

The Laughing Kookaburra In Aviculture

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The Laughing Kookaburra *Dacelo novaeguineae* has been a well known and much admired bird represented in many zoological collections around the world for many years. The impressive physical appearance and entertaining character of the Kookaburra has placed it into a position of public interest and affection that few other non-psittacines could possibly enjoy. As softbilled birds come increasingly under the spotlight as to whether aviculturists can really maintain these species into future generations and true avicultural establishment, then it soon becomes clear that some genera and species will reproduce more successfully in captivity than others. The Kookaburra is one bird where the captive population is already self-sustaining and has a steady population growth. This bird should become more widely kept by an increasing number of aviculturists each year.

The qualities of the Kookaburra as an avicultural bird are clear; its impressive appearance, its tame and inquisitive nature, its willingness to breed and its unique and evocative call which provides this bird with its common name all combine to make the Kookaburra an interesting and impressive aviary inhabitant.

The Laughing Kookaburra has long been on the list of my own favorite species that I have worked with. From the beginning of 1989 until the end of 1992 I maintained a number of pairs of Laughing Kookaburra in the collection of Birdworld Bird Park, where I was formerly Livestock Manager in England. Successful breeding was consistently achieved in each of the four breeding seasons with many young birds being reared by the parents and also by hand rearing methods during this time.

Husbandry

Kookaburras should be given a large aviary with plenty of flying space. In

countries of temperate climates a heated shelter may well prove to be a good precaution. Plenty of height is one consideration in the design of the aviary that the birds will appreciate. Although naturally confident in their character, high aviaries do seem to give Kookaburras a much increased sense of security and nest boxes which are situated with the entrance hole at least 60 cm (24 in.) above the owner's head height inevitably prove to be more successful than those placed at a lower height. Aviaries for Kookaburras can be planted to improve their appearance as Kookaburras generally will not unduly damage or interfere with plants, unless they are a size the bird might like to perch upon. Perching should consist of several short horizontal perches for resting upon, but these should have plenty of open flying space between them. When fed a diet which contains segments of day-old chick or segments of rodents, Kookaburras often beat their food against the perch, or the walls of their shelter if the food dish is placed inside the shelter. This beating of the food items is done to tenderize their food. It is therefore necessary that any perching and/or wall areas which are used by the birds for this purpose should receive regular cleaning and disinfection.

The diet of Kookaburras in captivity is principally animal matter. In the wild these birds feed on many prey animals such as rodents, lizards, snakes, larger insects and fish. In captivity the diet can be made up from a mixture of domestically bred mice, segments of day old chicks, diced ox heart (or a good quality mince meat), segments of small fish and large insects such as locusts. At Birdworld, we also used soaked Zoo A pellets (produced by Special Diets Services for Zoological collections). Aviculturists who do not have access to Zoo A pellets use alternatives such as soaked canine biscuits. Locust and

young mice seem to be among the Kookaburras favorite food items and tame birds will often accept these items from the keeper's fingertips. A good quality multi-vitamin and mineral powder should be sprinkled over the food dish daily.

Health care considerations for keeping Kookaburras are basically the same as for most other aviary birds. Worming should be carried out periodically and the birds' physical condition, appearance and behavior should be monitored for any signs which could be considered unusual. The often strong and individual personality of the Kookaburra can soon be learned by its owner and any sign of deviation from the normal can therefore be quickly noted.

Breeding

Sexing of Laughing Kookaburra can often be successfully achieved by looking at the amount of blue feathering on the upper wing and rump areas of the bird; these areas of blue are clearly apparent in the male, but are usually reduced or absent in the female. There are, however, exceptions to this rule and I have some females with a fair amount of blue marking that could lead to confusion if visual sexing were relied upon. More accurate methods of sexing include surgical sexing via endoscope and DNA

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sexing which requires a blood sample from the bird. Both of these techniques are widely practiced and should be available to the aviculturist.

Pairing of young birds is generally unproblematic. As the birds become more mature, more problems can be encountered. When mature birds are being paired it is often necessary for the more aggressive bird to be housed inside a small cage, within the main aviary for several days until the birds have become accustomed to each other. Close observation should always be carried out for several hours after the introduction to prevent fighting, and also for several days afterwards to ensure that both birds are feeding normally.

