



The Bearded Barbet

(*Lybius dubius*)

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Foreword: A few details regarding the climate in Ireland.

The Irish climate is officially described as "maritime," moderated by prevailing south-westerly winds. As a result, there are no great climatic extremes, with mild winter temperatures and cool summers. Rainfall is abundant. The east coast, where I live, is the driest area, having an annual rainfall of about 30 inches (250 centimeters), spread throughout the year, although late spring and autumn (fall) tend to be relatively dry. Average monthly temperatures vary from a low of 8C (46F) in January to 20C (68F) in July. Over the last few years we have experienced little or no snow and only a few nights of frost (average minimum temperature in January being 1C (34F). Unfortunately, we do not receive extended periods of sunshine, an average of two hours per day in January, rising to seven hours in May and June. Daylength varies from about 6-7 hours in Nov/Dec to over 18 hours in June.

All this has implications for birdkeeping. While there is no need for elaborate, heated shelters for most species, some require extended lighting, especially the smaller species. The period of winter darkness is just too long without access to food, especially as it will be cold at the same time. Nonetheless, it does mean that many species can have access to outside flights throughout the year, with only the minimum of shelter facilities.

The Bearded Barbet

In July 1997 I found four Bearded Barbets (*Lybius dubius*) offered for sale in a dealer's premises. This is a large barbet, basically black and red in colour, with the mid-to-lower back white. The flanks are creamy white. It has a large, grooved, yellow bill with two "teeth" on each side. The bare skin around the eyes is also yellow.

The species is native to West and Central Africa, where it is to be found in tall trees at the edges of open woodlands, wooded grasslands and cultivation, and in small isolated forest patches or clumps of second growth on old plantations (Fry et al. 1988).

The birds were in good condition, just a little rough in feather, although one had a badly dropped wing and was unable to fly. One bird appeared to be slightly larger than the others, with a slightly heavier bill, and while all would respond to being watched by flicking their tails from side to side, this was the only one to accompany it with a "caw" vocalization. At the time I was unaware that these birds could be sexed visually, but suspected this bird to be a male. I bought all four birds and later discovered that females can be recognized by the presence of a few black spots on the flanks (Fry et al. 1988). These spots can be seen without handling the bird and confirmed that I had indeed one cock and three hens. I decided to keep the birds together for as long as possible, as the species is supposed to be a co-operative breeder in the wild, albeit in natural family groups.

Accommodation

After an initial few days in a cage, I moved the birds to an outdoor aviary not shared with any other species. This is one of a series of flights, with flights on either side. The rear is enclosed as is the rear half of the roof, and there is a solid partition on one side. The aviary on that side houses a trio of immature Cape Parrots (*Poicephalus robustus suahelicus*), while there is a number of small passerines in the aviary on the other side. The aviary measures 8 feet deep x 5 feet wide x 6 feet high (approx. 2.4m x 1.5m x 1.8m). There was some dry heather hanging at the back of the aviary, a flowering currant bush planted at one side and a large abutilon near the front, trimmed to just below the roof. The aviary was furnished with a section of rotten silver birch and a wooden nest box 2ft 6in high and 6in square (approx. 76cm x 15cm square). There was a feeding tray near the front and a water dish was placed on a pine log approximately 3

feet (91.5cm) high. All birds roosted together in the box from the first night. The intention was to take the birds indoors as the weather deteriorated but this has never been necessary and they have now successfully passed three winters in the aviary. After a couple of weeks in the aviary, the birds' plumage had greatly improved and the bird with the dropped wing had recovered to a degree that enabled it to fly again. The wing is now only very slightly displaced. Unfortunately the birds are not ringed, making it difficult to distinguish individuals. This has restricted the amount of behavioral information that could be obtained, especially as they have remained quite shy and will not do anything other than sit on a perch if they are aware of being observed.

Feeding

The basic diet is a mixture of chopped fruits: banana, apple, pear, tomato, grapes, kiwi fruit, melon, peach, plum and occasionally tinned fruits. All fruits were chopped to a size suitable for swallowing whole, while half a pomegranate or half an orange would be eaten out by the birds. Berries, such as blackberries, raspberries and elderberries were always refused. Initially the fruit was mixed with a commercial softfood to increase the protein content, but the birds were reluctant to take it. Later it was coated with a dry baby cereal, which was readily taken. Once a week, a vitamin/mineral mix is added to the fruit. A dish of home-made softfood is always available and this is sometimes eaten, but usually not until the fruit is finished. Initially, the birds readily ate mealworms, but later lost interest, until breeding commenced. Crickets were always refused. On this diet the birds have retained their red colour, without the need of supplements.

