FURTHER NOTES ON THE DRAKENSBERG SISKIN
Serinus totta symonsi

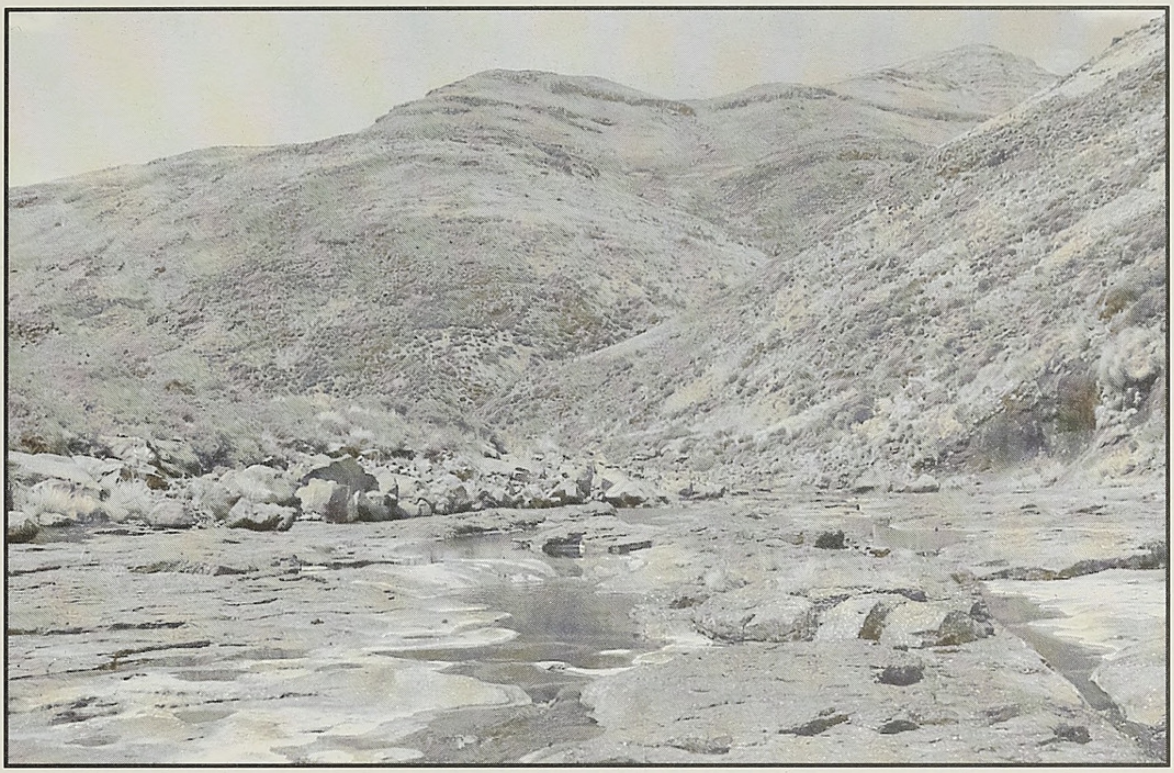
by Neville Brickell and Trevor Konigkramer

In 1986, at the time that my (N.B's) first notes about this species were published (*Avicultural Magazine* 92,1: 37-39), although the clutch size was known successful captive breeding had yet to be recorded. This remains the case but hopefully not for very much longer, as a serious attempt to successfully breed this species is presently underway here in South Africa.

After four months housed in an aviary approximately one-third the size of a tennis court, a pair began to show an interest in breeding. An approximately one-third open-fronted nest-box measuring 12cm x 16cm x 14cm (approx. 4¾in x 6¼in x 5½in) was visited by the pair for a week before they were first observed carrying nesting material. They preferred mostly coir in preference to the various grasses which were provided. When the nest was completed, the top was level with the lip of the front of the box, enabling the sitting female to have a clear view out. Two eggs were laid and incubated by the female for 17 days. The nestlings had reddish-pink skin with creamy coloured fluff on their heads. Both nestlings disappeared within two days. The culprit was possibly a gecko of an alien species which in recent years has invaded homes and other buildings in coastal towns and cities, having driven out the indigenous Striped Skink *Mabuya striata*, whose diet was solely insects and other small invertebrates.

