

## Breeding biology of the Southern Grey-headed Sparrow in the Namib-Naukluft Park, Namibia

*P.A. Bridgeford*

*NamibRand Nature Reserve, PO Box 43, Maltahöhe, Namibia*

The Southern Grey-headed Sparrow *Passer diffusus* is widely distributed in southern Africa, except in southwestern Namibia and southwestern Western Cape Province of South Africa (Craig 1997). Despite it being so common, little is known of its breeding biology. Maclean (1993) stated that incubation and fledging periods are unrecorded, while Tarboton (2001) said that incubation is not recorded and nestling/fledging period is c. 19 days. This paper gives some new information on the breeding biology of this species in Namibia, based on Southern Grey-headed Sparrows monitored at Zais (24°01'S, 16°09'E) in the Namib-Naukluft Park from 1986 to 1993.

The study area, below the escarpment in the pro-Namib, is in a semi-desert and savanna transition zone (Giess 1971). However, as Zais is situated next to the Tsondeb River, the area is mainly *Acacia* woodland dominated by *A. tortilis*. The majority of the breeding records were from nests in the garden. Where possible, the nests were checked visually or by inserting a hand into the nest. They were monitored as regularly as possible, but most observations were interrupted by official duties away from home. Some eggs were removed from easily accessible nests and measured with vernier callipers.

Although many birds were examined while ringing, no sexual dimorphism could be determined. Some ringed birds were sexed after they were seen mating.

### Nest sites

All the nests at Zais were in man-made structures, such as an unused asbestos chimney, nest boxes, wall cavities, and the chassis of a wrecked vehicle. Nest record cards from the Ornithological Section, Ministry of Environment and Tourism in Windhoek, show

a similar trend in choice of nest site. Only two were in natural sites, namely a woodpecker nest and a hole in the broken end of a branch. Southern Grey-headed Sparrows used the Zais nest in the asbestos chimney for over 20 years. The nests were filled with feathers, but a few pieces of paper and cloth were also found. Indeed, most nests were so filled with feathers that it was difficult to see eggs or chicks.

### Breeding season

Breeding seasons are slightly later in Namibia than elsewhere and coincide with relatively late summer rains. This study, with 17 records, showed January (24% of all active nests), February (29%), and March (24%) as the peak breeding months at Zais (Table 1). The summer rainfall, which generally starts in January, is highest in February/March (Table 2). For Namibia as a whole, the peak-breeding season was also February (28%) and March (28%), but extended from January through to May (Table 1). It is interesting to note that four of the 100 records for Namibia are from the Hoesch and Niethammer expedition in 1933/34. Tarboton (2001) gave the breeding season as mainly November–March throughout southern Africa.

### Egg size and clutch size

Clutches were 3–4 eggs (mean 3.3 eggs) at Zais (Table 3). This corresponds with clutch sizes in Maclean (1993) and Tarboton (2001). Five eggs were measured: range 18.2–19.4 mm × 14.2–14.4 mm (mean 18.9 mm × 14.28 mm). This differs only marginally from the 19.2 mm × 14.3 mm given by Maclean (1993) and Tarboton (2001). Eggs were grey/brown and heavily blotched with dark brown.

**Table 1.** Breeding season of Southern Grey-headed Sparrows in Namibia.

	Number of nests with eggs or chicks							
	N	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Zais	17	1	0	4	5	4	1	2
Whole of Namibia	100	1	4	9	28	29	19	10
<b>Total</b>	<b>117</b>	<b>2</b>	<b>4</b>	<b>13</b>	<b>33</b>	<b>33</b>	<b>20</b>	<b>12</b>

## Incubation

Only eight records of incubation period were obtained; these were 11–14 days (mean 12.5 days). Incubation for the congeneric Cape Sparrow *P. melanurus* and House Sparrow *P. domesticus* is 12–14 days (Maclean 1993; Tarboton 2001).

In this study, it was found from colour-ringed birds that the male and female both incubate during the day. Possibly because breeding is in the hottest months of the year, the one regularly observed nest was frequently left unattended by both adults. At 14:00 on 6 April 1886, at the chimney nest, six days after commencing incubation, the ambient temperature was 30°C, while the temperature in the nest was 32°C. Both adults were in and out of the nest during this time and on occasions left the nest for periods of 3, 7, 10 and 11 minutes. Both birds sat on the edge of the nest with beaks open and wings slightly spread after emerging from the nest.

