## INSTANCES OF ABERRANT PLUMAGE AMONG AFRICAN SERINUS SPECIES

## by Neville Brickell and Trevor Konigkramer

The species which in southern Africa we call the Yellow-eyed Canary and which most aviculturists elsewhere call the Green Singing Finch Serinus mozambicus is, of course, a popular and long-established avicultural subject. The closely related Black-throated Canary or Yellow-rumped Seedeater S. atrogularis is also a well-established avicultural subject, but has never been as popular as the former.

The Oxford Dictionary defines aberrant as 'straying from moral standard or diverging from normal type'.

Thirty-nine years have passed since Michael P. Stuart Irwin, Director of the National Museum in Bulawayo, Zimbabwe reported interesting examples of instability in the *S. mozambicus* and *S. atrogularis* group from southern Mozambique, where aberrants have been found in flocks of Yellow-eyed Canaries or Green Singing Finches. The latter probably are of the race *S. m. granti*, which occurs in the extreme northern part of Zululand (South Africa) and the extreme southern part of Mozambique. Skead (1960) suggested that this is something which would be worth further investigation. However, it was not something which was taken up by Dr Phillip Clancey (1996) in his up-dated work on the birds of southern Mozambique.

Irwin stated: 'These differ from *mozambicus* both in colour and pattern and show an approach in characters to *atrogularis*. The mantle is a uniform brown (streaked) instead of the usual green; the feathers on the crown have darker and broader centres, but with pale isabelline edges; sides of face to lores dusky, eye-stripe faint or absent; dusky grey-brown loral streak present and in this character showing affinity with *mozambicus*. The entire underparts are isabelline; bill dark horn, more strongly pigmented than in other species, but closer to *atrogularis*'.

Recently while fishing on the bank of the Pongola River in the Ndumu region, in thick foliage adjacent to the water's edge Trevor Konigkramer observed approximately 30 individuals of the *Serinus* family which he was unable to identify in *Roberts' Birds of Southern Africa* (1993). The birds were feeding on the fruits of the Black Jack *Bidens pilosa* and the yellow flowering heads of the Gallant Soldier *Galinsoga parviflora*. Feeding alongside them were small family groups of Bully Canaries *S. sulphuratus*, Lemon-breasted Canaries *S. citrinipectus* and Yellow-eyed Canaries or Green Singing Finches. Neville Brickell who was on a photographic trip to northern Zululand was located and was able to photograph one of these unidentified canaries for future reference.



Neville Brickell

Possible natural hybrid in the wild

A project is already underway to produce the following hybrids:-Yellow-eyed Canary x Black-throated Canary Yellow-eyed Canary x Lemon-breasted Canary Black-throated Canary x Lemon-breasted Canary

Captive bred examples will then be compared with those photographed in the field. If any aviculturist has already produced hybrids between any of the species listed above and has good photographs of them from which comparisons can be made, they are asked to contact the Director, Avicultural Research Unit, 100 Innes Road, Durban 4001, KwaZulu-Natal, South Africa.

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# KEEPING AND BREEDING FIG PARROTS OF THE GENUS Psittaculirostris AT VOGELPARK WALSRODE.

## by Martina Müller and Norbert Neumann

The representatives of the genus *Psittaculirostris* are medium-sized (18cm-20cm (approx. 7in-7<sup>3</sup>/<sub>4</sub>in long)), stocky parrots, with colourful plumage. Their most prominent features are the extremely short, rounded tail, the elongated ear-coverts and proportionally large bill with a prominent notch in the upper mandible.

Fig parrots are distributed throughout different regions of New Guinea, where they can be found primarily in fruit-bearing trees, especially fig trees.