Also, there was only sparse information on this species' food. Recently the Avicultural Research Unit undertook a survey of the food preferences of captive birds. It was found that they showed little interest in mound termites but alate termites were consumed when in flight. Plant material which had previously been collected from wasteland in all provinces of South Africa and presently growing in my (N.B's) weed and seed garden was offered to 16 birds housed in my (T.K's) aviaries. The plant species, the buds or seeds of which were eaten, were:-

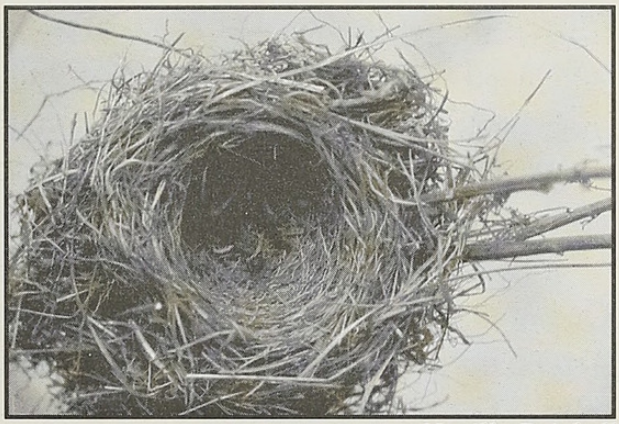
Dwarf Marigold *Schkuhria pinnata*
Common Dandelion *Taraxacum officinale*
Sowthistle *Sonchus oleraceus*
Gallant Soldier *Galinsoga parviflora*
Shepherd's Purse *Capsella bursa-pastoris*
Cape Wild Mustard *Sisymbrium capensis*
Chickweed *Stellaria media*
Yellow Sorrel *Oxalis pes-caprae*
Yellow Nutsedge *Cyperus esculentus*
Marsh Grass *Echinochloa colona*



Khatse River in Lesotho

Neville Brickell

Nest of Drakensberg Siskin



Neville Brickell

Top view of nest

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Male Drakensberg Siskin

Barnyard Grass *Echinochloa crus-galli*
Sweet Buffalo Grass *Panicum schinzii*
Guinea Grass *Panicum maximum*
Natal Red-top *Rhynchelytrum repens*
Scarlet Salvia *Salvia splendens* bushes growing in the aviary also had their buds attacked by the birds.

Plants previously recorded are omitted from the above list. No household greenfood was offered during the survey.

I (T.K.) discovered four nest sites in Lesotho on February 19th, 2000. One of these was on the horizontal branch of a bush identified as Wormwood *Artemisia afra*, which was growing 1m (approx. 3ft 3in) from the water's edge. The nest which had been abandoned consisted of fine dry grass and tendrils, lined with fine grasses and four dried leaves approximately 5cm (2in) in length. The nest which will be donated to the Free State Natural History Museum or the Transvaal Museum, measures 90mm in diameter x 55mm deep on the outside, with the inside (the cup) 58mm in diameter x 35mm deep.

The second nest was also by the Khatse River. It was in a clump of long drooping grass and is clearly visible on the video film shot at the time. When the female left the nest for a short period the opportunity was taken to examine one of the three eggs. It measured 18mm x 13mm and, like the two laid in the aviary, differed little from that described by Mackworth-Praed and Grant (1963), as being: 'white with fine brown speckling and occasional larger spots of brown.' This is at slight variance with Maclean (1993) in

Neville Brickell
Female Drakensberg Siskin

which they are described as: 'white to pale greenish blue, sparingly spotted with brown and grey mainly at the thick end'. The other two nest sites were in holes in a bank devoid of any vegetation, holes that had possibly been discarded by bee-eaters or kingfishers. The females were entering and leaving these while the males launched aerial attacks on rival males venturing too close to the holes.

References and bibliography

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Maclean, G.L. 1993. *Roberts' Birds of Southern Africa*. The Trustees of the John Voelcker Bird Book Fund, Cape Town, South Africa.

Skead, C.J. 1960. *The Canaries, Seedeaters & Buntings of Southern Africa.* South African Bird Book Fund, South Africa.