**Table 2.** Total monthly rainfall in millimetres at Zais 1986–1993.

Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
10.7	25.4	119.1	242.1	142.5	108.1	9.9

**Table 3.** Clutch size of Southern Grey-headed Sparrow at Zais, Namibia.

No. of eggs per clutch	2	3	4	5
No. of records	1	7	5	–

To determine who was incubating at night, I put up a net around the entrance before first light and only the colour-ringed female emerged. This was the only time I did this. More observations are needed to determine with certainty which parent incubates at night. Of the other three *Passer* species in southern Africa, Maclean (1993) stated that both male and female incubate, and in the Cape Sparrow, the female incubates at night.

## Nestling and post-nestling period

The nestling period was 16–19 days (N = 5; mean 17 days). This is identical to that recorded for both Cape and House Sparrows (Tarboton 2001). Of all the observations of breeding Southern Grey-headed Sparrows, only three records of the post-nestling period are considered to be of any value. These were 14, 17, and 21 days respectively. Both parents fed the chicks, but the female fed more often.

## Summary

The breeding biology of the Southern Grey-headed Sparrow was studied in the Namib-Naukluft Park, Namibia, and new information gathered on various life-history variables. The majority of nests were in man-made structures. The peak-breeding season was January–March, generally with 3–4 eggs per clutch with both parents incubating. The incubation period was 11–14 days and the nestling period 16–19 days. The post-nestling period was 14–21 days, with both parents feeding the chicks.

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Society, Windhoek.

**Maclean G.L. 1993.** Roberts' birds of southern Africa. John Voelker Bird Book Fund, Cape Town.

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**Craig A.J.F.K. 1997.** Southern Greyheaded Sparrow *Passer diffusus*. In: Harrison J.A., Allan D.G., Underhill L.G., Herremans M., Tree A.J., Parker V. & Brown C.J. (eds). The atlas of southern African birds. Vol.2. BirdLife South Africa, Johannesburg.



## The 9th International Roseate Tern Workshop, Wexford, Ireland, April 2003

**A.J. Tree**

*ADU Research Associate, PO Box 211, Bathurst, 6166. tonytree@zeane.com*

Memories, memories, memories . . . came flooding back when I returned to my home country, Ireland, after a break of more than 40 years. Blackbirds, Robins, Dunnocks and Wrens singing in the hedgerows, flights of Greenland White-fronted Geese passing over, honking excitedly as orderly skeins departed for their breeding grounds; daffodils and primroses flowering everywhere, horse chestnuts and sycamores bursting into leaf and draught Guinness in the pubs. And believe it or not, no rain! Putting aside reminiscences, it was also great to meet people I had known only through correspondence or the literature. So why Ireland for this workshop? Well, the southeast of the country is now home to the vast majority of Western Europe's Roseate Terns, hence the venue for the workshop.

Why are these Roseate Tern workshops convened? In certain parts of the world, the Roseate Tern is classified as Threatened and because of the deteriorating situation in the north Atlantic, researchers from North America, Western Europe and the Azores came together to discuss their problems and find solutions. From this has grown the Roseate Tern workshop. This year, fellow researchers from elsewhere in the world were invited to attend and contribute. There were only two southern hemisphere delegates, Anna Lashko from Australia and me. Anna has been working on sequencing the ND6 re-

gion of the mitochondrial genome in an attempt to identify different populations (results for South Africa pending complementary material from the Atlantic becoming available for comparison).

For many years, estimates of world totals of Roseate Tern were given at around 30 000 pairs, but recent extensive coverage of the multitudes of islands around the Australian coastline has come up with some staggering figures. A minimum estimate of 70 000 pairs there alone puts Australia into worldwide perspective and helps to make that continent the tern capital of the world. Thus, the world population is now estimated at about 85–90 000 pairs. Although we have a mere 240 pairs of Roseates in South Africa, it must be remembered that these probably represent an isolated population of unknown origin and therefore remain classified as Endangered.

