ailuroedus buccoides</i>	1	1
Total		46	26

the village.

Many of these species were recorded regularly at my census points. A high proportion of species (and individuals) caught were nectarivores of the endemic Australasian family of honeyeaters (Meliphagidae) (Table 1). While handling these species I was reminded of southern Africa's endemic sugarbirds (Promeropidae). I've ringed numerous Gurney's Sugarbirds *Promerops gurneyi* and am always aware that their sharp claws are capable of piercing the skin like pins.

Because nectarivores require a constant source of sugar energy any delay in their feeding activity is likely to have implications on their daily energy intake. Therefore, when ringing sunbirds in South Africa, I usually mix up a small bottle of sugar water (with honey added if available) to offer any birds before being released. In most cases they will drink from the hand. Most of the nectarivores I caught drank the sugar water I offered them, with a couple of birds drinking for at least a minute.

The Australasian region is unique for its nectarivorous parrots, which usually feed in large mixed flocks in flowering canopy trees. Every so often I would come across a tree with hundreds of feeding birds, Rainbow Lorikeets *Trichoglossus haematodus*, Dusky Lories *Pseudeos fuscata*, and smaller species of the *Charmosyna* genus. What a spectacle it was to see these colourful birds, like typical nectarivores, darting around in the canopy. Unfortunately I never ringed any.

Most of the species captured are brown or black [except the catbird which was the largest (165 g), with a green back and pale below with black spots] making them camouflaged and inconspicuous in the forest under-storey. Unless one is patient in the forest, and has time to wait for them, only their calls are heard. The nectarivores are generally more active and their movements easier to detect. However, the similar looking meliphagas are difficult to identify unless one is familiar with what to expect in a region, has learnt their calls and gets a good view of individuals. Many areas of New Guinea remain under-researched so one never knows what to ex-

pect in an unvisited region. One of my most favourite birds, despite it also being one of the most common, was the Long-billed Honeyeater *Melilestes megarrhynchus*, which was never shy in my presence. Its call was quite bulbul-like and I would often be alerted as it dashed through the undergrowth, passing close by. In the hand I became aware of how long the bill actually was (45–47 mm). The inner-side of the tip of the upper mandible is slightly serrated, much like the Malachite Sunbird *Nectarinia famosa*. This tended to get stuck on the mist-net threads, making birds difficult to remove.

While working in the area one is obliged to employ local guides and porters. By doing so the benefits of ecotourism, research and sustainability of the environment in the long term are encouraged. Set rates are established thereby preventing unnecessary disputes with local people over such matters. Logging concessions, where only short term benefits are realised, are in operation on lands bordering the CMWMA. Already decreases in certain animal species are evident. My guide, Ijenepe, had spent his whole life in the forest and was extremely knowledgeable of his environment. Like most of his community they are eager to learn and in a short time he became experienced in removing birds from the net. It was moving to watch his appreciation of birds seen close up, and his understanding of this aspect of research he'd had little experience of. Hopefully what he'd learnt from me would benefit future researchers in the area. I certainly benefited from his knowledge.

Certain birds responded to 'spishing' or call imitations and I offered Ijenepe an incentive for particular birds he could lure into the nets. Pheasant Pigeon *Otidiphaps nobilis* Greater Black Coucal *Centropus menbeki* and Blue-breasted (Red-bellied) Pitta *Pitta erythrogaster* responded well to call imitations and although some of these birds came close to Ijenepe, none were caught. The Crested Pitohui *Pitohui cristatus* makes a low mournful call that emanates through the forest. Imitating this call invokes an aggressive response from any territory holder. At one of

my census points I was 'teasing' a particular bird but, because of the ventriloquist characteristic of their calls in the forest, could not determine the location of the bird. In the next instance I felt a bird rush from behind as it brushed over the top of my head. This was a Crested Pitohui adamant on evicting any conspecific intruders, no matter what their size.

A group of birds I was disappointed not to catch was the birds of paradise (BOP's). However, observing King BOP *Cicinnurus regius*, Magnificent BOP *C. magnificus* and Raggiana BOP *Paradisaea raggiana* displaying was enough to whet my appetite. Malaria struck me at the end of my seven months and my plan to visit some higher altitude forests to observe *Parotia* spp. and *Astrapia* spp. was cut short. The closest I came to viewing an *Astrapia* was when I saw the feathers in the elaborate head-dresses at the annual Goroka Show Independence Day celebrations.

Another two of the many highlights of my trip were the observation of a Dwarf Cassowary and New Guinea Harpy Eagle. In villages hunters will catch cassowary chicks and raise them under domestic conditions. When they are fully grown they will eat, trade or sell them. At one of my census points I was waiting quietly and observing birds. My guide caught my attention and pointed to a cassowary moving slowly through the undergrowth. It came closer and at about 10 m noticed us. At that point it dashed away through the undergrowth with a grunt. Around Haia I would often hear the 'bowstring' call of the harpy eagle, but never saw one. Finally, at one of my census points, relatively close to the village I saw a lone bird perched on top of an emergent snag. A flock of Sulphur-crested Cockatoos were harassing it and it finally flew off. Moments like that became truly etched in my mind.

Acknowledgements

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co-ordinator. WCS-PNG Program, RCF (Goroka) and National Research Foundation of PNG are thanked for support during the study. The Pawaian people of the CMBRS are thanked for their friendship and hospitality, especially my guides, Ijenepe, Sam and Roksy. Drs Andy Mack and Debra Wright are thanked for their support and friendship and I wish them all the success in future research projects in 'paradise'.

For further information see:

- <http://www.rcf.org.pg/research.html> (RCF; research in PNG; ecotourism in CMWMA.)
- <http://www.nri.org.pg/visa.htm> (National Research Institute of PNG; research visas for PNG)
- <http://www.egs.mmu.ac.uk/users/mdobson/Marsden/Marsden.html> (Dr S. Marsden's research projects)

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Malachite Sunbird recaptured after ten years

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Malachite Sunbirds *Nectarinia famosa* were ringed at various localities in the Free State since 1990 (De Swardt 2001). At one of these sites, Free State National Botanical Gardens, capture sessions were mostly during the period March–May (when *Leonotus leonurus* are in flower) and on few occasions during September (when *Aloe granidentata* are flowering at the hilly areas of garden). Since the sunbird project was initiated in the Free State (De Swardt 1995), 128 sunbirds have been caught and ringed at the *Leonotus* clumps. Of the 12 recaptured, only one has been controlled outside of the gardens (see De Swardt 2001).

During 2002 and early 2003 regular ringing was conducted in an effort to collect recapture data of sunbirds and other species. On 22 April 2003, while still busy erecting the last 6-meter net in one of the *Leonotus* clumps in the Botanical Gardens, I noticed a sunbird in the net in the opposite clump and immediately observed that it bore a red colour-ring. The recaptured female sunbird carried ring number F31781 and I had reason to be excited as I recognized the ring number from previous recaptures. The bird was first ringed as a juvenile (possible female) on 19 April 1993 making the recaptured bird 10 years and 3 days old. Interestingly, it was ringed at the same *Leonotus* clump. It was first resighted on 21 April 1994 and thereafter recaptured four times including the April 2003 recapture. All recaptures and resighting were at the same *Leonotus* clump at the Botanical Gardens during the April–May period.

The previous three recaptures were on 4 May 1996, 26 April 2000 and 9 April 2002. During all recapture dates the sunbird showed active primary moult (scores 32, 23 and 17 respectively) with an average mass of 15.6 g. In addition, a Fiscal Shrike (BB73315), *Lanius collaris*, ringed during 1989 by Deon du Plessis, was recaptured in September 2001 after 12 years and 7 months – probably a new record for the gardens!

Malachite Sunbirds are rarely recorded around Bloemfontein during summer and only few records are available (De Swardt 2001). The fact that the sunbird was recaptured at the same site in the gardens during April–May suggests that it was probably present during the other years when no ringing took place. This recapture has prompted me to urge other ringers (especially in the Free State) to try and catch as many Malachite Sunbirds as possible. I am planning to revisit my other study sites such as Kirklington near Ficksburg during June–July and will visit the Free State National Botanical Gardens annually (see also De Swardt 1998). You never know what recaptures will be waiting for me!

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Editor: *The greatest elapsed time is only a few days more than Dawie's record: immature male AB59947, recaptured 10y 0m 14d after ringing at Olifantsbos, COGHR, W Cape.*

Reports

The Bloemfontein Swallow Project: 2001–2003

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Introduction

The background to the Bloemfontein Swallow Project, including the methods used to capture European Swallows *Hirundo rustica* at the unusual tree roost in a garden in the suburb of Universitas, Bloemfontein, as well as ringing results from the summers of 1998, 1999 and 2000 have been published previously (Nuttall, R.J. 2000. Barn Swallow *Hirundo rustica* ringing in Bloemfontein, South Africa. *Safring News* 29: 20–24). This article provides further information on the Project and the results of ringing efforts from the 2001, 2002 and 2003 summers.

The different arrival times of European Swallows at the roost sites in Bloemfontein and the changes in location of these sites during each of the last three summers have affected the results of the Project considerably.

Arrival time and roost site used

2000/2001 Season

Very low numbers of swallows were present in the Bloemfontein area during the 2000/2001 summer, probably as a result of the hot, dry conditions experienced in the central interior at the time, compared to the more favourable, moister conditions in the eastern and northern parts of the region.

The first report of birds using the Linga Longa garden roost site was on the night of 25 February 2001, more than 6 weeks later than the previous three summers. During a visit to the site on the evening of 27 February, an estimated 300–400 birds were seen roosting in a single tree; numbers had in-

creased slightly (estimated at 500–700 birds) by 4 March. The swallows used the roost until 17 March, with numbers decreasing dramatically; on the evening of 18 March, two groups of swallows (estimated at 20 and 50 birds respectively) made a number of low passes over the roost area before departing to roost elsewhere.