Here, we do not attempt to give full descriptions of the three *Psittaculirostris* species, as they can easily be distinguished by referring to the relevant literature or the photos used to illustrate this article. We believe that the following short notes should be sufficient:

## Desmarest's, Golden-headed or Large Fig Parrot P. desmarestii

Occurs in forested lowlands, hill forests and occasionally the savannas of the western Papuan islands, as well as western and southern New Guinea, locally up to 1,500m (approx. 4,900ft). Unlike the other species of this genus, which are monotypic, up to six well defined geographical races of it have been described. All are mainly green with the typical contrasting fiery-orange forehead and orange-yellow crown and nape, blue breast markings and blue on the flight feathers. In this species the sexes are alike.

## Salvadori's or Whiskered Fig Parrot P. salvadorii

Endemic to lowland forest and the forest edge, up to 400m (approx. 1,300ft), in northern Irian Jaya. Extensive logging and land clearance, associated with extensive trapping, are considered to be causing a rapid decline in its numbers and have led to it being listed as vulnerable. Sexual dimorphism is well developed in this species: adult males have a red breast, whereas adult females have broad bands of pale bluish-green across their breast. Both sexes have a blue mark behind the eyes.

# Edwards' Fig Parrot P. edwardsii

Distributed throughout lowland and hill forest, also partly cleared land, in north-eastern New Guinea. This species was in the past thought to be a race of Salvadori's Fig Parrot. The most striking features of Edwards' Fig Parrot are the broad blue-black band on the upper breast, the red belly and lower breast (females lack this red on the breast) and the broad black line through the eyes to the hindcrown and nape.

Their fascinating behaviour and vivacious nature make fig parrots among the most attractive of the parrots. They are gregarious, very active and playful birds, which become tame easily. While acclimatising and keeping the *Psittaculirostris* species is no longer a problem, breeding successes still need to be improved in order to establish viable populations. In the mid-1970s a good number of fig parrots were imported into Europe and the USA. At that time there was no detailed information available about these species, we knew only that keeping fig parrots seemed to be difficult, and therefore only a few enthusiasts purchased these birds.

Vogelpark Walsrode was one of the first institutions to take up the challenge to keep these three species of fig parrots and to improve the breeding results with them. During the early years the loss of some birds had to be accepted, but this led to even more intensive efforts to achieve satisfying breeding results. Up until that time and - still today sometimes - there are those who believe that a deficiency of Vitamin K, which delays blood-clotting, causes the death of these birds. Therefore even the slightest injuries such as those caused by flying against the wire of the enclosure, are supposed to be the reason for birds bleeding to death. As an additional supply of Vitamin K did not result in any improvement in the keeping of the adults or in the hatching of chicks, we decided to try other ways.

The first improvements came when we added an amino-acid supplement to the food. We noticed increased breeding activity and did not lose any of the adults. During this 'time of experimentation' chicks hatched, but died within the first 18 days. At that time, about the end of the 1980s and the beginning of the 1990s, the results of investigations by keepers in the USA were published which dealt with the causes of death in *Psittaculirostris* chicks. The surprising result of these investigations was the fact that young fig parrots are obviously unable to digest the seeds of figs and apples, etc., as adult birds do. Even soft and spouting seeds are a potential danger to young birds. These results caused us to reconsider the diet we fed to the fig parrots and, together with other breeders, we worked on a new combination of ingredients. After a short period of re-adaption to this new diet, it was very well accepted by the birds.

Today, the *Psittaculirostris* species' diet consists of the following, which is fed to them twice a day in clean bowls. It is sufficient for approximately ten birds.

3 tablespoons of cooked rice

1 medium-sized, cooked potato (cut into pieces)

1 large, peeled and steamed apple (with the core removed)

1 steamed carrot

1 banana

2 tablespoons Humana Spezial (powdered special diet for babies, which is free of lactose, fructose and refined sugar)

2 tablespoons of soft oat flakes

<sup>1</sup>/<sub>4</sub> teaspoon Korvimin (powdered vitamin/mineral supplement for birds)

10 ml honey

½ teaspoon of oil (olive or wheatgerm oil)

1/8 lettuce or Chinese cabbage

Approx. 100ml water

All of the ingredients are mixed in a blender until they form a paste-like substance.