The workshop was convened by Steve Newton and Oscar Merne, both from Eire. Oscar is a contemporary of mine, each known to the other, but we had never met. The gift of the gab, common to so many Irishmen, he certainly has and his knowledge of local history made the region come to life in ways other than ornithological. Most speakers were from America, where detailed research has been carried out on the east-coast metapopulation for many years now. This group was led by Ian Nisbet, the doyen of tern research in the north Atlantic and

again a name known to me since my teens, prior to his move to the States and mine to Africa.

The greatest emphasis was placed on management techniques used to re-establish populations that had drifted to a critically low level in the Atlantic, and the resultant impact of these techniques. Greatest benefits have accrued to the Common Tern, followed by the Arctic Tern, but results for the Roseate Tern have been very variable and productivity is low at many sites, particularly sites classified as marginal. Basic techniques include:

- creating suitable habitat on islands previously known to harbour this bird;
- culling or scaring the burgeoning gull populations that had literally pushed the terns off many islands as well as predating eggs and young;
- establishment of a variety of nest boxes, the most effective of which appears to be unsightly old car tyres sunk into the substrate at an angle;
- and the use of tape recordings to attract passing birds.

All methods have proved effective to various extents at different sites, but the European population (at just over 900 pairs) has another factor to contend with. These birds migrate to winter quarters in West Africa, especially coastal Ghana, where young lads catch them for food or to remove the rings for ornaments or trophies. Expeditions have visited the area to attempt to remedy this situation, and at the same time to establish a local working group to monitor these happenings. To date they seem to have had a modicum of success.

Other studies looked at the problems of population dynamics, including productivity, survival and longevity. Productivity is fairly easy to monitor at certain accessible colonies, but once birds leave those colonies, survival/mortality factors are difficult to determine and it is here that recovery data from ringed birds becomes so important. Continu-

ous monitoring of returning breeding adults each year gives a good idea of individual survival, strength of mate bond (the stronger the bond the better the chance of rearing young), improving breeding success with gathering years and experience, as well as average longevity of adult birds. Although the oldest known living bird was still going strong at 26 years, few appear to reach 20 years. Although birds may visit colonies from one year of age, first attempted breeding occurs only from years three to five and is rarely successful at first attempt. Special Roseate Tern rings are now in use and these can be read in the field with the use of telescopes (much in the way we have been doing with Swift Terns recently). These rings will be put to use in South Africa from this coming breeding season.

Atlantic populations of Roseates have been well studied but little is known of populations in the Indian Ocean, although the Australians have recently embarked on a large-scale ringing and colour-flagging project. The number of populations making use of Australia is not known, but there appear to be four separate breeding populations, each with its own time schedule, as well as birds from Japan and Taiwan wintering in the northeast. To this may be added likely visitors from the seas around Indonesia, the Phillipines and further east in the Pacific. At this stage, these birds can be separated only in the hand, based on the stage of moult. Thus the peak numbers of birds visiting that continent could well number over 200 000. A lot of birds for a species considered internationally Endangered only a decade ago.

The only other population that is being studied, other than our own, is that of Aride in the Seychelles. Jaime Ramos, from Portugal, has been studying these birds annually since the early 1990s, with earlier studies back to 1984, and has collected and published much data on nest-site selection, foraging habitats, diet, chick-feeding rates, chick growth and survival, and influence of

*remove the rings  
for ornaments or  
trophies*

weather conditions on reproductive parameters. The breeding population has crashed from approximately 4500 pairs in the 1970s to 1267 pairs in 2002. But how genuine this crash may be cannot be fully determined as there is a possibility that birds move around the northwestern Indian Ocean, breeding at several sites, and nothing is known of their post-breeding ecology. Productivity of tropical Roseates appears to be lower than that of temperate birds, both in the average number of eggs laid and in the number of young fledged, thus it is possible that the overall survival rate may be higher. There is also a suspicion that tropical birds may not breed consistently every year.

Comparative studies of foraging behaviour are also of interest as the distance to feeding grounds may vary enormously between different populations. It would appear that the species of food fish brought to the chicks varies from year to year and the calorific food value of the fish varies from one species to another. Those young fed on rich food fish in one year will have a better chance of survival to adulthood than those fed on less rich foods.

