## AVICULTURAL MAGAZINE

## THE JOURNAL OF THE AVICULTURAL SOCIETY

Vol. 107 - No. 2 All rights reserved ISSN 0005 2256

2001

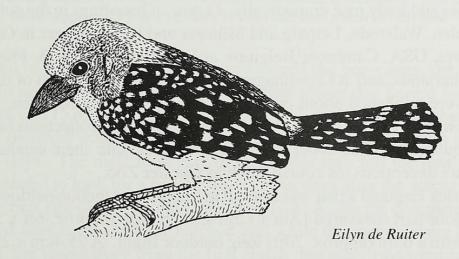
# BREEDING THE RED & YELLOW BARBET IN CAPTIVITY

by Maarten de Ruiter

#### Introduction

Although barbets of different species are offered for sale with some regularity, they have never been as popular as many other softbills. They are though very interesting birds and fortunately several private and public collections keep them and several species have been bred.

The Red & Yellow Barbet *Trachyphonus erythrocephalus* is a member of an African genus of some six species. The others are: the Yellow-billed *T. purpuratus*, Levaillant's (often called the Crested in its native countries) *T. vaillantii*, d'Arnaud's *T. darnaudii*, Usambiro *T. usambiro* and Yellow-breasted *T. margaritatus*.



Three of these - Levaillant's, d'Arnaud's and the Red & Yellow - are relatively well-known in aviculture and one, the Usambiro, is so far as I know, completely unknown in aviculture.

#### In the wild

The Red & Yellow Barbet is a medium-sized bird about 23cm (9in) in length. It lives in eastern Africa and has a number of subspecies:

T. e. erythrocephalus

T. e. gallarum

T. e. shelleyi

T. e. versicolor

T. e. jacksoni

s. Kenya, n. Tanzania.

s. & c. Ethiopia.

e. Ethiopia, n. Somalia.

n. Uganda, w. Kenya.

s. Ethiopia, n. & c. Kenya.

These are found in semi-arid bush country and open thornbush. The presence of termite mounds (termitaria) is important because they like to excavate their nest holes in these. Banks, including those of dry river-beds, may also be used for nesting in. They live in small groups that even during the breeding season remain intact. One pair breed and the other members of the group act as helpers.

The barbets' main food is insects and small vertebrates such as lizards are also taken. In captivity a good brand of insectile food mixed with some finely chopped or minced (ground) meat can form the basis of their diet, plus some fruit and livefood as an added extra. When they are feeding young in the nest, livefood is a must.

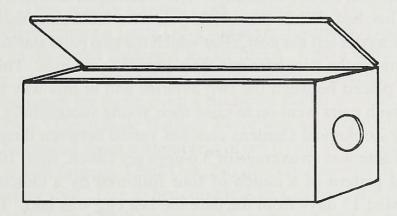
### Captive breeding

In recent years the Red & Yellow Barbet has been imported in quite large numbers and has been bred in several public as well as private collections. The first account of captive breeding I have been able to find is that of M. D. England (1973). In the mid-1990s the number of breeding successes suddenly rose dramatically. I know of breedings in the collections at Metelen, Walsrode, Leipzig and Münster and by Sehburger in Germany, at Denver, USA, Cambron, Belgium, at Rotterdam and by B. Fregeres in the Netherlands, and at Copenhagen, Denmark. It is a pity that of these ten, notes were published about only four of them, those at Metelen, Denver, Cambron and by B. Fregeres. Unfortunately, zoological collections in general rarely publish articles about breeding successes with their smaller birds. There are exceptions, of course, such as Chester Zoo.

Derrick England's pair was housed in a combined indoor/outdoor aviary. The indoor part measured 1.8m x 1.5m x 2.5m high (approx. 6ft x 5ft x 8ft high), with a 6.lm (approx. 20ft) long outdoor flight. A 25.4cm x 25.4cm x 18cm (10in x 10in x 7in) nest-box was provided and used for roosting in. Later, during the breeding season, a bale of tightly compressed peat in which Derrick England had constructed a tunnel and a nesting chamber was placed in the aviary as a possible nesting place. In addition, five different nest-boxes were provided. It was in one of these that the pair nested. The box was not inspected, therefore it was not known how many eggs were laid or how long incubation lasted, but it was known that it was shared by both birds. The time the young remained in the nest was also unknown. According

to Derrick England: 'by 17th April the nest undoubtedly contained young', however, shortly afterwards he wrote: 'by 7th April a youngster was looking out of the hole and two days later it was out'. There appears to have been an error over that date or the earlier date somewhere along the line in the preparation of the article. Eventually two young left the nest and were recognisable as being a male and a female. The latter did not look very well and died at five or six weeks of age. The young male thrived and was raised successfully.