A variety of different nest boxes have been used by various aviculturists to successfully breed the Kookaburra in captivity. The design used at Birdworld Bird Park was of forty-five degree sloped shaped and measure 90 cm in length and 35 cm (36 x 14 in.) in its height and width. The entrance hole measures 15 cm (6 in.) in diameter and is positioned towards the top of the front facing panel. A perch is secured onto the front panel of the nest box just below the entrance hole. The presence of this perch next to the entrance, and other perching nearby, is of importance as the male bird will spend much time roosting outside the nest box and

the perch also makes emergence from the nest box a much easier task for both the chicks and the parent birds. A layer of nesting medium is placed inside of the nest box for the birds to make a scrape, the medium usually consists of a mixture of sand, peat and some wood shavings.

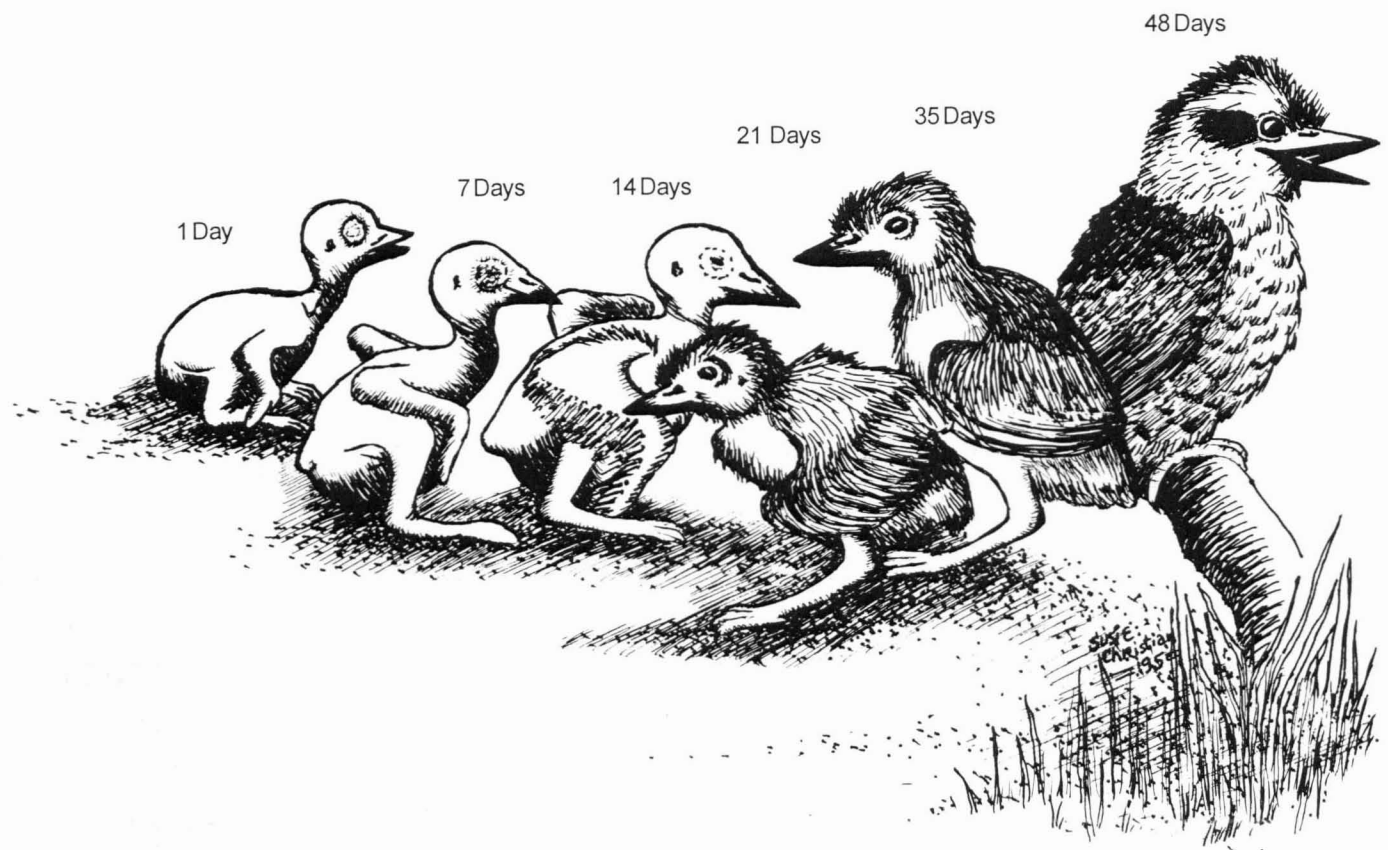
Once the eggs have been laid then incubation is shared by both the male and the female birds and lasts for around 25 days from the date each egg was laid. The clutch size is most commonly two or three eggs. Kookaburras in captivity can prove to be unreliable parents during their early attempts at rearing their chicks, with perhaps the most common parental mistake being the feeding of non-edible objects such as soil or even stones. Given practice, however, most parent birds will eventually achieve success, especially if extra care is taken by their keeper to supply them with live food and plenty of diced items of food in their food dish during the period when the chicks are still young.