We also offer a variety of spouted seeds and pulses, including sunflower seeds, mung beans and a seed mixture intended for pigeons. These are soaked in 5 litres (just over I gallon) of water to which we add two Chinosol tablets to prevent them from becoming mouldy. They are soaked for approximately eight hours, after which they are thoroughly rinsed with clean running water and then kept in a sieve and allowed to sprout for about 24 hours. In addition to the above, we also offer maize and rice which has been boiled for ten minutes.

Every other day 5ml of one of the following supplements is added to the food: powdered yeast, Muschelkalk (ground shells which provide calcium), powdered soya-malt, Nekton Tonik K (vitamin/mineral supplement for seedeating birds).

The food for the adult birds consists of the above mentioned paste (fed twice a day) and, once a day, one tablespoon of spouted seeds and pulses and half a dried fig (which has been soaked) per pair. The seeds, pulses and figs are provided up until two days before the chicks are expected to hatch. From then until the chicks are 14 days old, the only food we offer the birds is the paste. Then from 15 days old onwards, we add ten blanched mealworms per day.

When the young birds have fledged, we again feed our basic fig parrot diet (the paste, seeds, pulses and figs) and stop offering mealworms. About two weeks after fledging the offspring can be separated from their parents. They should though be kept in a quiet area, as at the beginning they are very timid.

As fig parrots like to use branches on which to clean their bills, they should always have access to branches which have not been treated with pesticides. The birds also peel the bark off the branches, and so get additional minerals, roughage and tannin acids which have a dietetic effect.

It should be borne in mind that fig parrots are very active birds, which enjoy bathing. They are also very curious. During the breeding season,



N. Neumann

Desmarest's Fig Parrot male (left) and female (right)

however, they can become very stressed, which can result in them abandoning or even killing their chicks. This does not necessarily take place at the time of the disturbance, but often occurs some days later.

Aggressive behaviour between males and females is seen only rarely, and it is more or less easy to set up pairs. Keeping the birds in flocks of two or more pairs, however, makes a big difference and, at breeding time, the pairs should be kept separately. When keeping *Psittaculirostris* species in a group of three pairs in a large enclosure, we found that all may hatch chicks, but only those of one of the pairs survive to the age of fledging. We assume that one of the pairs is dominant and suppresses the others, also the females sometimes become very aggressive towards each other and bad injuries can result.

Pairs do not in most cases seem to be difficult to please with regard to nest-boxes, but there are some pairs which start breeding only after the nest-boxes have been changed several times. The type of nest-box which is preferred differs from pair to pair. Some tend to breed in small boxes which have just a single entrance hole, others use boxes which have an extra opening on the opposite side to the entrance hole, and some pairs prefer to gnaw a second hole in the nest-box while incubating the eggs. When the chicks reach about 14 days old the parents use this extra opening through which to remove the chick's droppings, which is a great help in keeping the nest-box clean and dry.



N. Neumann Salvadori's Fig Parrot male (right) and female (left)



N. Neumann Adult pair of Edwards' Fig Parrot male (right) and female (left)

With the *Psittaculirostris* species incubation takes about 22 days and the chicks fledge at about 45 -50 days old. After a further 14 days the young are independent of their parents and can be separated. They are sexually mature at 18 months to two years old, when the plumage is in full colour. With Salvadori's Fig Parrots there is a difference between the sexes at the age of 14-18 months, and with Edwards' Fig Parrots the males start to show typical male coloration at about ten months at the earliest.

By exchanging our experiences and newly-gained knowledge about the husbandry and breeding of fig parrots, these beautiful birds which are unique in appearance and behaviour, will more and more find their way into the hearts and aviaries of 'parrot people'. Today, keeping fig parrots is one of the most wonderful experiences those interested in keeping parrots can have, especially as they no longer have to face the problems experienced with them in the past.