At Vogelpark Metelen a pair was received in 1993. Together with some White-fronted Bee-eaters *Merops bullockoides* they were housed in an indoor aviary in the Tropical House. The back of this enclosure was constructed to resemble a riverbank and several nest-boxes (see diagram below) were



The nest-boxes, which were filled with a sand-loam mixture, measured 75cm x 30cm x 30cm (approx.  $29^{1}/2in$  x  $11^{3}/4in$  x  $11^{3}/4in$ ) and had a 9cm ( $3^{1}/2in$ ) hole

concealed in it. After some aggression towards the bee-eaters, the barbets started to nest in one of these boxes. During a four day period four eggs were laid, and 15 days after the last egg was laid, three chicks hatched. A lot of extra livefood was provided and all three were raised and left the nest after 23 days. The male took care of them after they left the nest and the female started to look for a new nest site. Four days after the young left the nest, the first egg of the second clutch was laid. Again the complete clutch contained four eggs. All four hatched and while the parents were looking for food, the young male from the first clutch (the other two were females) entered the nest to brood the second lot of young (Gerstner and Berse, 1994).

During 1994-1996, while working at Cambron-Casteau, I was able to make some interesting observations on the breeding of the Red & Yellow Barbet (de Ruiter, 1997, 1998). When I started working at this park, there was a group of eight barbets and as at Metelen, an artificial riverbank had been constructed, in this case in a corner. The barbets shared the desert-like habitat in the greenhouse with roadrunners, rollers, starlings, weavers, babblers and a bee-eater. Nest holes had been placed in the artificial riverbank

like those at Metelen. The Belgian birds however produced larger clutches of five to seven eggs, though usually no more than four hatched. Raising the young was usually relatively straightforward and during the two breeding seasons I worked at Cambron no less than 20 young were raised. Due to escapes and aggression, however, many were lost.

The Dutch aviculturist B. Fregeres obtained his first pair in 1997 and a year later a second pair was bought. These were housed beside each other in two similar aviaries each measuring 2.5m x lm x 1.9m high (approx. 8ft x 3ft 3in x 6ft 3in high). One pair was provided with a normal nest-box, but with an entrance pipe filled with pressed wood chips. The other pair had a nest-box filled with rotten birch wood. The first pair produced a clutch of three eggs but only one hatched after about 14 days and the young barbet remained in the nest for about 28 days. The second pair also laid three eggs of which two hatched. While the second pair were incubating their eggs the first pair's youngster left the nest, after which the two pairs started to attack each other through the wire between their adjoining aviaries. Thick plastic sheeting was placed between the two aviaries and in this way peace was restored and both pairs went on to raise their young successfully.

At Denver Zoological Gardens clutches varied between three and four white eggs. There was an average of 3.6 eggs per clutch, from 10 clutches, with a typical pattern of a clutch of four followed by a clutch of three. Incubation lasted 13 days from the date the last egg was laid. The chicks fledged in 28 days, by which time they were fully feathered and capable of being sexed and able to fly (Schmitt and Lyvere, 1980).

#### Conclusion

The Red & Yellow Barbet has proved to be a good aviary bird that will breed in captivity. Hopefully, those breeding this species will get in contact with each other and attempt to establish a stable captive breeding population.

#### References

England, M. D. 1973. Breeding the Red and Yellow Barbet. *Avicultural Magazine* 79, 6: 194-196.

Fregeres, B. 2000. Geslaagde fok met de vuurkruim baardvogel. *Vogelexpresse* 29, 2: 7-11. Gerstner, R. and Berse, P. 1994. Beobachtungen an Bruten des Flammenkopf-Bartvogels. *Gefiederte Welt* 118, 11: 381-382.

de Ruiter, M. 1997. Breeding the Red and Yellow Barbet: a success story? *International Zoo News* 44, 3: 144-145.

de Ruiter, M. 1998. De vlamkop baardvogel. Witte Spreeuwen 48, 6: 462-464.

Schmitt, E. C. and Lyvere, P. A. 1980. Breeding of the Red and Yellow Barbet at the Denver Zoological Gardens. *Avicultural Magazine* 86, 3:128-130.

Maarten de Ruiter, Pr. Beatrixstraat 9, 4793 CV Fijnaart, the Netherlands.