2001/2002 Season

The good rains and warm temperatures of the 2001/2002 season produced 'normal' numbers of swallows again, as experienced since the project began in February 1998.

A flock of about 400 swallows was followed at dusk on 23 December 2001 until they descended to roost in a tree situated less than 1 km from the Linga Longa roost site. Despite frequent visits to the Linga Longa site at dusk over the next few days, the roost remained unused. A large number of European Swallows was reported using a *Phragmites* reedbed roost bordering the Modder River, on the farm 'Two-Bob-a-Day' about 20 km east of Bloemfontein in mid-January 2002. This site represents the more usual environment, habitat and substrate used by roosting European Swallows. From a Bloemfontein Swallow Project perspective, this large roost fortunately dispersed about two weeks later, with the first birds reported using the Linga Longa roost site at the end of January 2002. As is usually the case, the first birds using the roost, numbering a few thousand, gathered in the same single tree in the Linga Longa garden as has been the case in previous years. Use of a single tree only allowed more concentrated mistnetting activities than

was the case later in the season, when larger numbers of birds were present.

As numbers of European Swallows using the roost increased, so the roosting birds utilized the other trees in the garden, and later on, those growing on the sidewalk on both sides of the adjacent street. Although the larger numbers of birds present under these circumstances often resulted in high catches of swallows, the chances of recapturing ringed birds decreased.

Numbers of birds at the roost started to decrease from late March, with an estimated 1000–2000 using a single tree as a roost on the evening of 6 April. On 7 April a group of about 300 birds flew in to the roost area after sunset and circled a few times before flying off to roost elsewhere. On 8 April, a smaller group of about 100 birds did the same. The last swallows were seen on the evening of 9 April 2002, when two birds came in to the roost area at 18h15, flew low between the trees before disappearing to roost elsewhere. The sequence of events described here is typical of the end of the ‘swallow season’.

2002/2003 Season

This was the first season since 1994/1995 that European Swallows did not use the Linga Longa garden roost at all during the summer. Although careful observations were made at the roost during late December 2002 and throughout January and February 2003, no swallows roosted in the trees in the garden. There were reports in January that the ‘Two-Bob-a-Day’ reedbed roost along the Modder River was again in use, but this was not investigated. Nevertheless, on 27 January 2003 a group of a few thousand birds was discovered roosting in *Phragmites* reeds in a small, dry dam on the University of the Free State (UFS) campus, about 1.5 km from the Linga Longa roost site. These swallows were easily targeted and ringing could fortunately continue even though the birds were not using the ‘regular’ garden roost. An estimated 3000–4000 birds at most used the small reedbed roost, with numbers of swallows decreasing noticeably towards the end of March. An estimated 80–100 birds used

the roost on the night of the last ringing session of the season, 4 April.

Ringling results

2000/2001 Season

A total of 493 swallows were ringed during five ringing sessions at the Linga Longa roost between 5 and 18 March 2001. Adults (53.5%) and juvenile birds (46.5%) were caught in almost equal numbers. The ringers who contributed to the 2000/2001 season were Frik Conradie (5 sessions, 206 swallows), Rick Nuttall (5 sessions, 151 swallows), Dawie de Swardt (3 sessions, 110 swallows), Johan Kok (1 session, 16 swallows) and Johan van Niekerk (1 session, 10 swallows).

Two foreign-ringed swallows, from the United Kingdom and Finland, and 11 SAFRING-ringed birds were controlled. Data available for nine of the SAFRING-ringed birds revealed all were ringed at the Linga Longa site; a single bird ringed in 1999, six in 2000 and two ‘same season’ controls, from 2001.

2001/2002 Season

Ringling was carried out at the Linga Longa roost on 16 occasions between 5 February and 5 April 2002. The first ringing session of the season was initiated partly by the presence of veteran ringer Gerrie Grobler, who visited Bloemfontein for a week in February; one of his prime objectives was to assist with the swallow ringling. The ringers who contributed to the 2001/2002 season were Rick Nuttall (16 sessions, 1009 swallows), Dawie de Swardt (11 sessions, 838 swallows), Johan Kok (11 sessions, 611 swallows), Gerrie Grobler (4 sessions, 564 swallows) and trainee Graeme Skinner (1 session, 11 swallows). Visiting Norwegian swallow ringer Ingvar Grastveit joined in for a single session.

A total of 13 foreign-ringed swallows from six different countries (United Kingdom: 4; Norway: 4; Channel Islands: 2; Finland: 1; Poland: 1; Spain: 1) were controlled during the 2001/2002 season. Of particular

interest were single birds from Spain and Poland, representing the first swallows from these regions controlled during the Bloemfontein Swallow Project. One of the four Norwegian-ringed swallows controlled was ringed in Norway by Stein Byrkjeland, one of the sponsors of the Project who visited the roost to assist with ringing in February 2000!

A total of 39 swallows ringed at the Linga Longa roost either earlier this season, or during previous seasons, were controlled during the 2001/2002 summer. Some of these were ringed in early 1999.

2002/2003 Season

Ringing took place during 17 sessions from 29 January–4 April 2003 at the small reedbed roost on the UFS campus, with only 12 birds ringed on the last evening. Ringers who contributed were Rick Nuttall (17 sessions, 982 swallows), Dawie de Swardt (10 sessions, 744 swallows), trainee Graeme Skinner (3 sessions, 161 swallows), Johan van Niekerk (3 sessions, 55 swallows) and Johan Kok (1 session, 50 swallows). The Project was also fortunate to welcome visiting Hungarian swallow researchers Dr Tibor Szep and Zoltán Szabó and Chairman of the SAFRING Steering Committee, Prof. Steven Piper (University of Natal, Pietermaritzburg), who joined the ringing activities for a single night. Well-known Netherlands swallow ringer and enthusiast, Bennie van den Brink, spent four days in Bloemfontein and participated in the

ringing during three evenings. We are very grateful to these esteemed ornithologists for visiting Bloemfontein and sharing their knowledge with us!

A total of five foreign-ringed swallows from four different countries (United Kingdom: 2; Finland: 1; Germany: 1; France: 1) were controlled; the birds from Germany and France were the first from these countries for the Project. A total of 86 SAFRING-ringed birds were controlled; at the time of writing, data available for 63 of these revealed all were ringed at the Linga Longa site: three birds ringed in 1999, two in 2000, 20 in 2002 and 38 'same season' controls, from 2003, with single birds controlled 34, 36 and 40 days after initial ringing.

The recapture of comparatively large numbers of swallows in the Universitas, Bloemfontein area in subsequent seasons, following original ringing at the Linga Longa roost, and in particular recaptures at the nearby UFS reedbed site in 2003, indicate a high degree of non-breeding site fidelity of these long-distance migrants.

Ringling results compared: 1998–2003

The results for the last six seasons (1998–2003) are shown in Table 1. For locally-ringed (SA) birds (i.e. at the Linga Longa and UFS reedbed roosts), no distinction is made between controls of same-season ringed birds and those ringed during previous seasons. Details of foreign-ringed birds controlled in

Table 1. European/Barn Swallows ringed at the Linga Longa and University of the Free State roosts (1998–2003).

Year	Sessions	Total ringed	1 year	Adult	Controls	
					Foreign	SA-ringed
1998	3	411	–	–	–	–
1999	15	3935	1983	1952	11	50
2000	18	5434	3763	1671	17	91
2001	5	493	229	264	2	9
2002	16	3033	2008	1025	13	39
2003	17	1992	574	1418	5	86
Total	74	15 298	8557	6330	48	275

Table 2. Foreign-ringed European Swallows controlled in Bloemfontein: 1998–2003.

Country	Season					Total
	1999	2000	2001	2002	2003	
United Kingdom	8	9	1	4	2	24
Norway	2	4		4		10
Finland		3	1	1	1	6
Channel Islands				2		2
Denmark		1				1
Italy	1					1
France					1	1
Poland				1		1
Spain				1		1
Germany					1	1
Total	11	17	2	13	5	48

Bloemfontein are presented in Table 2.

The results as shown in the tables are remarkable considering that the ringing effort has been restricted to a few trees in a single suburban garden and a small reedbed site only!

Acknowledgements

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- Mario, Riette, Amy and Brian Gonsior of *Linga Longa Guest House*, who once again made us feel totally at home while catching and ringing swallows in their garden in 2001 and 2002. The welcome cups of coffee served like clockwork during the ringing sessions are always much appreciated!
- My fellow swallow ringers – Dawie de Swardt, Johan van Niekerk, Johan Kok and Graeme Skinner (trainee) from Bloemfontein for their sterling, often late-night efforts.
- Gerrie Grobler for travelling especially from Potchefstroom, North West, to come and help us get the 2002 season off to a great start.
- Ingvar Grastveit, swallow ringer from Norway and one of the joint sponsors of the Project, who changed his family holiday plans especially to come and join us for a ringing session in 2002 (in fact two years exactly to the day since his last visit to *Linga Longa*, when, accompanied by two other compatriot swallow ringers, the occasion was celebrated with the capture of four foreign controls in one evening – from Norway, Finland, Denmark and Great Britain!).
- Dr Tibor Szep, Zoltán Szabó, Prof. Steven Piper and Bennie van den Brink for their professional and enthusiastic participation during the 2003 season.
- Ella Marais for sponsorship of rings.
- Heather Gordon (Producer) and the friendly team from M-Net's *Carte Blanche* for making the effort to come to Bloemfontein to collect material for a great story on the *Linga Longa* swallows.
- Our families for putting up with late nights and swallow-dropping spattered clothing!
- Members of the Free State Bird Club and the general public for their interest, excitement and enthusiasm for the *Linga Longa* and University of the Free State swallows.