Although much has been learnt around the world, there is a huge field open for further research into various factors affecting populations of Roseate Terns, both annually and in the long term. In South Africa, Rod Randall set the scene with his publications in the 1970s. Norbert Klages and I have added our contribution over the last five seasons, but there is great difficulty and expense in accessing Bird Island during the winter months, and our visitations have been too short and variably infrequent. The Bird Island colony is difficult to observe, hence we do not have the options of close study as at some colonies.

We have little idea whether our birds are resident or migratory, although they do seem

to become pelagic away from the breeding island and may come to land mainly at night, or may depart our shores almost completely. We do not know if our population is an isolate or part of a larger metapopulation, such as that of Madagascar with which our birds seem to show the greatest affinities. We have never been able to do any intensive studies on productivity, although we have a rough idea of the number of birds breeding and the fact that they seem to be increasing slowly. We have little data on survival of the young of different years as we have little idea of what proportion of the well-hidden young we actually catch and ring each season, nor do

we know if all our offspring return to breed at either Bird Island or Dyer Island.

Management of the Bird Island population

is not a priority as the only problem, other than wet spells damping and chilling eggs and chicks, is the burgeoning gannet population that is spreading over the terns' main breeding area. But it is at the even more crowded Dyer Island that management is a necessity because Cape Cormorants destroy the terns' vegetation cover for nest-building, exposing the eggs and young to the depredations of numerous Kelp Gulls. Establishment of suitable nest-boxes is a priority.

All-in-all, the workshop was very worthwhile, especially in making contact with other researchers. The hotel accommodation was great, the food good, field trips interesting (I even saw a lifer – a Snow Goose) and on the last evening we had dinner at the Heritage Centre where we were entertained with traditional Irish music and dancing.

### Acknowledgements

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## Spotted Ground Thrush threatened by forest destruction

With less than 2500 individuals remaining in the world, the Spotted Ground Thrush *Zoothera guttata* is one of Africa's most endangered birds and amongst the most sought after by birders. Some populations of this fast-disappearing thrush migrate between African countries. It would be futile to protect the bird in one country only for it to die for lack of suitable habitat in another. Five races of this striking ground-dwelling thrush are recognised. They exist in what are now isolated patches of indigenous forest. Two are migratory coastal races, one in Kenya and Tanzania, and the other in South Africa. The three sedentary races are found in small forest fragments in Democratic Republic of Congo, Malawi, and Sudan, and recent unconfirmed observations suggest also Mozambique.

Under the auspices of the BirdLife Africa Species Working Group, a workshop of international experts was held at Turtle Bay Beach Club, Watamu, Kenya from 5–9 May 2003. It was jointly hosted by NatureKenya and National Museums of Kenya (NMK), facilitated by NatureUganda and BirdLife South Africa, and co-funded by the Royal Society for Protection of Birds (RSPB) and the UK Darwin Initiative. The aim of developing an International Conservation Action Plan for this enigmatic species was achieved, and an International Spotted Ground Thrush Working Group was set up to coordinate the implementation of the Plan.

The 16 NGO and Government participants in the workshop were drawn from BirdLife International partners in South Africa, Malawi, DRC, Kenya and Tanzania. The workshop identified appropriate stakeholders, activities and methods to be included in the Action Plan and recommended

that urgent and immediate action be taken to conserve the species. Recommended activities include raising awareness, research and monitoring, and effective management of forest habitats.

In his opening speech, Mr Tito Mbuvi, Centre Director of Kenya Forestry Research Institute (KEFRI), Gede, and also Secretary for the Arabuko-Sokoke Forest Management Team, emphasized the importance of involving local communities and other stakeholders adjacent to Spotted Ground Thrush sites if conservation actions are to succeed in the long term.

Colin Jackson, Director of A Rocha Kenya, said that from observations in Arabuko-Sokoke, Spotted Ground Thrushes appear to require good quality forest for their survival and thus could be used as an indicator of a healthy forest environment. Furthermore, local communities can benefit from birdwatchers visiting sites such as Arabuko-Sokoke Forest to see the thrush and, in so doing, contribute to schemes like the existing bursary fund, *Arabuko-Sokoke Schools & Eco-Tourism Scheme* ([www.assets-kenya.org](http://www.assets-kenya.org)).