Video

Konigkramer, T. 2000. *Nesting Drakensberg Siskins in Lesotho*. Natal Bird Breeder's Society Video Library.

Plant identification by Parks Department (Burman Bush), Municipality Metropolitan Council, KwaZulu-Natal, South Africa.

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HAND-REARING AN ASIAN GREEN STARLING
Aplonis panayensis

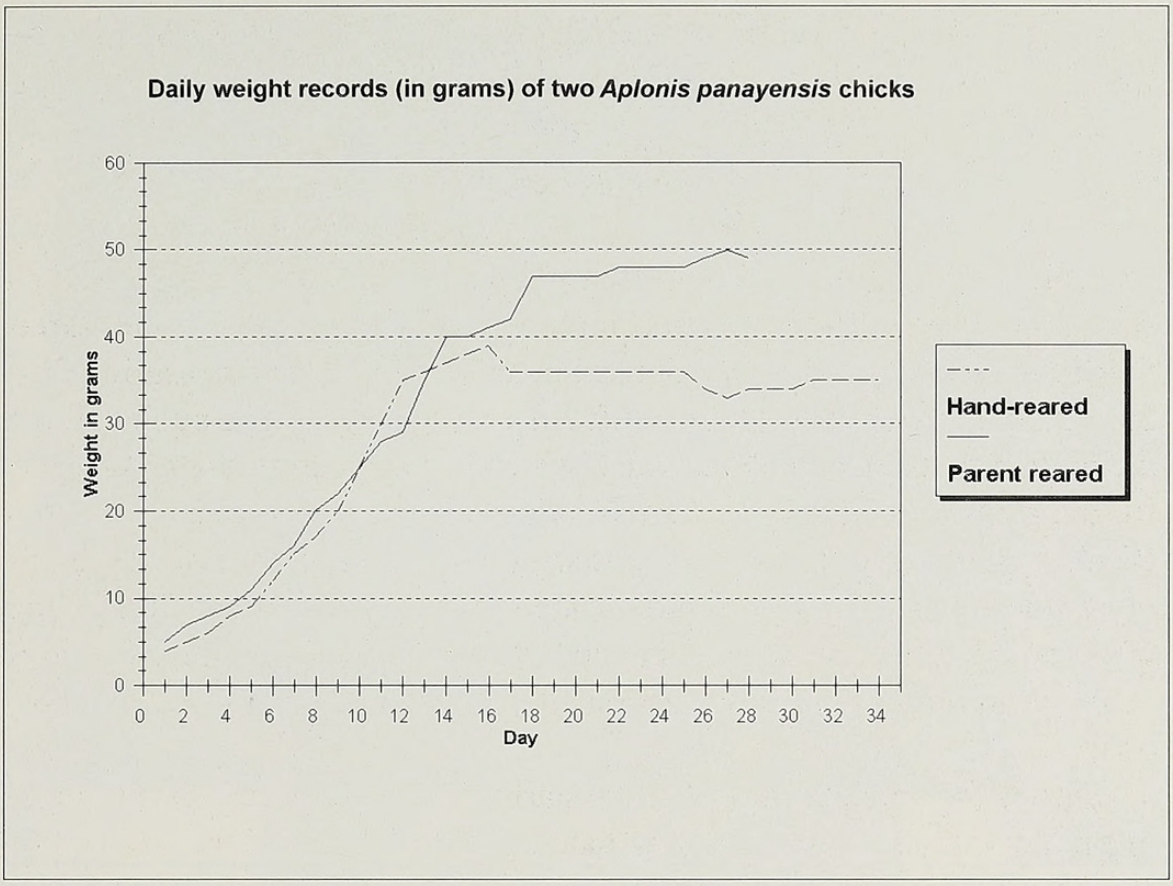
by Juan Cornejo

During the time I was biologist at El Parc de les Aus, a bird garden near Barcelona, Spain, the collection included an adult pair of Asian Green Starlings *Aplonis panayensis*, housed in an outside aviary measuring 2m x 2m x 2.5m high (approx. 6ft 7in x 6ft 7in x 8ft 3in high). The public viewed the birds from the front of the aviary, which had a concrete shelter provided for the birds at the back. A similar aviary on one side housed a group of Black Bulbuls *Hypsipetes madagascariensis*, and a similar aviary on the other side housing a pair of White-headed Bulbuls. Once a day the starlings were provided with universal mix and large pieces of seasonal fruits such as apple, pear, orange and water melon, etc., as well as fresh water in a bowl on the floor.