Breeding

After a week or so in the aviary the birds began to excavate a hole in the birch, but in a very short time they had bored right through it, as it was only about 8 inches (20cm) thick. I obtained a section of rotten birch trunk about 3 feet (91cm) high and 16 inches (40cm) in diameter. This was installed this at the front of the aviary, on top of a pine



Adult pair of Bearded Barbets; male on left. The male's heavier bill is not always this obvious.

log, in such a way that the top of the birch was close to the roof of the aviary. This was ignored for about a week and then one morning I found that a hole had been started about 6 inches (15cm) from the top of the log. Progress was rapid and by the same afternoon I could just see the tip of the tail of an excavating bird. I could not determine how many birds were involved in the excavation. Subsequently all four birds slept in the log. Nothing further happened in 1997.

In April 1998 I heard a slow "chop, chop" sound coming from the barbet aviary, but could not determine which bird was making the call. By the second week in May only three birds were ever to be seen in the aviary at any one time, but it was not possible to determine whether it was always the same bird that was missing. It seemed that they might have eggs. This is where the use of a natural log was frustrating, as there was no way of checking the nesting chamber.

On 19th May there was a broken white egg on the aviary floor, underneath a perch. When I placed a pot of mealworms in the aviary the male repeatedly collected one or two at a time and fed them to one of the females that just sat on a perch and waited for him to bring them to her. The mealworms were always swallowed and regurgitated to her, never carried in the bill. A second female remained in the log throughout, while the female with the dropped wing was ignored. Although one bird continued

to spend long periods in the log nothing came of this nesting attempt.

On 21st August I heard a deep croaking coming from the log. Initially I thought this might have been from a large nestling, but later I heard the sound from one of the adults in the aviary. Most unusually, the dish of fruit and the dish of softfood were empty by the middle of the day. When refilling these I also added a dish of mealworms (given sparingly until then) and immediately three of the birds started to take beakfulls of mealworms to the log. They worked in rotation, each waiting its turn to enter the log. This was the only time I saw them carrying mealworms in the bill (otherwise they were carried in the throat, as described earlier) and they were not very efficient at it, dropping many in the process. It appeared that at last there were young in the nest. There is no doubt that the nestling was fed fruit from a very early stage, as mealworm consumption was never very high. I supplied about a tablespoonful of mealworms three times daily.

It was 1st September before I saw all four birds in the aviary once more and from then on much less time was spent in the log. On 17th September I managed to reach the aviary just after an adult had entered the log and I could hear a faint "mu-mu-mu" coming from the nest. Two days later the young barbet was looking out of the log (it was a single nestling). It was not particularly shy and did not retreat particularly quickly, enabling me to see

that the red on the throat was just as brilliant as on the adults and that the bill was considerably smaller, with no sign of the "teeth."

From what I could see, the adults did not feed the chick at the nest entrance but waited until it had descended to the nest chamber before entering to feed it. Each time I approached the aviary the adults uttered a loud "carr" sound, presumably a warning call. This was ignored by the chick, which continued to stare at me. On 24th September the adults opened a second entrance to the nest, apparently a little above the floor of the cavity. This revealed that the log had been evacuated to a depth of at least 18 inches (46cm). Over the next couple of days the chick spent a lot of time looking out of this hole.

The young barbet fledged on September 26th. It was just as brightly-colored as the adults, although there was slightly more black on the sides of the breast. The "beard" was less obvious and the bill was the same colour and about two-thirds the size of the adults'. There was no sign of "teeth." The eyes were dark (yellow in the adults) and the bird was about three-quarters adult size. This differs from the description of the immature in Fry et al. (op. cit.), where the description is "like adult but black and red duller, breast dull black, throat red mixed with black, base of bill dusky."

The fledgling returned to the log that evening and from then on it was out of the nest every day. Once it had fledged I could see that the flanks were unspotted, suggesting that perhaps these birds can be sexed at this early stage. One year later the flanks remained unspotted, confirming the sex of the bird. It has remained a fully integrated member of the group.

During the following winter the birds bored a number of holes in the log at various levels, but in spite of renewed interest they failed to breed in the summer of 1999. Perhaps the log was too badly damaged and I have obtained a new log for the coming breeding season.

Reference

Fry, C.H., Keith, S. and Urban, E. (1988) *The Birds of Africa* Vol. III. Academic Press.