A presentation on the species was given by Kariuki Nding'ang'a (Research Scientist at NMK). Doug Harebottle (Avian Demography Unit, University of Cape Town), who has extensively studied the species in South Africa, said that much more information is needed for effective conservation of the species.

The workshop concluded that, with active support for the Species Action Plan from the governments and conservation bodies in countries where the bird occurs, there is hope for the continued survival of this elusive and threatened bird.

*Five races of this striking ground-dwelling thrush are recognised.*

**For more information contact Kariuki Nding'ang'a, NatureKenya, PO Box 44486, 00100 GPO, Nairobi, Kenya. Tel: +254-(0)20-3749986/57; Fax: +254-(0)20-3741049; email: [kbirds@africaonline.co.ke](mailto:kbirds@africaonline.co.ke) or [office@naturekenya.org](mailto:office@naturekenya.org)**

## White-billed penguins

*Phil Whittington*

*Dept. of Zoology, University of Port Elizabeth, Box 1600, Port Elizabeth, 6000*

The Avian Demography Unit, Marine and Coastal Management, Robben Island Museum and Earthwatch Institute are currently conducting research on the African Penguin *Spheniscus demersus* at Robben Island. An important component of this work is the field-testing of a new design of flipper band (Whittington 2001). The project necessitates regular monitoring of a number of study nests, that is carried out by teams of Earthwatch volunteers together with staff of the participating organisations.

On 13 July 2002, while carrying out nest monitoring with Earthwatch Team Five, an adult penguin was noticed at a nest with two large, downy chicks. There was something different about this bird. After a couple of seconds, I realised that it had an almost completely white bill. Normally, the bill of the African Penguin is black, with a variable greyish vertical band towards the tip. I assumed the occurrence of a white-billed bird to be a form of albinism. The plumage of the bird was, however, perfectly normal (see photograph).

During my seven years of fieldwork on this species, I have seen several examples of partial albinism in the plumage (see also BN9[1]: 22), but this was the first occasion on which I had witnessed a bird with anything other than a black bill. So I was even



more surprised when I observed another African Penguin with a partially white bill on Bird Island, Algoa Bay on 3 February 2003. This bird had an entirely white upper mandible but a normal black lower mandible, including the lower half of the greyish vertical band (see sketch).

There are several examples of partial, and a few of complete albinism in penguins in the literature (e.g. Rand 1950; Van Wyk 1995) but I was unable to find any mention of birds with normal plumage and a leucistic bill. Two other seabird biologists, with over 25 years of field experience of the African Penguin between them, could not recall having seen a penguin with a white bill. Therefore, I assume this to be a rare phenomenon.

### Acknowledgements

Earthwatch Institute and the University of Port Elizabeth are acknowledged for their support of seabird monitoring work in 2002 and 2003, respectively. Robben Island Museum and in particular, Mario Leshoro, gave logistical support at Robben Island. Marine and Coastal Management kindly allowed the use of their accommodation facilities at Robben Island. Robben Island Museum and Brian Howe provided transport to the islands.

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**Van Wyk J.C.P. 1995.** Unusually coloured penguins at Marion Island, 1993–1994. *Marine Ornithology* 23(1): 58–60.

**Whittington P.A. 2001.** And the bands played on ... *Bird Numbers* 10(1): 44–45.

## Firefinches and sunbirds on the move

**R. Cowgill<sup>1</sup>, S.B. Davis<sup>1</sup> & D. Harebottle<sup>2</sup>**

<sup>1</sup>59 Edmonds Road, Glenwood, Durban 4001

<sup>2</sup>Avian Demography Unit, UCT, Rondebosch, 7701

Over the past three decades, a number of KwaZulu-Natal bird species have extended their ranges, and in doing so have extended the types of habitat that they use. Some of these changes can be followed from past records while others have few records. The species considered here are Red-billed Firefinch *Lagonosticta senegala* and Purple-banded Sunbird *Nectarinia bifasciata*. Of these two species the Red-billed Firefinch has the most available records.

### Red-billed Firefinch

Clancey (1964) recorded the Red-billed Firefinch as common in eastern Zululand with its range extending south to the lower Tugela River. In Natal south of the Tugela, it occurred along the coast to Stanger and near Durban (April 1962).