For further information on the Bloemfontein Swallow Project visit www.nasmus/ornithol/swallow1.html.

Report on the 2001–2002 ringing year

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The period covered in this report is 1 July 2001 to 30 June 2002. A total of 69 383 birds was ringed (Table 1) compared to 82 792 in the previous year (see Table 7). The total was made up of 64 689 free-flying birds and 4694 nestlings. There is a fair amount of fluctuation in ringing totals over the last 5 years (Table 7), probably mainly due to the number of penguins and quelea ringed, as mentioned in previous annual reports. The figures for this report were compiled in April instead of the usual December, meaning that the data is slightly more up to date than in previous years, although there are always a few ringers who submit data a few years late.

Most birds were ringed in Gauteng (Table 1). Ringing records were received from 3

countries not represented in the previous year: Zambia, Malawi and Mauritius. Top ringer is Tim Osborne (Table 2), who was in 5th position in the previous year. Top raptor ringers are Kevin Mitchell for nestlings and Francois Taljaard with balchatries (Table 3).

The number of species ringed was 569, slightly more than the previous year (Table 7). The top species are Red Bishop, Masked Weaver, Redbilled Quelea, European Swallow and Cape White-eye as in previous years, although the Red Bishop is on top for the first time in the last few years.

Common Terns lead the Seabirds list (Table 5). Barn Owl is the most ringed nestling raptor and Pale Chanting Goshawk is the most trapped raptor (Table 6).

Table 1. Geographical distribution of ringing effort in the 2001–2002 ringing year.

Province/ country	Number of ringers	Number of species ringed	Number of birds ringed	Average no. of birds per ringer
Gauteng	34	326	18 951	557
Western Cape	28	187	12 740	455
Namibia	15	225	9628	642
KwaZulu-Natal	13	234	4962	382
North West	6	158	4412	735
Limpopo	6	209	4207	701
Eastern Cape	13	164	5347	411
Mpumalanga	8	206	2914	364
Zimbabwe	7	199	1658	237
Botswana	5	110	1522	304
Free State	6	111	1564	261
Zambia	1	53	927	927
Northern Cape	3	23	201	67
Swaziland	1	51	146	146
Mauritius	1	5	196	196
Malawi	1	7	8	8
Totals	148	569	69 383	469

Table 2. Top 20 ringers in the 2001–2002 ringing year for all species.

Ringer	Province/country	No. of birds
Tim Osborne	Namibia	4007
Kobie Raijmakers	Gauteng	2308
Gerrie Grobler	Limpopo	2299
Margaret McCall	Western Cape	2200
Hennie de Klerk	Gauteng	2108
Bob Ellis	Western Cape	2057
Rihann Geysler	Gauteng	1928
Dirk Heinrich	Namibia	1628
Mark Boorman	Namibia	1534
Rita Marais	North West	1534
Tony Tree	Eastern Cape	1467
Herman & Zephné Bernitz	Mpumalanga	1315
Johann Snyman	Gauteng	1287
Colin de Kock	Gauteng	1262
Henk Bouwman	North West	1240
Mark Brown	KwaZulu-Natal	1165
Dawie de Swardt	Free State	1162
Norbert Klages	Eastern Cape	1142
Shonie Raijmakers	Gauteng	1117
Barry Taylor	KwaZulu-Natal	1078

Table 3. Top ringers in the 2001–2002 ringing year for raptors.

a) Nestlings		
Ringer	Province/country	No. of birds
Kevin Mitchell	Zimbabwe	103
Carl Jones	Mauritius	58
Dirk Heinrich	Namibia	56
Tim Osborne	Namibia	52
Anthony van Zyl	Western Cape	29
b) Free-flying raptors		
Ringer	Province/country	No. of birds
Francois Taljaard	Northern Cape	156
Herman & Zephné Bernitz	Mpumalanga	134
John Moorcroft	Eastern Cape	95
Manfred Schmitt	Gauteng	89
Dirk Heinrich	Namibia	87

Table 4. The most frequently ringed birds for the 2001–2002 ringing year: terrestrial species.

Rank	Species	Total ringed	Previous rank
1	Red Bishop <i>Euplectes orix</i>	5837	2
2	Masked Weaver <i>Ploceus velatus</i>	5597	1
3	Redbilled Quelea <i>Quelea quelea</i>	4204	3
4	European Swallow <i>Hirundo rustica</i>	3716	5
5	Cape White-eye <i>Zosterops pallidus</i>	3411	4
6	Cape Weaver <i>Ploceus capensis</i>	1444	7
7	Blue Waxbill <i>Uraeginthus angolensis</i>	1156	10
8	Redheaded Finch <i>Amadina erythrocephala</i>	1149	6
9	Blackeyed Bulbul <i>Pycnonotus barbatus</i>	1021	13
10	Laughing Dove <i>Streptopelia senegalensis</i>	1005	9
11	African Marsh Warbler <i>Acrocephalus baeticatus</i>	840	12
12	Cape Sparrow <i>Passer melanurus</i>	822	11
13	Melba Finch <i>Pytilia melba</i>	758	
14	Cape Robin <i>Cossypha caffra</i>	675	14
15	Olive Thrush <i>Turdus olivaceus</i>	666	18
16	Common Waxbill <i>Estrilda astrild</i>	640	16
17	South African Cliff Swallow <i>Hirundo spilodera</i>	604	19
18	Spottedbacked Weaver <i>Ploceus cucullatus</i>	588	
19	Redeyed Bulbul <i>Pycnonotus nigricans</i>	583	20
20	Cape Reed Warbler <i>Acrocephalus gracilirostris</i>	579	

Table 5. The most frequently ringed birds for the 2001–2002 ringing year: seabirds.

Rank	Species	Total ringed
1	Common Tern <i>Sterna hirundo</i>	1612
2	Cape Gannet <i>Morus capensis</i>	1610
3	African Penguin <i>Spheniscus demersus</i>	1330
4	Swift Tern <i>Sterna bergii</i>	1033
5	Kelp Gull <i>Larus dominicanus</i>	632
6	Indian Yellow nosed Albatross <i>Thalassarche carteri</i>	490
7	Hartlaub's Gull <i>Larus hartlaubii</i>	440
8	Black Tern <i>Chlidonias niger</i>	398
9	Antarctic Tern <i>Sterna vittata</i>	293
10	Cape Cormorant <i>Phalacrocorax capensis</i>	210

Table 6. The most frequently ringed birds for the 2001–2002 ringing year: raptors.

(a) Raptor nestlings			(b) Free-flying raptors		
Rank	Species	Total ringed	Rank	Species	Total ringed
1	Barn Owl <i>Tyto alba</i>	86	1	Pale Chanting Goshawk <i>Melierax canorus</i>	231
2	Mauritius Kestrel <i>Falco punctatus</i>	58	2	Steppe Buzzard <i>Buteo buteo</i>	158
3	Whitebacked Vulture <i>Gyps africanus</i>	38	3	Lesser Kestrel <i>Falco naumanni</i>	114
4	Rock Kestrel <i>Falco tinnunculus</i>	30	4	Blackshouldered Kite <i>Elanus caeruleus</i>	81
5	Peregrine Falcon <i>Falco peregrinus</i>	25	5	Jackal Buzzard <i>Buteo rufofuscus</i>	64
6	Spotted Eagle Owl <i>Bubo africanus</i>	19	6	Greater Kestrel <i>Falco rupicoloides</i>	61
7	Lappetfaced Vulture <i>Torgos tracheliotos</i>	16	7	Rock Kestrel <i>Falco tinnunculus</i>	44
8	Whitefaced Owl <i>Otus leucotis</i>	15	8	Pearlspotted Owl <i>Glaucidium perlatum</i>	40
9	Lizard Buzzard <i>Kaupifalco monogrammicus</i>	14	9	Barn Owl <i>Tyto alba</i>	35
10	Lanner Falcon <i>Falco biarmicus</i>	10	10	Spotted Eagle Owl <i>Bubo africanus</i>	33

Table 7. Comparison of annual totals over 5 years.

Ringing year	1997/98	1998/99	1999/2000	2000/2001	2001/2002
Active ringers	127	134	155	149	148
New ringers	?	27	34	24	25
Birds ringed	79 977	80 958	65 981	82 792	69 383
Species ringed	504	536	553	554	569

Report on recoveries received at SAFRING: July 2001–June 2002

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This report covers recoveries reported to SAFRING from July 2001 to June 2002. The total recoveries were 359 while 6272 retraps (5475 individual birds) were processed. These retraps include birds retrapped one day after ringing or at any time thereafter. As many retraps as possible are processed at SAFRING but it is impossible to keep up with all of them. Preference is given to data received electronically.

The format is similar to that of previous reports. Selected foreign and local recoveries and retraps are detailed in this report. The species common and scientific names are

listed, followed by the number of recoveries and retraps reported in the current ringing year. The first line of each listed recovery gives the ring number, bird's age at ringing, date of ringing, and place of ringing. South African provinces are given in abbreviated form. The second line indicates the state of the bird (e.g. cause of death), date and place of the ring recovery, the elapsed time (to the nearest month) and distance between ringing and recovery.

Where a recovery has provided the greatest elapsed time or distance in the SAFRING databank, this is indicated in italics.

Foreign and notable local recoveries (recoveries, retraps in this ringing year)

Wandering Albatross *Diomedea exulans* (5 recoveries, 10 retraps)

14003339	Adult	24/07/1960	Near Sydney			
	Resighted	19/12/2001	Prince Edward Island	41y 5m	8802 km	

Greatest elapsed time for this species in SAFRING's database.

European Storm Petrel *Hydrobates pelagicus* (1, 0)

9916652	Unknown	26/07/1990	Bordon, Denmark			
	Dead	25/04/2002	Plettenberg Bay, W Cape	11y 9m	11 017 km	

Greatest distance for this species in SAFRING's database.