#### **OBSERVATIONS ON SEED-EATING PIGEONS**

## by Philip Schofield

Having kept various seed-eating pigeons since 1967, it seems appropriate to record some of my experiences with this group of birds. It all started in August of that year, when, at the age of 13, I selected a pair of doves (paying £1 (approx.US\$1.50) for the pair) from a cage full of Barbary Doves Streptopelia risoria dom. in a local pet shop. The female was a typical fawn Barbary Dove, her mate an apparent hybrid with a European Turtle Dove S. turtur. While they quickly became a devoted couple, the female never produced an egg, appearing to have some internal trouble that prevented her from laying. However, the pair used to go to nest and sit devotedly on an empty nest. They readily adopted eggs of other birds provided by me and reared at different times a Turtle Dove and several domestic pigeons Columba livia dom. of the small Budapest Roller breed. I gave them only a single pigeon egg at a time, feeling that two comparatively large foster squabs might be too much for them; even a Budapest Roller is rather larger than a Barbary Dove. The female Barbary Dove was hand-tame from the start, and could be carried about without fear of her flying away. She once flew to the top of a 40ft (approx.12m) Oak, but quickly returned to be picked up from the aviary roof. Due to her complete lack of fear, she could never be left alone outside in a built-up area with many cats and dogs. The hybrid male, on the other hand, remained relatively flighty and unapproachable for many months after purchase. Eventually he got out and I expected never to see him again. However, after visiting neighbours' gardens and being heard calling from all points of the compass, he returned to the aviary and walked in when I held the door open. After that, I often let him out, and a pattern of behaviour developed. He would hang around the garden for a few minutes, then head at speed for some tall conifers some 500yds (approx. 450m) away, where a pair of Collared Doves S. decaocto lived. The Collared Doves would then rocket out of the tree, pursued by the hybrid, and all three would fly at speed over the neighbouring golf course and disappear into the distance. Minutes or hours later, the hybrid would be back on the aviary roof, displaying to his mate and ready to be let back in. His aggressive tendencies were also directed at my free-flying domestic pigeons, and he could always move them on when he tried to. Smaller and faster, his tactics of fluttering round their heads and buffeting them with his wings left them looking clumsy and had them taking evasive action from their much smaller adversary.

In 1968, I hand-reared a Rook *Corvus frugilegus* that consorted with the pigeons through the summer before reverting to the wild. The Rook used to chase the pigeons, trying to tweak their tails as they flew. This appeared to

be in play, with no aggressive intent. Early attempts to do the same with the Turtle Dove hybrid left the Rook out-manoeuvred by the more agile and faster dove. The original female Barbary Dove died in 1971, apparently from a fit, and was replaced by another, which proceeded to lay eggs. I had hopes of interesting colour breeding from this newly made-up pair. The fawn-coloured Barbary Dove is, as most members are aware, a longdomesticated blonde mutation of the African Collared Dove S. roseogrisea, which resembles a small Collared Dove and is similarly grey in colour. The first cross with a Turtle Dove is coloured as one would expect if the Barbary Dove parent had been grey; all the (recessive) fawn colour is lost. Pairing the hybrid back to a Barbary Dove produces what are effectively grey Barbary Doves, with no trace of Turtle Dove in their appearance. My pair produced one of these from their first clutch of eggs; the other eggs were addled, which should have served as a warning. Having other breeding Barbary Doves at the time, I sold the grey youngster to a dealer with a batch of fawn ones, thinking there 'would be plenty more where that come from'. There never was another. Most of the eggs from this pair were fertile but failed to hatch; when the occasional one did, the squab did not live to leave the nest. A similar state of affairs occurred in later years when the hybrid was mated with a Collared Dove. It may be the Barbary Dove x Turtle Dove hybrids are not completely reproductively viable. Certainly a female of this cross that a friend had, paired to a male Barbary Dove, never hatched an egg. The old hybrid came to a bad end in 1975. Housed in a pheasant aviary, it was pulled through 2in (5cm) wire mesh by a cat, and fatally injured. Since then I have always tried to avoid keeping any bird where it can get its head through the wire.

My subsequent experience with Barbary Doves has been great fun. In recent years they have been bred in a variety of new colours (Goodwin (1987) and Brown (1995) both describe these newer varieties in some detail), of which I have kept red and yellow varieties, making a welcome addition to the long established fawn and the White Java Dove. The latter, once a familiar conjuror's accessory, has the relatively poor eyesight of many redeyed animals and can take a while to orient itself in a strange situation. When I tried one of these at liberty, it fluttered straight up to a height of some 50ft (approx.15m), then dropped 'like a stone' and sat there, panting, waiting to be picked up. After this, I never let one out again. The fawn Barbary Dove can make a reasonably assertive liberty subject, as described by Speakman (1982). I have seen a bewildering variety of coloured Barbary Doves in a continental enthusiast's birdroom, caged in pairs and used for fostering Bleeding Heart Pigeons Gallicolumba luzonica, also caged in pairs. I have never liked to keep such large birds permanently caged, but have had them so housed for months at a time, when used for fostering. Many of the



Ruiter, Maarten De. 2001. "Breeding The Red & Yellow Barbet In Captivity." *The Avicultural magazine* 107(2), 49–54.

View This Item Online: <a href="https://www.biodiversitylibrary.org/item/253202">https://www.biodiversitylibrary.org/item/253202</a>

Permalink: <a href="https://www.biodiversitylibrary.org/partpdf/314844">https://www.biodiversitylibrary.org/partpdf/314844</a>

#### **Holding Institution**

Smithsonian Libraries and Archives

#### Sponsored by

**Biodiversity Heritage Library** 

#### **Copyright & Reuse**

Copyright Status: In Copyright. Digitized with the permission of the rights holder

Rights Holder: Avicultural Society

License: https://creativecommons.org/licenses/by-nc-sa/4.0/

Rights: <a href="http://www.biodiversitylibrary.org/permissions/">http://www.biodiversitylibrary.org/permissions/</a>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.