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EDITOR **GRAEME HYDE**

Breeding Blue-faced Honeyeaters at Taronga Zoo – An Update

by Nick Atchison, Taronga Zoo, Sydney, New South Wales

The 1991/1992 breeding season has seen a continuation of Taronga Zoo's work with the blue-faced honeyeater *Entomyzon cyanotis* (refer *AA*, February 1992, pp. 29-35). Data has been collected on the weight loss of parent incubated eggs, artificial incubation, supplementary feeding of chicks in the nest and the ability to foster eggs under another species.

Five parent incubated eggs from three different clutches were weighed from day one through to external pipping at day sixteen. The weights have indicated the expected percentage weight loss in blue-faced honeyeater eggs.

The parent incubated eggs lost between 12.7% and 14.6% of their original weight. This data can now be used to monitor artificially incubated eggs. Artificially incubated eggs are weighed initially and then regularly weighed until hatching. Those eggs that do not fall within the expected weight loss range can then be returned to normal weight range by manipulating incubator humidity levels.

Taronga Zoo has artificially incubated one clutch of three blue-faced honeyeater eggs. These were incubated by their parents for about seven days before being placed in a Rotorex XT Auto-turning Electric Incubator. The temperature was maintained at an average 37.4°C with a wet bulb reading of 27.2–28.3°C which was raised to 31.1–32.2°C for hatching on day sixteen. The eggs were hand turned three times daily. Initial fresh weights were not taken as we were unaware that the parents had laid, so the eggs were not monitored for weight loss during incubation. Two chicks hatched successfully in the incubator and were handraised, though one subsequently died at three days old. The incubator-hatched chicks did not seem as robust in the early stages as parent-hatched chicks, but it is not known if this is a result of problems relating to incubation. Further work needs to be carried out in this area.

At the same time that the blue-faced honeyeater eggs were being incubated, our single female red wattlebird *Anthochaera carunculata* had built a nest and laid eggs. It was decided to attempt fostering the third blue-faced honeyeater egg under the wattlebird to see whether she would hatch and raise the chick. This experiment was partially successful as it achieved the hatching of the egg. However, careful observation of the chick's weight and the weights of last season's chicks revealed that the chick was not receiving sufficient food. Supplementary feeding was commenced on the second day with the chick remaining in the nest. It was fed pieces of baby "pinkie" mouse twice daily by the keeper, in addition to food received from the wattlebird. After nine days it was apparent that the chick still wasn't gaining enough weight, so it was removed for handraising.

This was an interesting exercise in fostering a honeyeater under another species, even though not fully successful. Probably inexperience and the demands on the single parent combined to make the task too much for the wattlebird. If this technique is to be repeated in future it may be beneficial to increase the number of supplementary feeds to four per day.

The weights of blue-faced honeyeater chicks taken in the 1990/91 season have been useful

in monitoring progress of subsequent nestlings, allowing detection of unsuitable weight gains in some chicks from the 1991/92 season. These chicks, like the one hatched by the wattlebird, were assisted by supplementary feeding them in the nest two to four times a day. A week of supplementary feeding was usually sufficient to bring the chicks within the expected weight range, with the parents then being able to maintain them. The application of this technique was necessary when, in a nest of three chicks, the youngest could not compete for food with its siblings. This chick only survived through the intervention of keepers providing supplementary feeds. Supplementary feeding two to four times per day is much less demanding on keeper time than handraising.

Now, mid-way through the 1992/93 breeding season, our breeding pair of blue-faced honeyeaters have just fledged two chicks. Last season's young, which are still housed with the pair, gave a lot of assistance with raising the chicks. Of greater importance though is the pairing of two of the handraised birds. All the handraised birds have integrated with the flock of six blue-faced honeyeaters and are not imprinted to people. Ultimately however, it will only be through the breeding of handraised birds that the success of handraising can be gauged.

Reference

Atchison, N. 1992. Breeding blue-faced honeyeaters at Taronga Zoo. *Australian Aviculture* pp. 29-35.

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Footnote

The author is a birdkeeper on the staff of Taronga Zoo. **Ed.**

MEETING DATES — 1993

The Society holds its monthly general meeting at 8 pm on the first Tuesday of each month in Nicholas Hall, 148 Lonsdale Street, Melbourne. The venue is between Russell and Exhibition Streets, right next to Wesley Uniting Church.

DATES

5 January, 2 February, 2 March, 6 April, 4 May, 1 June,
6 July, 3 August, 7 September, 5 October, 2 November, 7 December

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