During the previous two years the starlings' breeding attempts had ended in failure with the eggs or newly hatched chicks being abandoned. May 1998, the pair started to build in a wooden nest-box measuring 10cm x 10cm x 15cm high (approx. 4in x 4in x 6in high), with the top 5cm (2in) open at the front, and eventually filled the bottom with green leaves from the trees in the aviary. On May 13th, during a periodic check, two eggs were found in the box. They were glossy blue with a greenish cast and garnet blotches around the wider end. On the 24th, a chick hatched after an estimated incubation period of 11-14 days. The second egg was found to be infertile.

Because of the history of the pair, the day after the chick hatched it was removed for hand-rearing. It had a little grey down on the back and head, a yellowish bill, and weighed 5g. It was placed in a tissue-lined container in a portable brooder. The temperature was set at 35°C (95°F) and a small container with moistened cotton wool used to maintain the humidity at about 60%. A hand feeding formula was designed made up of 25% fruit (banana, apple and papaya), 50% soaked kitten pellets and 25% hard-boiled egg, mixed together and moistened with warm water as necessary according to the age of the chick. A syringe was used to feed the chick every hour from 6.00am to 12.00pm for the first two days, and every hour from 7.00am to 10.00pm from the third day to the eighth day when we started to supplement the diet with earthworms and newly moulted mealworms. From the eighth day to the 18th day it was fed every two hours from 7.00am to 9.00pm. The chick was weighed every day before the first feed and its weight gains are plotted on the accompanying graph (p. 123)

At four days old, and maintaining a visible amount of yolk sac, the chick's ears opened and it started to lift its head when begging for food; one day



later its eyes started to open. The pin-feathers on the wings and those of the tail started to appear at eight days old, followed one day later by those on the chest. At this time the temperature in the brooder was reduced to 32°C (89.6°F). At 10 days old the chick's eyes were completely open and the upper mandible had began to turn darker. The chick was really active, and shook its head when begging for food. When the chick was 14 days old, all the major feather tracts had feathered up and the legs, feet and claws were grey. The temperature was reduced to 28°C (82.4°F). The chick started to peck at food held in the fingers and jumped out of the brooder. So, during the warmest hours of the day it was placed on a perch and sections of apple, pear and orange, and soaked pellets were placed in front of it to encourage it to feed itself.

At 17 days old, it was provided with food and placed outside in a small cage during the day. It was capable of scratching itself, as well as cleaning its beak against the perch. It had dark grey feathers on the wings, back and tail, and the underparts from the throat to the under tail-coverts were white with dark spotting. The iris of the eyes was brown orange and the claws were grey.