Northern Giant Petrel *Macronectes halli* (4, 1)

957805	3+ y	16/09/1986	Marion Is.			
	Sick	13/07/2001	Robben Is., W Cape	14y 10m	2191 km	

Greatest elapsed time for this species in SAFRING's database.

Leach's Storm Petrel *Oceanodroma leucorhoa* (0, 7)

BC45253	Nestling	21/02/1998	Dyer Island, W Cape			
	Recaptured	23/10/2001	Dyer Island, W Cape	3y 8m	0 km	

Greatest elapsed time for this species in SAFRING's database.

Whitetailed Tropicbird *Phaethon lepturus* (0, 1)

5H22208	Nestling	18/09/1999	Cousin Island, Seychelles			
	Recaptured	16/12/2001	Cousin Island, Seychelles	3y 8m	3 km	

White Pelican *Pelecanus onocrotalus* (2, 3)

H003	Nestling	Summer 2002	Dassen Island, W Cape			
	Resighted	02/05/2002	Rondevlei, W Cape	(3m)	80 km	

Resighting of cohort colour-ringed pelican.

Cape Gannet *Morus capensis* (59, 1268)

9A28299	Nestling	19/02/2000	Bird Island, W Cape		
	Injured	30/07/2001	Ballito Bay, Natal	1y 5m	1266 km
919678	Nestling	21/01/1980	Bird Island, W Cape		
	Recaptured	28/04/2002	Dwarskersbos, W Cape	22y 3m	61 km

White Stork *Ciconia ciconia* (5, 9)

CA0212	Nestling	22/06/2000	Belarus		
	Resighted	13/02/2002	Muldersvlei, W Cape	1y 8m	9658 km

Resighted by Jan Hofmeyr using a telescope: in total he reported 9 sightings of 6 individual East European birds.

Sacred Ibis *Threskiornis aethiopicus* (5, 14)

804401	Adult	10/07/2001	CROW, Durban, Natal		
	Released	17/07/2001	Mkuzi GR, Natal	7 days	269 km
	Shot	28/02/2002	Durban airport, Natal	0y 8m	9 km

This bird returned to Durban after release. It was shot to prevent collision with aircraft.

Peregrine Falcon *Falco peregrinus* (5, 3)

790951	Nestling	13/11/2000	Glencairn, W Cape		
	Control	10/01/2002	Cape Flats, W Cape	1y 2m	30 km

This bird flew into a moving vehicle, presumably while chasing a bird. Mrs de Bruyn had to catch the wild falcon while her husband was driving! The bird was released a week later.

790964	Nestling	02/11/2000	COGHR, W Cape		
	Control	18/03/2002	Port Elizabeth, E Cape	1y 4m	658 km

Lesser Kestrel *Falco naumanni* (1, 0)

5H07194	0–6 m	11/03/2000	Victoria W, N Cape		
	Poisoned	13/03/2002	Lindley, Free State	2y 0m	608 km

Greatest distance within South Africa for this species in SAFRING's database.

Longcrested Eagle *Lophaetus occipitalis* (0, 3)

845604	3+ y	03/10/1992	Mataffin, Mpumalanga		
	Resighting	16/05/2002	Mataffin, Mpumalanga	9y 7m	0 km

Three resightings of this wing-tagged eagle, still the greatest elapsed time for this species in SAFRING's database. New records in the 2003 ringing year have already been reported.

Forest Buzzard *Buteo trizonatus* (1, 1)

784882	Imm.	15/09/1992	Island Forest, PE, E Cape		
	Hit by car	04/12/2001	Island Forest, PE, E Cape	9y 3m	2 km

Injured by car, rehabilitated, released 4 months later.

Black Harrier *Circus maurus* (2, 0)

679506	Nestling	10/10/2000	Jakkalsfontein, W Cape		
	Hit by car	17/12/2001	N7 in Vanrynsdorp, W Cape	1y 2m	203 km

Greatest elapsed time and distance for this species in SAFRING's database (second recovery).

Gymnogene *Polyboroides typus* (2, 0)

849120	Immature	02/04/2001	Theescombe, E Cape		
	Hit by car	28/10/2001	East London, E Cape	0y 7m	240 km

Greatest distance for this species in SAFRING's database.

Blue Crane *Anthropoides paradiseus* (5, 61)

901253	Nestling	13/02/1999	Stilbaai, W Cape		
	Resighted	16/08/2001	Caledon distr, W Cape	2y 6m	196 km

Second greatest distance for this species in SAFRING's database (greatest 198 km).

African Black Oystercatcher *Haematopus moquini* (7, 55)

675505	Nestling	03/04/2000	Somerset West, W Cape		
	Controlled	15/11/2001	Walvis Bay, Namibia	1y 7m	1308 km

Second greatest distance for this species in SAFRING's database (greatest 1516 km).

Chestnutbanded Plover *Charadrius pallidus* (1, 0)

BC67373	Nestling	15/10/1995	Swakopmund, Namibia		
	Hit by car	20/07/2001	Mile 4 Saltworks, Namibia	5y 9m	2 km

Greatest elapsed time for this species in SAFRING's database.

Bartailed Godwit *Limosa lapponica* (1, 0)

1383597	Adult	13/05/2001	Castricum, Netherlands		
	Resighted	04/01/2002	Walvis Bay, Namibia	0y 8m	8395 km

Second report for this species.

Hartlaub's Gull *Larus hartlaubii* (11, 39)

587682	Nestling	12/07/2001	Possession Island, Namibia		
	Recovery	13/11/2001	Walvis Bay, Namibia	0y 4m	457 km

Greatest distance for this species in SAFRING's database.

564011	Nestling	22/05/1976	Robben Island, W Cape		
	Recovery	24/07/2001	Century City, W Cape	25y 2m	15 km
563291	Nestling	15/05/1976	Robben Island, W Cape		
	Recovery	24/07/2001	Century City, W Cape	25y 2m	15 km

The above 2 gulls were found on the same day at Century City! Greatest elapsed time for this species in SAFRING's database is 26y 5m.

Lesser Blackbacked Gull *Larus fuscus* (1, 0)

8098535	Nestling	04/07/1998	Langharet, Sweden		
	Dead	06/12/2001	Torra Bay, Namibia	3y 5m	9126 km

First ring recovery of this species in southern Africa.

Caspian Tern *Hydroprogne caspia* (1, 0)

659632	Nestling	12/03/1990	Port Elizabeth, E Cape		
	Recovery	09/06/2002	Gamtoos RM, E Cape	12y 3m	51 km

Greatest elapsed time for this species in SAFRING's database.

Common Tern *Sterna hirundo* (9, 54)

AT138310	Nestling	03/07/1997	Konnevesi, Finland		
	Controlled	10/11/2001	Somerset West, W Cape	4y 4m	10 774 km
JA01967	Nestling	07/07/1979	Sandoya, Norway		
	Controlled	17/11/2001	Mile 4 Saltworks, Namibia	22y 5m	9041 km

Royal Tern *Sterna maxima* (1, 0)

5H27882	Nestling	03/06/2001	Ile aux oiseaux, Senegal		
	Dead	20/09/2001	Cap Skirring, Senegal	0y 4m	120 km

First record.

Black Tern *Chlidonias niger* (0, 1)

BC84619	Adult	06/11/1999	Mile 4 Saltworks, Namibia		
	Controlled	01/05/2002	Drana Lagoon, Greece	2y 6m	7148 km

First SAFRING ringed bird to be recovered overseas.

European Swallow *Hirundo rustica* (3, 23)

AF98914	Adult	01/03/2000	Universitas, Free State		
	Controlled	23/02/2002	Francistown, Botswana	1y 12m	883 km

Captured on migration. Many long distance controls – see Swallow report (page 12–15).

European Marsh Warbler *Acrocephalus palustris* (0, 5)

7781760	0–6mths	29/07/2001	Lebbeke, Belgium		
	Controlled	04/12/2001	Nankhumwa, Malawi	0y 4m	8045 km

Greybacked Warbler *Camaroptera brevicaudata* (0, 10)

AD11617	Adult	03/08/1996	Sherwood, Botswana		
	Controlled	16/06/2002	Sherwood, Botswana	5y 10m	2 km

Greatest elapsed time for this species in SAFRING's database.

Levaillant's Cisticola *Cisticola tinniens* (0, 57)

AE11529	Unknown	27/06/1995	Tygerberg, W Cape		
	Controlled	30/05/2002	Tygerberg, W Cape	6y 11m	0 km

Greatest elapsed time for this species in SAFRING's database.

Fiscal Shrike *Lanius collaris* (0, 33)

BB73315	Adult	18/02/1989	Botanical Gardens, Free State		
	Controlled	20/09/2001	Botanical Gardens, Free State	12y 7m	0 km

Greatest elapsed time for this species in SAFRING's database.

Crimsonbreasted Shrike *Laniarius atrococcineus* (1, 6)

494589	Juvenile	29/04/1993	Gaborone, Botswana		
	Controlled	16/07/2001	Gaborone, Botswana	8y 3m	0 km

Greatest elapsed time for this species in SAFRING's database.

Redwinged Starling *Onychognathus morio* (2, 2)

518614	Adult	19/01/1991	Simonstown, W Cape		
	Dead	01/09/2001	Noordhoek, W Cape	10y 7m	10 km

Greatest elapsed time for this species in SAFRING's database.

Redbilled Oxpecker *Buphagus erythrorhynchus* (0, 8)

CV14062-69	Adult	17/10/2001	Stockpoort, Limpopo		
	Translocated	29/10/2001	Melkriver, Limpopo	0y 1m	(146 km)

Sociable Weaver *Philetairus socius* (0, 114)

BC34244	0–6mths	20/07/1993	Benfontein, Free State		
	Controlled	13/09/2001	Benfontein, Free State	8y 2m	0 km

Greatest elapsed time for this species in SAFRING's database.