In the wild, Kookaburras live in extended family groups, often with the previous year's chicks staying with their parents and helping to raise the next year's clutch of chicks. As an avicultural display, family groups of Kookaburras always make an interesting and entertaining aviary. For this reason many peo-

ple prefer to persist with parent rearing, instead of hand rearing, because of the pleasure that is gained from building up a family group of Kookaburras in an aviary. I have reared many Kookaburras by both artificial and parent rearing, but I gained most pleasure from seeing parent reared chicks fledging from their nest boxes. Hand rearing does, however, have its place in the breeding of Kookaburras and can be achieved with an extremely high level of success.

Artificial Rearing

Kookaburra eggs have been incubated from various different ages, including freshly laid, and have proven to be generally unproblematic. The incubation temperature used has been 37.5° Celsius (99.5°F). The level of humidity is altered according to the needs of each individual egg so that a weight loss of around 14-15% can be achieved from the eggs original freshly laid weight. The eggs were hand turned several times a day (in alternating directions) as well as being turned in the incubator by rollers. Following these basic incubation conditions, and by carefully monitoring the egg's weight, and embryo development by candling, a high level of hatch is achieved with the chicks drying and becoming strong and vocal within a few hours of emergence.



Drawing by Susie Christian



"Kookaburra" a beautiful painting by Susie Christian whose attention to detail makes her birds very lifelike, indeed.

To begin with, the chicks were housed inside a brooder on their removal from the hatcher. The chicks remained inside a brooder for their first week of life, with the temperature being slowly lowered slightly each day from the original hatching temperature. After the first week the chicks were then housed inside open plastic containers with a heat source over one end. This is only done inside the nursery where the room that the open containers are located in is of a stable and controllable environment. The floor of the chick's container is covered by

paper toweling for the first week, and with wood shavings for the remainder of the rearing period.

The diet for hand rearing Kookaburras consists almost entirely of animal protein. At Birdworld we gave segments of pink mice and also the bodies of Crickets (with the legs, head and ovipositor removed) for the first seven days of life. Feeding periods to begin with were five feeds a day given every three hours from 8am until 8pm. After the first week the last feed (8pm) was no longer necessary because of the chick's rapid weight gain. Also after seven days the

diet started to change away from segments of pink mice and onto day-old chicks, of which the thigh meat is initially used. This, to begin with, is tenderized by lightly beating the segments that are offered to the chick for the first few days while the chick adjusts to the change in diet. By the 30th day, when initial weaning begins, the chick should be receiving most items that are present in the adult bird's diet in a diced form.

The chick's weight starts to level out from day 25 onwards and during weaning, which can slowly start from day 30 onwards. Most chicks will experience a slight weight loss as their handfeeding is reduced and they start to experiment with feeding themselves. The weaning period should not be rushed and if a chick continues to show weight loss it should still be given some handfeeding until it is well and truly feeding for itself and its weight has stabilized. Hand feeding does not normally stop completely until around day 45, unless the chick is feeding itself vigorously well before this time.

Care should be taken in the later stages of the rearing period to ensure that the chick's legs are developing suitably. As soon as the chick becomes mobile then sterilized twigs should begin to be placed upon the floor surface of the container for the chick's feet to grip against. A good quality vitamin and mineral supplement should be used on the chick's diet throughout the rearing period, with special care being given to ensure that there is adequate calcium in the diet. At weaning, care should be taken that the chick is eating a good selection of different food items and not just one specific favorite item from the diet. Other than this, the same guidelines that are followed for hand rearing many other softbilled birds also apply to hand rearing the Kookaburra.

Many of the formerly well known species of softbilled birds in aviculture are now becoming scarce. Those species, such as the Kookaburra, which have proved to be so adaptable and willing to breed, will become of much greater avicultural significance in the future. The Kookaburra has always had a unique appeal to many aviculturists, so with continued successful captive breeding, this is one species that should become firmly established within aviculture for many future generations to appreciate. ➤