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# THE FIRST UK BREEDING OF THE CROWNED HORNBILL Tockus alboterminatus AT LEEDS CASTLE

## by Laura Gardner

In February 1996 a pair of Crowned Hornbills *Tockus alboterminatus* were purchased for the Leeds Castle aviaries. We decided to work with this species following our success with the closely related Von der Decken's Hornbill *T. deckeni* (*Avicultural Magazine*, 98, 2: 44-47).

The new birds appeared quite drab in comparison to the Von der Decken's, but as their general condition improved so did their appearance. Adult birds are dark brown with a white breast and leg feathering and all but the central tail feathers are broadly tipped with white. There are distinctive flecks of white feathering above and behind the eyes, the irises of which are golden coloured. The bill is dusky red, with the male's bill generally being larger than the female's. The male's throat patches are black and those of the female are blue. The call of this hornbill is a high-pitched piping whistle, unlike the throaty calls of Von der Decken's Hornbill.



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Adult female Crowned Hornbill

At the beginning of the 1997 breeding season two nest-boxes were provided, one in the shelter and the other in the aviary. The boxes were of a parrakeet nest-box design with a entrance hole just big enough for the female to squeeze through. The base of the boxes was approximately 12in (30.5cm) below the tip of the entrance hole. Nest material consisting of peat and moistened shavings were added and pressed firmly into the base of the boxes.

On May 20th the female was seen inside the nest-box in the aviary and was starting to mud-up the entrance hole. She spent the next ten days going in and out of the box until May 31st, when the male was seen offering nestingmaterial to the female inside the box. Later that same day he was seen offering livefood to the female which now seemed to be sitting tight, although the entrance hole had not been completely mudded-up. Throughout the first week of June the male continued to feed the female and also continued to take up twigs and leaves. On June 3rd however the female left the box. She was looking tatty and had no tail feathers and had obviously begun to moult. Despite being a little concerned about her condition we decided to leave her in the aviary. The male remained protective of her and fed her the choicest livefood. Two days later she returned to the nest and continued to mud-up the entrance. The female was now incubating properly and both birds were continuing to mud-up the entrance hole. At this point, in addition to the main feed, locusts were fed by hand to the male twice a day. The male took the locusts directly to the nest and fed them to the female. In this way we could gauge the health of the female by her appetite and also ensure that the male was playing his part.

On July 16th there was a sudden increase in the amount of locusts taken to the nest. We assumed that at least one chick had hatched and the following day the keeper heard a chick squeaking inside the box. The next day at least two voices were heard coming from inside the box. Approximately 20 locusts were being taken at each feed and waxmoth larvae were also introduced to supplement the other livefood. Foods such as fruit and pinkies were also offered to the female from the main food dish, but only after the livefood had gone.

Early on August 11th the female began breaking open the mud sealing the entrance hole and by 11.30am she had left the box, having been inside for 67 days. She was fully feathered and appeared well, although her bill was very dirty. Later that day both adults were taking livefood to the nest-box and the two chicks were re-sealing the entrance from the inside. During the next week the male would take livefood to the female and she would feed the young. On August 18th, both chicks were seen panting due to the very hot weather and one side of the nest-box was hosed with water in order to cool the chicks inside.

Three days later the slit in the mud was enlarged by the female, but the chicks continued to re-seal it from inside. On the 25th the female re-entered the nest-box and re-emerged an hour later. This behaviour was repeated three days later; we assumed that the female was trying to encourage the young to leave the nest or was wanting to lay a second clutch. On September 2nd, at mid-day, one of the youngsters finally fledged. This was 47 days after the chicks had first been heard in the nest. The juvenile looked very



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Juvenile Crowned Hornbill hatched at Leeds Castle

much like the female but with a shorter, paler coloured bill and without the blue throat patches. As with the young Von der Decken's Hornbills, the eyes were pale blue-grey. When begging for food it gave a low piping call which was always answered by the adult male.