Cape Sparrow *Passer melanurus* (9, 56)

F19689	Adult	01/04/1991	Vanderbijlpark, Gauteng		
	Dead	02/12/2001	Vanderbijlpark, Gauteng	10y 8m	0 km

Greatest elapsed time for this species in SAFRING's database (see Afring News 31)

Redbilled Quelea *Quelea quelea* (2, 10)

AE74337	Adult	01/12/1997	Secrabje, Limpopo		
	Released	04/05/2002	Knysna, W Cape	4y 5m	1385 km

Violeteared Waxbill *Uraeginthus granatinus* (0, 13)

X81628	Adult	19/08/1993	Sandveld NR, Free State		
	Controlled	03/08/2001	Sandveld NR, Free State	7y 11m	2 km

Greatest elapsed time for this species in SAFRING's database.

Erratum for Recoveries report July 2000–June 2001 (Afring News 30: 74–81).

Bird ringing on Inhaca Island, Mozambique

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Introduction

Inhaca Island lies 35 km east of Mozambique's capital city, Maputo. The island, with the Machangulo Peninsula, forms the eastern boundary of the Bay of Maputo. Inhaca Island is separated from the Machangulo Peninsula by a very narrow (500 m) straight. The major habitats of the island are inter-tidal sand- and mud-flats, mangrove swamps, freshwater swamps, subtropical evergreen forests ranging from regenerating to mature, and a semi-natural mosaic of trees and bush clumps interspersed with small villages, subsistence agricultural fields and regenerating, no longer used, agricultural fields (Kalk 1995, De Boer & Bento 1999).

Two people have ringed on the island previously. Ian Sinclair ringed 45 bush birds during five days in October–November 1976, in addition to 450 waders during October–December 1976 (SAFRING data). Peter Nilsson ringed at the Marine Biological Research Station of Eduardo Mondlane University (MBS) on 21–22 May 1988 (SAFRING data; De Boer & Bento 1999).

We stayed at the MBS during winter (1–7 June 2003) to do a bird survey of the island (in prep.) and ring (this study).

Methods

We conducted four ringing sessions in widely separated parts of the island. Two of these sessions were in forest and two were in open areas (Table 1).

Due to our poles being lost at the Maputo airport, we asked the MBS staff for poles and they kindly cut some rough poles from trees. These worked well under the circumstances, although the height was less than poles usually used. We used three or four nets of 12 m-length and four shelves, and sometimes we

added a fifth, single-shelf, 12 m-net.

For each bird, we recorded standard measurements and for most birds we also took blood samples.

Results

At the MBS we placed the nets in the paths on the forested slope on the eastern side of the buildings. Seven birds were trapped (Table 2), the first being a Terrestrial Bulbul in the single shelf net. The second was an African Goshawk that HDO saw flying into a net while chasing a passerine (that escaped the nets!). It was an adult male captured at 10h30. A CD was briefly played of Spectacled Weaver and a pair of these birds appeared in the canopy above the nets, but were not caught. An immature was trapped some hours later.

At Ngomela we put our nets along a path in coastal dune forest. Four birds were caught and ringed (Table 2). The nets were under a tree with berries that attracted many Sombre Bulbuls and other species, but unfortunately this was well above the height of the nets, which was limited by the branches of the canopy.

An attempt was made to catch Masked, Yellow and Spotted-backed Weavers in some open woodland, where flocks had been observed on a previous walk. On the day of ringing the wind picked up and did not stop. The weaver flocks were present in the general area but did not come near the nets.

We also made an attempt to ring weavers at the Nhaquene swamp. This swamp consisted of a patch of dry, low *Phragmites* reeds, with very little standing water. The surrounding area is cultivated. Previously, various weaver species were noted here, but hardly any birds were present on the morning of ringing. We did capture one Tawny-

flanked *Prinia*.

Of the birds handled, two showed primary moult and the rest had new or old primaries. The Olive Sunbird, an adult female, had moult 5555555432 and the Tawnyflanked *Prinia* had 0055555531. Tail moult was present in two Natal Robins and the Tawny-flanked *Prinia*. There was some body moult in most of the birds ringed.

Discussion

The most exciting capture was the Yellow-bellied Bulbul ringed at the MBS, as this is regarded as a 'rare vagrant on Inhaca' according to de Boer & Bento (1999). Trapping it early during our stay alerted us to the presence of this species and we subsequently recorded (saw and heard) it on most days on the island.

The forest patches at the MBS and Ngomela are not prime forest, but regenerating (Kalk 1995, Fig. 10.1). The catch rate was similar between these sites (Table 2) although there is probably greater human disturbance at the MBS forest.

Mature forest occurs at the north-eastern end of the island around the lighthouse and near Ponta Torres. Future ringing at these sites could produce good results, albeit at a low catch rate. These relatively remote forests may contain bird species not found in the widespread regenerating forests of the island (De Boer & Bento 1999).

Ringing in the open woodland and swamp can potentially be rewarding, but we had poor results. The reason was largely due to wind and the large area available to foraging birds in winter. In summer one could place nets at breeding colonies of weavers, which

would ensure good catches. While weaver flocks had been seen in both areas, on the ringing days they foraged nearby but away from the nets.

Little ringing has been conducted on Inhaca and in Mozambique in general. Nilsson ringed 507 birds in Maputo during 1988–1990 and twelve birds on Inhaca (Table 2). In 1976, Ian Sinclair was primarily on the island ringing waders (Waltner & Sinclair 1981) and helping two UK ringers from Maputo University start up a ringing station on the island. They were initially using Ian's rings and nets. This ringing station does not seem to have materialized. We will list the waders ringed by Ian in a wader paper (in prep.), while his bush birds are listed here (Table 2).

Ringing on Inhaca is hard work but potentially rewarding. Transporting ringing gear to the island by ferry is no problem, but the charter ferry only runs on weekends (at least at the time of our visit). There are daily charter flights, but luggage is most certainly limited. Getting around the island is possible by boat and 4x4, but is not easy as there are cost and logistic factors to take into account (details available from the authors). We walked to the two open sites with all our gear.

Ringing on the island was disappointing in that HDO wanted to trap weavers and only caught one. At the same time the ringing was rewarding, as all species except the *Prinia* were new ones: HDO has only done limited forest ringing in the past and CNL has done none! Wader ringing was not attempted, but this would also be rewarding in summer. However, time to get to know the wader roost sites and movements would be required.

Table 1. Ringing sites on Inhaca Island, Mozambique

Site	Habitat	Coordinates	Altitude a.s.l (m)
MBS	Forest, regenerating	26°02.345'S 32°54.196'E	11
Ngomela	Forest, regenerating	26°01.571'S 32°58.073'E	20
Field	Semi-natural mosaic of bush	26°01.956'S 32°54.380'E	47
Nhaquene	<i>Phragmites</i> swamp, disturbed	26°02.937'S 32°55.071'E	58

Table 2. Birds ringed on Inhaca Island, Mozambique, 1–7 June 2003, with a comparison of bush birds previously ringed on Inhaca.

Date	Locality	This study				Total	Previous ringing efforts	
		2/6/03 MBS 3+1	4/6/03 Ngomela 4+1	5/6/03 Field 4+0	6/6/03 Nhaquene 4+1		Nilsson May 1988 MBS	Sinclair Oct.–Nov. 1976 Inhaca
160	African Goshawk <i>Accipiter tachiro</i>	1				1		
398	Pygmy Kingfisher <i>Ispidina picta</i>						2	
438	Goldenrumped Tinker Barbet <i>Pogoniulus bilineatus</i>							1
518	Squaretailed Drongo <i>Dicrurus ludwigii</i>						1	
545	Blackeyed Bulbul <i>Pycnonotus barbatus</i>							16
546	Terrestrial Bulbul <i>Phyllastrephus terrestris</i>	1			1	1		
550	Yellowbellied Bulbul <i>Chlorocichla flaviventris</i>	1			1			
551	Sombre Bulbul <i>Andropadus importunus</i>							1
579	Natal Robin <i>Cossypha natalensis</i>	2	3			5	4	
625	Yellowbreasted Apalis <i>Apalis flavida</i>							1
627	Bleating Warbler <i>Camaroptera brachyura</i>		1			1		1
649	Tawnyflanked Prinia <i>Prinia subflava</i>				1	1		
673	Chinspot Batis <i>Batis molitor</i>							1
680	Bluemantled Flycatcher <i>Trochocercus cyanomelas</i>						2	2
721	Gorgeous Bush Shrike <i>Telophorus quadricolor</i>							1
756	Purplebanded Sunbird <i>Nectarinia bifasciata</i>							1
761	Neergaard's Sunbird <i>Nectarinia neergaardi</i>							1
766	Olive Sunbird <i>Nectarinia olivacea</i>	1				1		1
771	Collared Sunbird <i>Anthreptes collaris</i>							2
774	Scarletched Sunbird <i>Nectarinia senegalensis</i>							2
791	Spectacled Weaver <i>Ploceus ocularis</i>	1				1	1	2
792	Lesser Masked Weaver <i>Ploceus intermedius</i>							8
797	Spottedbacked Weaver <i>Ploceus cucullatus</i>							3
842	Grey Waxbill <i>Estrilda perreini</i>							2
Totals		7	4	0	1	12	12	45
Hours		9	5	4	3			
Birds/hr		0.78	0.80	0.00	0.33			
Birds/hr/net		0.19	0.20	0.00	0.08			

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Ringing courses

15–23 November 2003, Lambert's Bay

A week-long ringing session will be held at Lamberts Bay, with a focus on ringing terns at night – so don't expect much sleep! Experts Tony Tree and Mark Boorman will coordinate the tern ringing. There will again be opportunity to do some seabird work on Bird Island, e.g. ringing Cape Gannets and Kelp Gulls, coordinated by Leshia Upfold of Marine and Coastal Management. There will also be some mistnetting sessions of bush birds as usual.