The *Bird atlas of Natal and Zululand* (Cyrus & Robson 1980) has only a July record at Stanger and few records in western Zululand. ASAB2 shows an extended distribution to inland Zululand and an increased number of records from the region, reaching south to Ballitoville (Ballito).

Both ASAB2 (Harrison et al. 1997) and Clancey (1964) described the species' habitat as thornveld and riparian thickets but also gardens and chicken runs. Further records from individual observers' and the Birds in Reserves Project (BIRP) have revealed a southward movement of this species during dry months. An isolated record of Red-billed Firefinch came from Sea Cow Lake, Durban, during the dry year of 1982. The earliest observations during this time were generally made at the onset of winter.

In July 1989 a few pairs were observed in rank vegetation and grass near the old Melville sugar mill, 10 km southwest of Stanger.

Another isolated report came from Umbogavango south of Durban on 27 August 1991. Five years later in May 1994, further sightings were made at Newlands East in Durban, and in July 1994 of a pair in the coastal lowland forest at North Park. In June 1994, several records also came from Umbogavango Nature Reserve, 20 km south of Durban (Cowgill & Davis 1998), also in thick coastal lowland forest. These records reflected a significant influx of birds into the greater Durban area. In May 1995, sightings were recorded in Ilanda Wilds Nature Reserve, also a reserve of coastal lowland forest situated along the Amanzimtoti River.

During 1995, the first inland sightings were made at Shongweni in July, when a small flock was seen in dry grassland with juveniles being fed by adults. The next records came from the coastal lowland forests of Palmiet Nature Reserve in February 1997. In August 1997, an isolated record from Umdoni Park, Pennington, marked a farther southward expansion. By May 1998, there were frequent records from further down the south coast at Port Shepstone, Anerley and Umzumbe. By this time, regular records were being received from both Amanzimtoti (July 1998) and Umkomaas (December 1998) where the species occurred regularly at bird feeders. By July 1999, Red-billed Firefinches were well established and resident at Umkomaas, numbering 11–13 in a single flock. From August 1999 onward, regular records were received from Um-twalume, between Umdoni Park and Umzumbe, indicating that they had become a resident species.

During mid-February 2000, a pair of Red-billed Firefinches bred successfully in Glenmore, Durban, and reared three chicks by



mid-April (M. Hoile pers. comm.). The nest was built in a potted *Plectranthus verticillatus*, 2.5 m from a kitchen window on a patio. In May of 2001, another set of three chicks was raised but not at the same site. There was no evidence of breeding during 2001, but in April 2003 a pair of adults were accompanied by two feathered young at the feeding table.

In 2001, the birds moved south during the winter months of June and July to Ramsgate, 20 km south of Port Shepstone. In March 2002, a record was submitted from Uvongo River Nature Reserve just north of Ramsgate.

It seems evident that the Red-billed Firefinch moves south during dry periods, particularly in winter. There appear to have been three phases of range extension, each preceded by a small number of sporadic records south of the usual range. Prior to 1979, regular observations were made north of the Tugela River (2931AB), and by the end of the atlas period in 1992, the birds had become more common in the Stanger/Ballito area (2931AD) but had not been recorded further south. The species had established itself in the Durban area (2931CC) by 1994, and subsequently in Port Shepstone (3030CB) by 1998 and Ramsgate (3030CD) by 2001.

There has not been a corresponding expansion of the Steelblue Widowfinch *Vidua chalybeata*, a brood parasite of the Red-billed Firefinch. Two documented records report sightings of this species firstly in Umbogintwini where two males were feeding on a lawn in February, 1999. This is possibly the most southerly record received so far. The second sighting was from SAPPI Stanger in January 2001.

### Purple-banded Sunbird

According to ASAB2, this sunbird has undergone a less dramatic expansion than the Red-billed Firefinch, but since the Purple-banded Sunbird has diversified its habitat in Durban, it has become far more numerous and has also spread southward.