The following day the male was seen trying to entice the second youngster out of the nest-box, which he did by sitting on the nest-box perch holding livefood, but not offering it to the youngster there at the nest entrance. This obviously proved too tempting for the second youngster and it left the nest later that day. Within 24 hours of the second chick fledging the female was back inside the nest-box with the entrance hole mudded-up again. For the next two days keepers and the male hornbill were kept busy feeding livefood to the youngsters. The male however was not taking food to the female in the nest and the following day she left the nest-box and spent most of the day feeding. She was still fully feathered and had obviously not started to moult. The next day the female was back in the box and was begging for food at the nest entrance but the male was still too busy feeding the young to feed the female as well.

For the next five days the female was fed livefood in the nest by keepers but she re-emerged within a couple of days. She was fully feathered and there was no sign of any eggs having been laid. At this point the nest material reached to within 4in (approx. 10cm) of the entrance hole. A second food dish was placed in the flight for the youngsters, which soon learned to feed themselves, although they continued to beg from the parents for about six weeks. The nesting behaviour of the female continued over the following couple of weeks but no more eggs were laid that year.

As described above, the two youngsters, which have now been placed on breeding loan, were parent reared to independence. To our knowledge this is the first UK breeding of this species.

As described by Laura Gardner, the Crowned Hornbill *Tockus* alboterminatus, has been bred at Leeds Castle. This is probably the first successful breeding of this species in Great Britain or Ireland. Anyone who knows of a previous breeding is asked to inform the Hon. Secretary.

At the time that the above breeding account was submitted (13.8.98) the pair had two more young in the nest. If anyone else is breeding this species and would like to make up unrelated pairs could they please get in touch with Laura Gardner at:- Leeds Castle, Maidstone, Kent ME17 IPL, England. Tel:01622 765400/Fax:01622 735616.

The following article was first published in the magazine in 1934. Mrs Wharton-Tigar was at the time a prominent member of the Society and is credited with being the first person in the UK to have bred the Vinaceous Firefinch Lagonosticta larvata vinacea (in 1933) and the Black-crowned Waxbill Estrilda nonnula (in 1936). - Ed.

## AN AMATEUR'S EXPERIENCE IN IMPORTING HUMMINGBIRDS

# by Mrs Wharton-Tigar

In September last year (1933) I accompanied my husband on a short visit to Pernambuco, Brazil. This place is practically unexplored from an avicultural point of view, so I was determined to try and bring home a collection of rare birds. With this end in view, I made a hurried study of the birds to be found in that part of Brazil, and in this I was greatly helped by an article by a Mr Forbes, written in *The Ibis* in 1881, on the birds he saw in Pernambuco when on a visit there.

Late in July I met Mr Seth-Smith and he had accepted my offer to obtain and bring over 20 hummingbirds for the zoo. As I was returning in November and my stay in Pernambuco would only last three weeks, I rather wondered if I had been rash in making this offer!

We chose the Royal Holland Lloyd line to travel on, as it was the only line we could find that would let us bring back birds and would undertake to keep them warm. We sailed from Southampton on the SS Zeelandia on 28th September, and early dawn of 12th October saw us nearing Pernambuco. As we slowed down to await the pilot boat the air was delicious, clear and not too warm; the port showing itself in a very long line of twinkling lights. After some hours we slowly got alongside the quay, and as we got in we could see local people with pineapples, highly painted gourds, and many large cages of birds, Squirrel Monkeys, marmosets, and other small mammals, which they try to sell to the passengers, mostly, of course, on the home-coming boats. I noticed that the birds offered were not in good condition, usually sticky, the manakins and hummingbirds especially.

The state is generally known by the name Pernambuco, but the town there is really called Recife. It is divided into three parts by the River Capiberibe, which winds in and out, separating the portions known as Recife, Santo Antonio, and Boa Vista. Bridges across give the place a gay appearance and in various parts of the town there are small public gardens which I thought were quite cleverly laid out. They are planted with beautiful trees of different sorts, some of the acacia family, resembling huge laburnums; big bushes of oleanders (poisonous to birds, by the way) and bougainvillia



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