Lambert's Bay has plenty of accommodation ranging from a municipal camping site to guesthouses. Some guesthouses are large so that ringers can share accommodation. All booking can be made through a central booking office (027-4321040).

Cost for trainees for the week is R500 (excluding accommodation, food and travel to Lamberts Bay).

3–9 January 2004, Wakkerstroom ringing training

This course will be held at the BLSA Wetland Centre, Wakkerstroom, in conjunction with BirdLife South Africa. It will be similar to courses held there in the past.

Costs and more details about the course will appear on our web page in due course: <http://web.uct.ac.za/depts/stats/adu/safring/notices.htm>

Registration for both courses:

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Morphometrics and mass of raptors from the Eastern Cape, South Africa

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Introduction

Historically, many raptor ringers focused only on 'hunting down', trapping and ringing birds of prey (e.g. Malan 1996). During such 'hunts', often valuable morphometric data was not collected, and when it was, remained largely unpublished. This is evidenced by the paucity of biometric raptor data in Maclean (1994) and lack of or limited morphometric data of 36 519 raptors (nestlings included) from 41 species ringed over the past 54 years (Oatley *et al.* 1998, Oschadleus pers. comm.). There are exceptions, with published data ranging from full morphometrics to mass only (Biggs *et al.* 1978, Amadon 1980, Herholdt 1988, Brown 1989, Herholdt 1993, Brown *et al.* 1995, Jenkins 1995).

It can be regarded that measurements are constant within a certain population, which may correspond to the entire range of a species. It is likely, however, that geographical differences do occur (Brown *et al.* 1982). Morphometrical data presented here endeavours to accrue to existing data but through accumulation of additional data geographical differences, if they exist, could possibly be explained.

Materials and Methods

Morphometrics of 411 raptors from 17 species trapped in the Eastern Cape were extracted from ringing schedules covering the ringing years 1993–2001. Large eagles, including the African Fish Eagle *Haliaeetus vocifer*, were trapped with special modified

and manufactured gin traps baited with carrion. Medium sized raptors were trapped with cone shaped wire-mesh balchatri with base diameter 280 mm by 190 mm high, with lead weight attached to base. Kestrels were trapped with lightweight wire-mesh balchatri with base diameter 240 mm by 145 mm high. All balchatri traps were baited with two white laboratory mice, with the exception of Steppe Buzzard *Buteo buteo vulpinus* traps, baited with one mottled-coloured laboratory mouse.

Wing and tail measurements were taken with 300 mm or 600 mm stainless steel rule with stop ends; eagles were measured with coiled spring steel tape. Wings were measured for maximum chord length on flattened wing from foremost extremity of carpus to tip of longest primary feather. Tail feathers were measured with stop end pushed against root of central pair of tail-feathers, measuring tip of longest tail-feather, when naturally folded. Culmen and tarsus were measured with a sliding dial caliper to the nearest 0.5 mm. Culmen measurements were taken from tip of bill to cere, while tarsus were measured from notch on back of intertarsal joint to lower edge of last complete scale before toes diverge. Mass was recorded with Pesola spring balances; accuracy to 1.0 g for kestrels: 10, 50, and 100 g for the rest of the raptors.

Results

When sufficient sample size was obtained, measurements are given as mean, range (minimum–maximum), and standard devia-

tion (SD). Less than five was regarded as a meagre sample, and in some cases measurements of individuals are given.

Discussion

Sexual dimorphism in birds of prey is well known with females being up to 30% larger than males, depending on the species. This factor can be so pronounced that sexing individuals holds no problems. However, grey areas do exist across most species and where the common measure of wing-length and other measurements are used they often cannot reliably indicate sexual dimorphism. Due to overlaps in biometrics, difficulty then arises if the bird is a large male, a small female, undernourished or diseased. Nearly all the morphometrics of raptors in Table 1 reflect this problem, particularly Steppe Buzzard, Blackshouldered Kite, and Greater Kes-

rel; this is also noticeable in Maclean (1994) and Brown *et al.* (1982) for the same species. Although the complete sample size of Blackshouldered Kites is sexed, Mendelsohn (1982 in Maclean 1994) had to sex according to breeding behaviour or by discriminant analysis of body measurements (Mendelsohn 1982). Such methods of sexing are impossible in the field when ringing.

Cataloguing sex differences in birds of prey based on morphometrics would involve substantial ringing effort and the production of long-term data sets. Reliable sex determination of individual raptors caught has now become a simple, rapid and cheap method through molecular sexing, due to the discovery of the CHDIW gene (Fridolfsson & Ellegren 1999). Sexing of non-ratite birds is based upon detection of constant size differences between CHDIW and CHDIZ introns in the different sexes.

Table 1. Morphometrics and mass of 409 raptors of 17 species trapped during 1993–2001 ringing years, from the Eastern Cape, South Africa. Measurements in millimetres; mass in gram.

Species	Sex	n	Range	Mean	SD
Black Eagle <i>Aquila verreauxii</i>					
Wing length	male	7	560–610	589.43	17.9
	female	9	610–632	618.8	7.9
Tail length	male	6	295–320	308.2	10.3
	female	7	314–334	322.3	8.2
Tarsus length	male	6	106.4–123.6	113.8	6.8
	female	6	110.1–120.7	115.5	4.2
Culmen length	male	6	40.4–43.5	42.3	1.1
	female	7	29.8–46.0	42.1	5.9
Mass	male	7	3100–4500	3771.4	564.8
	female	9	3200–4500	3720.5	401.3
Steppe Buzzard <i>Buteo buteo</i>					
Wing length	unsexed	47	345–489	373.7	22.4
Tail length	unsexed	46	123–224	192.5	15.7
Tarsus length	unsexed	24	64.7–77.1	72.5	2.8
Culmen length	unsexed	45	18.9–24.1	21.6	1.3
Mass	unsexed	47	550–980	777.0	102.8

(Table 1 continued)

Table 1 (continued).

Species	Sex	n	Range	Mean	SD
Jackal Buzzard <i>Buteo rufofuscus</i>					
Wing length	male	31	340–448	403.9	21.2
	female	24	327–463	434.3	26.3
	unsexed	17	398–434	416.8	10.1
Tail length	male	31	163–214	184.0	12.2
	female	24	175–225	197.6	12.2
	unsexed	17	175–214	192.1	12.3
Tarsus length	male	21	69.6–91.9	86.1	4.9
	female	16	85.7–99.1	91.2	3.9
	unsexed	11	81.2–94.5	86.6	3.4
Culmen length	male	31	19.9–29.4	25.6	1.6
	female	24	25.7–31.9	28.5	1.5
	unsexed	17	19.9–30.3	26.8	2.4
Mass	Male	31	590–1250	1006.5	138.2
	female	24	900–1550	1211.3	182.3
	unsexed	17	870–1400	1062.9	119.4
Blackshouldered Kite <i>Elanus caeruleus</i>					
Wing length	unsexed	16	268–284	276.1	5.2
Tail length	unsexed	16	108–131	119.8	5.9
Tarsus length	unsexed	13	31.8–42.0	35.9	3.4
Culmen length	unsexed	16	12.7–18.5	16.1	1.6
Mass	unsexed	16	231–340	260.3	30.1
Pale Chanting Goshawk <i>Melierax canorus</i>					
Wing length	male	46	340–384	354.2	7.9
	female	70	361–407	379.9	10.6
	unsexed	22	257–475	362.1	35.1
Tail length	male	46	222–267	238.8	8.6
	female	70	224–281	255.2	12.2
	unsexed	20	230–265	247.9	11.6
Tarsus length	male	33	96.6–114.9	102.6	4.1
	female	42	99.4–118.0	105.5	4.6
	unsexed	13	97.1–107.0	101.5	2.8
Culmen length	male	46	18.7–33.3	20.5	2.1
	female	68	18.8–24.2	21.9	1.3
	unsexed	21	18.2–23.4	20.8	1.5
Mass	male	46	610–870	740.8	58.7
	female	65	670–1600	903.2	170.2
	unsexed	21	610–980	793.8	103.9
Greater Kestrel <i>Falco rupicoloides</i>					
Wing length	unsexed	8	240–287	273.3	15.8
Tail length	unsexed	6	134–175	157.8	13.4
Tarsus length	unsexed	5	47.5–51.2	49.4	1.6
Culmen length	unsexed	7	11.8–18.3	16.6	2.3
Mass	unsexed	8	236–310	269.5	23.0
Rock Kestrel <i>Falco tinnunculus</i>					
Wing length	male	39	228–259	244.7	7.3
	female	52	232–265	248.2	7.9
	unsexed	7	234–252	244	5.8

(Table 1 continued)

Table 1 (continued).

Species	Sex	n	Range	Mean	SD
(Rock Kestrel <i>Falco tinnunculus</i> continued)					
Tail length	male	39	140–166	153.5	6.7
	female	52	140–179	156.2	9.3
	unsexed	7	145–173	153.7	11.2
Tarsus length	male	25	40.0–48.6	42.9	2.1
	female	30	37.3–47.1	42.6	1.9
	unsexed	7	41.7–44.0	43.0	1.0
Culmen length	male	35	13.9–16.8	15.3	0.7
	female	50	13.9–19.3	15.6	1.0
	unsexed	7	11.2–16.6	14.1	2.1
Mass	male	39	178–238	204.9	17.3
	female	52	142–258	211.0	23.5
	unsexed	6	174–218	203.0	15.6

Table 1 (continued).

