

## VI. Breeding

With the onset of the breeding season begins the most exciting period for the parakeet breeder. There is much to see and do; the birds awake as it were from their hibernation and develop all sorts of activities. The aviculturist must react to this by beginning in good time with the supply of more protein-rich food than in the winter rest period, making nest-boxes available, and to ensure the necessary quiet.

Especially light and to a lesser extent temperature influence the reproductive cycle. In the wild an important stimulus for the awakening of the breeding instinct is formed by a combination of an abundance of food and favourable weather conditions. In Australia, therefore, the start of the breeding period is heavily dependent on the rain seasons. The eggs are often laid one or two weeks after the first rainfall. The closer the birds live to the equator in the wild the less they react to the changes in the length of the days. This can be explained by the fact that in the tropics there is little difference between the number of hours of darkness and daylight throughout the year. The availability of food is therefore the most important factor there.

Seen in this light it is no coincidence that some of the most successful aviary birds (Budgerigar, Cockatiel, Zebra Finch) come from the same area: they feed mainly on grass seeds and breed after the rain season when there is an abundance of seeds. In that respect they could actually have eggs at any time of the year here.

We find an insensitivity for the number of hours of daylight in, for example, the Hooded Parakeet and the Brown's Parakeet, birds which come from the extreme (tropical) north of Australia. They breed there in a fairly wet period and also stick to that here, which means that they only become active from September onwards. Only recently have there occasionally been pairs which have bred in our spring.

Generally speaking Australian parakeets dislike touching each other. You therefore hardly ever see them sitting close to each other on the perch; they always keep some distance. This aloofness must be overcome as the breeding season begins. The cock then has to try to approach the hen more closely. In this group of parakeets the problem is solved by the development of a courtship ceremony, which gradually allows him to cautiously come nearer to her. He stimulates her breeding instinct with his courtship behaviour and, what is more, he gets so carried away with his own performance that he forgets himself and as a result slowly overcomes his timidity.

His repertoire of movements is fairly limited. He can jump up and down, bend or stretch himself, sway his head from side to side, beat his wings, let his wings hang or hold them up, twist his body, widen his eyes, or dilate his pupils. Not all his movements are calming for the hen; some are downright aggressive, for example 'the jump in the air'. Although this might gain the hen's attention it also seems to be a warning to other cocks that the hen to which this behaviour is directed is no longer available.

Each species has developed its own display which is for the most part unique. Natural selection increases the effectiveness of this by seeing to it that the parts of the body displayed have become more colourful. A bright colour pattern in a particular place,

therefore, gives us a clue regarding the courtship behaviour of each species; a good example of this is the Crimson-winged Parakeet.

The cocks that turn or bob their heads often have bright colours there; those that let their wings hang will often have brightly coloured coverts, and birds that hold their wings up display colours on their underside.

When in this manner the distance between the birds has been overcome mating will take place, after which the next steps in the reproduction cycle will follow.

## Nest-boxes

All Australian parakeets found in our aviaries are hole-nesters. Most look for a hollow branch or trunk, often in a eucalyptus or gum-tree. This preference is due to the fact that these trees are hard on the outside but soft inside. If a branch breaks off the inside of the trunk rots away fairly quickly at that spot; the parakeet can also speed up this process by chewing.

A few (sub)species do breed in holes but hardly ever in trees: the Hooded and the Golden-shouldered Parakeet have a preference for termite hills, in which they themselves make tunnels with a nest-cavity at the end, during the rain season when the hills have become soft. However, in an aviary these (sub)species settle for nest-boxes.

The natural nest-site is therefore relatively easy to imitate. To begin with there are two possibilities: a natural log (a hollowed-out trunk), or a home-made nest-box of wood or (multiplex) sheets. A home-made box has various advantages:

- as Australian parakeets have been bred here for centuries, they take to these fairly readily;
- they are much lighter in weight;
- if necessary you can adjust their shape to suit your aviary;
- you can make them just how you want; for example you can even dictate the position of the entrance hole and the inspection flap.

Now, how big should a nest-box be? This is indicated separately in Chapter IX during the descriptions of each species. However, there is a general rule of thumb which can be applied. Assuming the bottom of the box is square, the sides of this should be the same length as the distance from the beak to the rectum of the bird to breed in it. This boils down to the length of the bird excluding the tail. The height of the box should then be three times this length. However, as this does not apply to all parakeets, for example not for the King Parakeets, it is better to rely on the sizes stated for each species.

Nest-boxes are often made too big. The smaller they are the more warmth they retain. In the wild the birds sometimes nest in the most impossibly small holes, in which the chicks are sometimes not even able to sit next to each other on the bottom, but hang halfway up the sides. That is not such a problem as these sides are always uneven and so contain enough footholds. In smaller nest-boxes the young are forced to sit against each other so that they keep each other warm.

Another disadvantage of too big a nest-box is that they let in too much light, which can prevent the birds from starting to breed. Many parakeets like to sit in the dark.

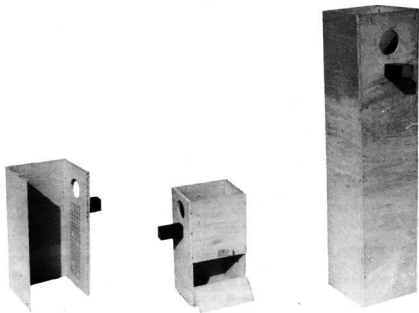
It is the generally accepted rule that the entrance hole should be just big enough for the bird to get through. Firstly this gives a feeling of security, and secondly no more light

shines in than is strictly necessary. This is, however, not a hard and fast rule: in Australia parakeets do use considerably bigger holes in order to enter the nest cavity.

The holes in home-made boxes can be in the middle or to one side. An off-centre hole has the advantage that the light inside is unevenly distributed, which means that the hen can search out the darkest corner. The hole does not necessarily have to be round; there is no objection to a different shape.

As the sides of the box are often fairly smooth, it is a good idea to attach something to act like a ladder to the inside. This can be in the form of a piece of mesh, although with this it is not unheard of for the birds to get their claws or rings caught behind it. It is therefore better to hammer a couple of large staples into a side. You could also attach a couple of pieces of wood, but these can easily be chewed up.

Make sure that your parakeets can get into the nest-box without too much difficulty; place a perch under or near the entrance hole.



*Various sizes of multiplex nest-boxes. Notice the mesh under the entrance hole and the inspection flap*