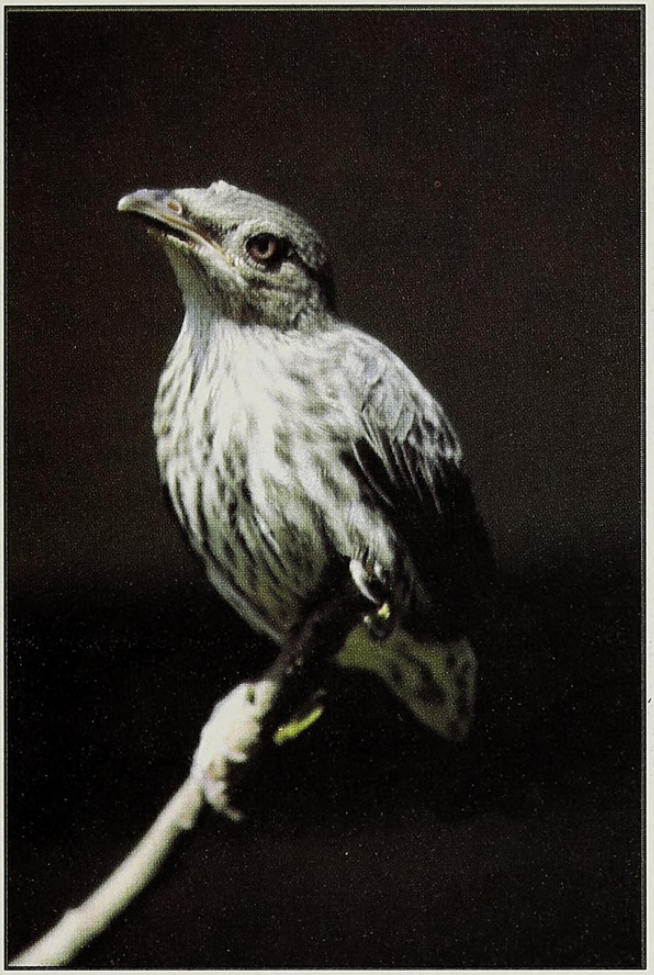
It began to feed on its own, pecking from a cut section of apple, at 19 days old, and from that time was hand-fed only twice a day to encourage it to fledge. It flew for the first time at 24 days old, when I was taking it for a ride around the park perched on one of my shoulders. From that day it was

Juan Cornejo

Egg and newly hatched chick in nest

Juan Cornejo

Chick at 18 days old



Juan Cornejo

Hand-reared bird at 35 days old

placed in a mixed aviary but continued to come to be fed. Two weeks later it become totally independent and lost its tameness. By that time its beak was almost black and the iris of the eyes had begun to turn red around the outside, the wings and tail feathers had completed their development and the first signs of glossy plumage appeared on the back.

The adult pair laid again on June 1st, but the eggs disappeared. They later laid a third clutch from which one chick hatched on August 1st. With the addition of mealworms to the diet, it was reared successfully by the parents. As can be seen from the accompanying graph (p. 123) from the 14th day it started to gain more weight than the hand-reared chick had.

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BREEDING THE LESSER FLAMINGO
Phoeniconaias minor

by Mark Rubery

Hillside Bird Oasis obtained its first Lesser Flamingos *Phoeniconaias minor*, eight birds in all, in 1987. In the few weeks run up to their arrival, a wintering house was built and the pool redesigned to suit their requirements. Lesser Flamingos being the most delicate of the six species of flamingos and easily chilled, it was most important they had an easily accessible house in which they could shelter from the weather as and when required.

The eight birds arrived safely and settled in well with no real problems. During their first winter they stayed in their house coming out only occasionally. After wintering well and going through a successful moult they all looked in fine feather, and later that year we managed to obtain another 10 birds so that we now had a nice flock. Over the summer I began to notice some slight pair bonding with occasional signs of displaying.

Through the summers of 1995 and 1996 the flock messed about building nests along the water's edge and eventually built some substantial nest mounds on which they sat for many hours. However, no eggs were laid. So, in spring 1997, I moved the flock to the Greater Flamingo *Phoenicopterus ruber roseus* enclosure, in the hope that their nesting behaviour would stimulate the Lesser Flamingos. Although at first they showed interest in the nesting area used by the large flock of Greater and Chilean Flamingos *P. chilensis,* once nesting commenced they felt intimidated by the larger birds, and stayed near to the water away from the nesting areas. So in the autumn of that year I moved the flock back into its own enclosure.

In 1997 the flock again built nests by the water's edge but, after a while, lost interest. To try to encourage them I put a Chinese Goose egg on one of the mounds. One pair took turns to incubate the egg until eventually they deserted it after about two weeks. However, towards late summer, much to my delight, we had our first Lesser Flamingo egg. It was laid on the grass, so we artificially incubated it, but it turned out to be infertile. At least though, we had made a start.

Lesser Flamingos have only rarely been bred in captivity. So on a visit to East Berlin Zoo in the winter of 1997, I was keen to see how it had achieved success with its Lesser Flamingos. Its flamingos had in fact built nest mounds in their wintering quarters, where they had laid and successfully reared a chick.

I returned home excited at the prospect of trying out placing a nesting area in their winter house. In it I built eight nest mounds. Almost immediately there was a high level of activity, with all mounds soon occupied,