Species	Sex	n	Value(s)
Longcrested Eagle <i>Lophaetus occipitalis</i>			
Wing length	female	1	309
Tail length	female	1	158
Culmen length	female	1	19.9
Mass	female	1	550
African fish Eagle <i>Haliaeetus vocifer</i>			
Wing length	unsexed	1	565
Tail length	unsexed	1	290
Tarsus length	unsexed	1	99.4
Culmen length	unsexed	1	43.5
Mass	unsexed	1	3100
Martial Eagle <i>Polemaetus bellicosus</i>			
Wing length	unsexed	1	625
Tail length	unsexes	1	276
Culmen length	unsexed	1	43.5
Mass	unsexed	1	3400
Forest Buzzard <i>Buteo oreophilus</i>			
Wing length	male	2	341, 344
	female	3	360,362,351
Tail length	male	2	175,170
	female	3	187,188,200
Tarsus length	male	2	66.0,66.7
	female	3	67.4,66.2, 65.6
Culmen length	male	2	22.1,21.2
	female	3	21.4,23.6,22.2
Mass	male	2	590,550
	female	3	670,610,600

(Table 1 continued)

Table 1 (continued).

Species	Sex	n	Value(s)
Little Sparrowhawk <i>Accipiter minullus</i>			
Wing length	unsexed	1	144
Tail length	unsexed	1	112.0
Tarsus length	unsexed	1	44.9
Culmen length	unsexed	1	10.1
Mass	unsexed	1	83.0
African Goshawk <i>Accipiter tachiro</i>			
Wing length	male	1	200
	female	1	251
Tail length	male	1	185
	female	1	211
Tarsus length	male	1	62.0
	female	1	66.5
Culmen length	male	1	15.8
	female	1	19.8
Mass	male	1	214
	female	1	490
Black Sparrowhawk <i>Accipiter melanoleucus</i>			
Wing length	female	1	329
Tail length	female	1	264
Tarsus length	female	1	83.5
Culmen length	female	1	22.9
Mass	female	1	860
Lanner Falcon <i>Falco biarmicus</i>			
Wing length	male	1	309
	female	1	343
Tail length	male	1	158
	female	1	184
Tarsus length	male	1	50.1
Culmen length	male	1	19.9
Mass	female	1	23.3
	male	1	550
	female	1	710
Barn Owl <i>Tyto alba</i>			
Wing length	unsexed	1	298
Tail length	unsexed	1	117
Tarsus length	unsexed	1	65.4
Culmen length	unsexed	1	19.4
Mass	unsexed	1	340
Spotted Eagle Owl <i>Bubo africanus</i>			
Wing length	unsexed	1	332
Tail length	unsexed	1	207
Tarsus length	unsexed	1	71.70
Culmen length	unsexed	1	23.8
Mass	unsexed	1	710

Acknowledgements

I am extremely gratefully to John Moorcroft for the introduction to the 'Balchatri Brigade', and the loan of the first trap; also to Doug Harebottle for comments, which improved this paper. Special thanks to all willing individuals too numerous to mention for lending their valuable assistance. Together we traveled long, hot, dusty roads: often discouraged, other times exhilarated, but never bored.

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Size and moult of Streaky-headed Canaries *Serinus gularis* in the Eastern Cape

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Although widespread, the Streaky-headed Canary has been little studied, and clearly ranks as a 'by-catch' for most ringers. Vincent Ward's recent paper (Ward 2002), which summarizes the available data on biometrics and moult, prompted me to examine my own ringing records.

To date, 127 Streaky-headed Canaries have been ringed, primarily in the Grahams-town area. All birds were captured in mist-nets, and only wing-length (to the nearest 0.5 mm) and mass (to the nearest 0.5 g with a 50-g Pesola spring-balance) were recorded. In addition all birds were examined for

moult. Only 5 birds from December, February and March, were sexed as female on the basis of a brood patch; their measurements do not suggest that there is any significant difference in size between the sexes. There was a strong seasonal bias, with 87 birds captured between May and August, and few in spring and summer. Table 1 compares Western Cape birds (Ward 2002) with those from the Eastern Cape.

These data indicate that there is no size difference between Western and Eastern Cape birds in this species, a marked contrast to some others such as the Red Bishop (A. Craig, unpub. data). Ward (2002) also concluded that there was little regional variation in size within South Africa.

Only seven birds had active primary moult; 1 of 3 in December, 2 of 4 in January and 4 of 16 in March. Of the three birds caught in February none were moulting, and no birds were handled in April. For some of the May birds, the primaries were recorded as very fresh, and a few birds still had body moult. It seems likely that birds moult in late summer after the breeding season, which is mainly from October to January in this region (Nuttall 1997).

The atlas data did not suggest any extensive seasonal movements in Streaky-headed Canaries (Nuttall 1997). Of the Eastern Cape birds, one was found dead 11 months after ringing and within a few blocks of the garden where it had been caught. Four other individuals were recaptured: one within a month of ringing; one 4 years 2 months later; one twice: after 1 year 10 months and after 2 years 3 months; and one bird was recaptured three times: after 2 months, 1 year 1 month, and finally after 5 years 2 months. All of these recaptures were at the original ringing site, which suggests that Streaky-headed Canaries frequent the same areas, even if they move away in between.

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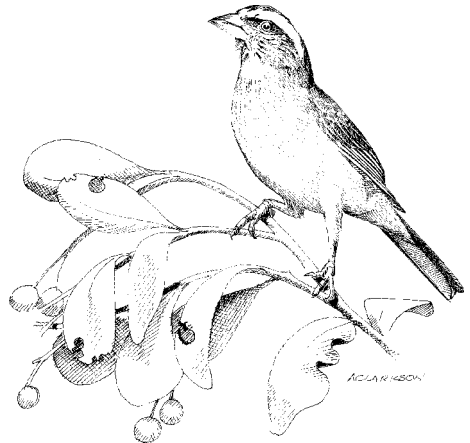
Table 1. Wing-length and mass of Streaky-headed Canaries.

Measurement	This study	Ward 2002
Mass		
Mean	21.6	20.3
Range	18.0–25.0	16.7–24.8
S.D.	1.3	1.6
Sample size	122	112
Wing-length		
Mean	75.2	75.2
Range	71.0–80.0	1.5–80.0
S.D.	1.9	1.8
Sample size	125	120

panionship and assistance in the field; some birds bearing their rings are included in this analysis.

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Biometry and movement of Cape Canaries *Serinus canicollis* in the Algeria Valley, Western Cape

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Cape Canaries *Serinus canicollis* are common in the southern and eastern parts of South Africa, in Lesotho and western Swaziland, and an isolated population occurs in the eastern highlands of Zimbabwe (Fraser 1997). Maclean (1993) gives biometric data for both sexed and unsexed, presumably adult birds. Underhill *et al.* (1998) report data for unsexed adults from the Western Cape. Mass for adult males ringed in the Free State is given in Herholdt (1988). This note reports on mensural data for sexed adults and on lo-

calised movement, in the Cederberg region.

Cape Canaries were captured in the Algeria Valley, in the central Cederberg Wilderness Area, Western Cape from September 2000 to November 2002. Birds were caught in mistnets set between moist riverine vegetation and mountain fynbos. Measurements were taken, and moult scores recorded following de Beer *et al.* (2000). Adults were sexed on the basis of plumage differences (Maclean 1993).

Fifty-nine Cape Canaries were captured

Table 1. Number of Cape Canaries captured in the Algeria Valley 2000–2002.

	August	September	October	November	December	Total
Males	0	5	13	19	0	37
Females	0	0	1	10	0	11
Juveniles	0	0	1	10	0	11
Total	0	5	15	39	0	59

Table 2. Measurements of adult male Cape Canaries. (Measurements for mass in gram, other measurements all in millimetres.)

Measurements	Algeria				Herholdt 1988 ¹ , Maclean 1993 ²		
	Range	Mean	S	n	Range	Mean	n
Mass	12.0–18.0	15.10	1.59	37	12.4–17.5	14.9	7 ^{1,2}
Head	23.4–27.1	25.65	0.92	21			
Bill, base of feathers	8.8–14.1	11.77	1.8	29			
Bill, union with skull	9.7–14.3	11.34	1.30	29			
Bill depth	6.4–9.9	7.15	0.72	20			
Total tail	48–62	54.87	3.37	30			
Tail fork	46–57	51.03	2.77	30			
Wing	73.0–83.0	78.00	2.47	37	75–82	79	30 ²
Tarsus	13.5–17.1	15.40	0.71	29			

during the study period (Table 1). Adult males were predominately captured, as they feed the incubating adult females at the nest, and are primarily responsible for the feeding of fledgling chicks, and are therefore highly mobile (Skead 1960, Maclean 1993). As the females and juveniles leave the nest, the number of captured birds increased and peaked in November.

Despite ringing throughout the year, Cape Canaries were only captured in September–November. This species only occurs in the Algeria Valley from late August to early December and breed in *Pinus radiata* plantations during this period (pers. obs.). The post-breeding and moulting distribution of this breeding population is unknown, but presumably they move down into the adjoining Olifants River Valley. Cape Canaries are known to undertake regular altitudinal and seasonal movements (Skead 1960, Hockey *et*

al. 1983, Maclean 1993, Fraser 1997). Controls of two adult birds, a male (2y 01m 17d) and female (0y 11m 25d), indicate a degree of site fidelity.

The biometry of sexed, adult Cape Canaries in the Cederberg Mountains is comparable to other data from southern Africa (Tables 2 & 3). The mean measurements for Cederberg adults compare well with values reported by Maclean (1993) and Underhill *et al.* (1998) (Table 4). No wing, tail or contour plumage moult was observed during this study.

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Table 3. Measurements of adult female Cape Canaries. (Measurements for mass in gram, other measurements all in millimetres.)