The Purple-banded Sunbird was de-

scribed by Clancey (1964) as common on the littoral plains of Zululand with a few stragglers on the coast of Natal, as far south as Durban. Cyrus and Robson (1980) recorded this species as common in Zululand, reaching south to Mtunzini, but only seasonal around Durban. Skead (1967) reported that this species inhabits riverine bush and occasionally thorn trees. He recorded the species as common in northern Zululand, but a rare winter visitor in Durban at the southern edge of its range. It was not noted as a bird of coastal forests but as an occasional visitor for nectar.

In Durban, the earliest record of note was when the species frequented the mangroves at Beachwood Nature Reserve in July 1978. The specific breeding date was not recorded, but it nested there during that year. The nest was constructed of fine fibres, covered with spider webs and suspended from the end of a foliated branch of a White Mangrove *Avicennia marina*, about 2.5 m above the water. Between the Natal Atlas and ASAB, there were only a few records. From the late 1980s until the present, this sunbird was recorded regularly at Beachwood and Durban Bayhead. In November 1985, it was reliably recorded as a summer visitor to Umhlanga Ponds, in the rank vegetation around the ponds. In July 1987, it visited the forest margins of Stainbank Nature Reserve (Cowgill & Davis 1998). During July 1990, Purple-banded Sunbirds arrived and finally established themselves at both Beachwood Mangroves and the Bluff Nature Reserve. In the summer of that year, the birds settled in the mangrove stands at Bayhead where they have remained as a resident species.

Most visitations were during winter months. In June 1993, a few birds visited the coastal lowland forest of Pigeon Valley Nature Reserve where they fed on the nectar of Natal Wild Banana *Strelitzia nicolai*. In the same year, records were regularly received from Umhlanga Lagoon and Umhlanga Wastewater Treatment Works, all in similar forest habitat. When the Common Coral Tree *Erythrina lysistemon* and Water Berry

*Syzygium cordatum* were in bloom at Bluff Nature Reserve in June 1994, these sunbirds visited the site with a number of males in eclipse plumage. In July 1995, Virginia Bush Nature Reserve, also a coastal lowland forest, was the next site visited by this species. This was followed, in May 1996, by a sighting made in Burman Bush Nature Reserve. In July 1997, the species was recorded at Northern Wastewater Treatment Works where there is no coastal lowland forest.

During 1992 to 1995, winter records (June and July) were received from Umbovango Nature Reserve where a nest was later found in December 1999. The next significant southward movement was in September 1996 where the species was sighted at Uvongo (3030CD), and then in Mpenjati Nature Reserve in August 1998.

Inland movements were recorded from the first urban observations in Westville (2930DD) in 1992. Individual birds arrived intermittently in May to feed on a blossoming Chinese Hat Plant *Holmskoldia sanguinea*. The birds were absent during 1993 but returned in 1994, leaving again in September of the same year. Visits have been regular since then to the present. In June 1999, single birds visited gardens on the Berea, Durban (2931CC), and later in Cowies Hill in September 2001. In November 2001, a pair took up residence at Durban Botanic Gardens. In July 2001, birds were seen at the Mbumbazi Nature Reserve approximately 15 km inland from Port Shepstone (3030CB). By July 2002, the bird was recorded as a winter visitor at Umtentweni, and at Port Shepstone in October 2002. An unusual record came from Spioenkop Nature Reserve (2829DA) when a dead specimen was collected at Spioenkop Lodge in October 2001. Most of the records are of birds moving during winter months. It is still unknown where they go during summer breeding months. No recent records of successful breeding have been received from south of Durban.

It is not evident that the Purple-banded Sunbird is spreading in phases like the Red-

billed Firefinch. Instead, the records indicate a steady southward expansion with dispersal into non-specific habitat during winter. The question is, what habitat and season is required for it to breed down south?

### Other species and further monitoring

Other species that require closer examination of their range extensions include Woolly-necked Stork, Scarlet-chested Sunbird, Black Coucal and White-eared Barbet. It is evident that BIRP plays a significant part in the continuous and regular recording that is required to document changes in distribution ranges. The personal observations of birders in areas that lie outside of protected areas, particularly domestic gardens, are also important. An important function of Out-of-Range Recorders on bird club committees, is to evaluate and report on all observations in a suitable format. The recorder should monitor the distributions of certain species and draw attention to these, requesting detailed records. These records will provide more accurate details of the distribution and movement of birds, including as yet unexplained erratic or nomadic movements.

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