Measurements	Algeria				Maclean (1993)		
	Range	Mean	S	n	Range	Mean	n
Mass	14.4–19.0	15.63	1.47	11			
Head	24.6–26.1	25.31	0.52	8			
Bill, base of feathers	10.4–13	12.4	0.85	8			
Bill, union with skull	9.4–13.2	10.46	1.16	8			
Bill depth	6.7–7.4	7.01	0.26	8			
Total tail	51–56	52.75	1.58	8			
Tail fork	48–52	49.5	1.31	8			
Wing	69.0–79.5	75.05	2.70	11	72–79	75	30
Tarsus	14.1–16.3	15.33	0.69	8			

Table 4. Measurements for adult Cape Canaries. (Measurement for mass in gram, other measurements all in millimetres.)

Measurements	Algeria	Maclean (1993)	Underhill <i>et al.</i> (1998)
Mass	12–15.2–19 (n = 48)	12.4–14.7–17.5 (n = 129)	10.0–15.2–19.7 (n = 207)
Bill, base of feathers	8.8–11.9–14.1 (n = 37)	9–10.1–12.5 (n = 48)	
Total tail	46–54.4–62 (n = 38)	49–53.8–60.5 (n = 36)	
Wing	69–77.3–79.5 (n = 48)	72–76.7–81 (n = 35)	65–76.8–86 (n = 213)
Tarsus	13.5–15.4–17.1 (n = 37)	13.5–15.2–17 (n = 48)	

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Partial post-juvenile moult in Cape Siskins

Pseudochloroptila totta

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Partial post-juvenile moult is the replacement of natal contour feathers with either immature or adult plumage, usually within a few months of a young bird fledging. The flight feathers of the wing (remiges) and the tail (rectrices) are retained during this moult. Post-juvenile moult usually coincides with the post-nuptial (breeding) moult of adult birds (De Beer *et al.* 2001).

Although data on primary moult has been published for a number of canary species (Fringillidae) in southern Africa, partial post-juvenile moult has only been reported for Forest Canary *Serinus scotops* and Yellow-eyed Canary *Serinus mozambicus* (references in Table 1). This paper reports on observations of partial post-juvenile moult in Cape Siskins *Pseudochloroptila totta*.

During fieldwork conducted in the Cederberg Wilderness Area, Western Cape, 66 Cape Siskins were netted in 2000–2002. Two males were captured in November 2001 and November 2002 that had adult body feathers but juvenile rectrices and remiges. Juvenile Cape Siskins have no or small white tips on the primaries and tail feathers and adult males

have very extensive and conspicuous white markings (Ward 2001). The flight feathers of the two captured birds were examined and found to show no extensive wear that may have reduced the size of these markings. No active moult was recorded in any of the body, covert or flight feather tracts. The structure of the body feathers were adult in nature, i.e. with thicker and more numerous barbs and barbules. It was not known which of the lesser, median or greater coverts had been replaced, as there is insufficient reference data on adult plumage in these tracts.

Siskins in the Cederberg breed from November to January, with young fledging in December and January (pers. obs.). Therefore the two study birds would have been 10–12 months old and have undergone a post-juvenile moult in this period. Juvenile Forest Canaries in South Africa were recorded in post-juvenile moult in March to May, after having fledged in December, a period of three to five months. In Europe, juvenile Citril Finches *Serinus citrinella* complete a partial moult approximately four to five months after fledging (Jenni & Winkler 1994). Siskins in

Table 1. Summary of published moult data for canaries in southern Africa.

Species	Primary	Contour	Post-juvenile	References
Bully Canary <i>Serinus sulphuratus</i>	x			Manson 1986
	x			Manson 1990
Streakyheaded Canary <i>Serinus gularis</i>	x			Manson 1986
	x	x		Ward 2002
Yellow Canary <i>Serinus flaviventris</i>	x			Liversidge 1968
Forest Canary <i>Serinus scotops</i>	x		x	Dowsett & Barnard 1991
Yelloweyed Canary <i>Serinus mozambicus</i>	x			Hall 1956
	x			Earlé 1981
	x			Manson 1986
			x	Herremans 1995
Blackeared Canary <i>Serinus mennelli</i>	x			Hall 1956
Blackthroated Canary <i>Serinus atrogularis</i>	x			Hall 1956
	x			Traylor 1965

primary moult were not captured during this study, but have been recorded moulting at other localities in March (n = 1) and May (n = 2) (SAFRING).

If the 'moulting model' for these two species is applied to Cape Siskins, the following moult chronology can be proposed, and used as an ageing tool. First year siskins complete a post-juvenile moult three to five months after fledging, attaining adult contour plumage and retaining juvenile flight feathers. The second year moult replaces the juvenile flight feathers and the first set of adult contour feathers. Freshly moulted second year birds will thus have the appearance of adults.

Further work is needed to fully understand all aspects of moult in this and other species of canary. The investigation of greater covert moult, which has been identified as a reliable means of ageing, is especially important.

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Obituary

Manfred B. Schmitt



Manfred Schmitt lived in Johannesburg and became a ringer before 1975. He ringed over 1488 birds. While Manfred's main interest was in raptors, he also ringed ducks and waders, including 216 Ruff. His most ringed species were Steppe Buzzard (749) and Jackal Buzzard (543).

Les Underhill tells a story of Manfred arriving at wader ringing sessions with a briefcase, looking like a businessman. Upon opening the briefcase, however, out came the cold beers!

He passed away on 30 November 2002 at the age of 61.

Manfred did an impressive amount of analytical processing of bird ringing data, as illustrated by the list of his published papers:

- Schmitt, M.B. 1973. How to catch rails & crakes. *Safring News* 2(2): 7–9.
- Schmitt, M.B., Whitehouse, P.J. & Von Maltitz, F. 1974. On the potential sexing of Black Shouldered Kites. *Safring News* 3(3): 20–21.
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H. Dieter Oschadleus

Reviews

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The report presents the results of research on breeding densities and success of the local breeding birds with special emphasis on waders. A large part of the study involved the

catching and ringing of many of the breeding species. The major outcome was that birds nested in high densities due to 1994 being a good lemming year.

Waterbirds in the Gulf of Gabes and other wetlands in Tunisia, Autumn 1999. (WIWO Report 74) Bos, J.F.F.P., van der Geest, G.M., Gillissen, N.L.M., Pahlplatz, R., Essetti, I. & Ayache, F. 2001. 76 pages. Price: € 12.

This report presents the results of autumn counts in 1999 of waterbirds in wetlands in the Gulf of Gabes and other parts of Tunisia. Abundance and diversity of waterbirds in the Gulf of Gabes are presented and discussed. Counts from 16 wetlands outside of the Gulf are also included and their results discussed

of which the barrages at Cape Bon supported globally important numbers for Marbled Teal, Ferruginous Duck and White-headed Duck. Two scenarios for preparing and performing integral counts are described for Kneiss, one of the most important tidal wetlands in the Mediterranean.

Waders and waterbirds in the floodplains of the Logone, Cameroon and Chad, January–February 1999. (WIWO report 75) Dijkstra, B., Ganzevles, W., Gerritsen, G. & de Kort, S. 2002. 59 pages. Price: € 9.

The report presents the results of wader and waterbird counts in the floodplain areas of the Logone River. Total counts of 94 000 birds in Cameroon and 26 000 in Chad were

attained. The ringing of selected species of waders was also carried out to collect information about birds using these areas as wintering and stop-over sites.

Distribution and status of Great Bustards, *Otis tarda*, in the Konya Basin, Turkey, Spring 2000. (WIWO report 76) Heunkes, C., Heunks, G., Eken, G. & Kurt, B. 2002. 22 pages. Price: € 6.

This survey was carried out within the framework of BirdLife International's Great Bustard action plan. Four study areas were surveyed and a total of 83 birds were reported. In addition to the bustard survey other

threatened and near-threatened birds were also recorded and noted. Future survey recommendations and proposals for additional conservation initiatives are proposed for the bustard.

Breeding birds of Medusa Bay, Taimyr, Russia. Methods for biological monitoring in the Arctic with results of 1998 and 1999. (WIWO report 77) Willems, F., van Turnhout, C., van Kleef, H. & Felix, R. (eds). 2002. 172 pages. Price: € 16.

This report outlines in detail the results of a project designed to develop and apply standardised breeding bird-monitoring techniques. The techniques were applied largely to breeding waders in Medusa Bay during 1998 and

1999. The report suggests that these techniques be used in future surveys to improve the current knowledge of population dynamics of wader and other bird species in the Arctic.

Monitoring and breeding ecology of arctic birds at Medusa Bay, Taimyr, Russia, in 2000. (WIWO report 78) Klaasen, R.H.G, Schekkerman, H., Tulp, I., Berezin, M., Bublichenko, A.G., Bublichenko, J.N., Kharinotov, S.P., Rosenfeld, S. & Khomenko, S. 2003. 80 pages. Price: € 14.

This report presents the results of two months of monitoring on all breeding birds at Medusa Bay. The monitoring method developed in 1998 (WIWO report 77) was applied for a third time in this study. Breeding suc-

cess was low due to 2000 being a poor lemming year. Biometrics of Snow Bunting chicks formed part of the monitoring programme for 2000.

Waterbirds in Lake Orumieh, Iran, September 2000. (WIWO report 79) Jalving, R. & Vos, R. 2003. 66 pages. Price: € 9.

Lake Orumieh is an important wetland in Iran and this report covers the result of a waterbird survey of the lake and its bordering marshes during September 2000. The main purpose of this project was to update the existing information of the value of wetlands in north-west Iran for migrating waterbirds. The survey found two threatened species (Marbled Teal

and White-headed Duck), were present at the lake, while Avocets dominated the wader guild. Recommendations include more regular monitoring as water-levels fluctuate considerably and this may be important in understanding the value of this area for migratory waterfowl.

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