

completely plum iris in late December. The iris colour does not vary in response to such stimuli as breeding condition. Any bird with a complete plum iris may be assigned the age category '2+'.

### CONCLUSION

The results of this study show that Yellow-throated Scrub-wrens can be sexed from fledging, unlike the White-browed Scrub-wren *S. frontalis* which has a female-like immature plumage (Disney 1974), and can be aged by noting iris colour. This has been summarized as a Bird in the Hand (Geering 1992). Juveniles may be readily identified by plumage texture, the presence of a distinct yellow gape and the grey iris colour. Immature birds have either a completely brown iris or a brown iris with a plum centre whilst adults have a completely plum iris. Using these criteria all birds can be reliably aged.

Large-billed Scrub-wrens *S. magnirostris* also undergo similar iris colour changes but as yet the timing of these changes has not been established

but appears to be similar to that of the Yellow-throated Scrub-wren.

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## PREDATION ON GOULDIAN FINCH *Erythrura gouldiae* BY REPTILES

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### INTRODUCTION

Studies on wild populations of the Gouldian Finch *Erythrura gouldiae* have been conducted in the Northern Territory since 1986 (Woinarski and Tidemann 1992). The species is classed as endangered (Joost and Garnett 1990). It co-occurs with Masked Finch *Poephila personata* and Long-tailed Finch *P. acuticauda*, both of which are abundant in northern (central and west) Australia (Blakers *et al.* 1984).

There have been no records of predation on the Gouldian Finch by reptiles although Brown Tree Snakes *Boiga irregularis* and small goannas *Varanus timorensis* have been found

in hollows in which finch nests have been built (pers. obs.). Ghost Bats *Macroderma gigas* have been recorded taking Gouldian Finches (Shulz 1986).

Observations of predation on a Gouldian Finch adult by an Olive Python *Liasis olivaceous* and a nestling by a Spotted Tree Monitor *Varanus timorensis* are reported.

### STUDY AREA AND PREDATION

Observations were made (1) at a rock-hole situated in a creek, and (2) at a nest in *Eucalyptus tintinnans*, in the Yinberrie Hills (14°09'45"S, 132°06'E) about 50 km north of Katherine,

Northern Territory. The habitat is savannah woodland with *E. tintinnans* and a grass understorey of *Sorghum* spp predominating.

(1) At 0730h on May 31, 1991, an adult male red-headed Gouldian Finch was noticed lying in the water next to the head of an Olive Python which may have been disturbed by our approach. The finch was retrieved. It was still warm, had a mucous covering on its head and puncture marks with fresh blood on its breast. The Olive Python was 2–2.3m long. During the following 2 hours, it was observed to swim up and down the rock-hole (16 m × 2 m × 0.4 m deep) with only its nostrils and eyes protruding.

During the following month the Olive Python was present intermittently in the rock-hole. On one day, the rock-hole was observed for eight hours (0700–1100h, 1300–1600h) and 1700–1800h) and four birds were taken as prey. These were a Long-tailed Finch (at 0725h), a Cockatiel *Leptolophus hollandicus* (at 1030h), a Masked Finch (at 1420h) and a Galah *Cacatua roseicapilla* (at 1700h). The python made an unsuccessful strike at an Australian Magpie-lark *Grallina cyanoleuca* shortly before it captured the Masked Finch.

(2) At 0800h on June 2, 1991, a visit was made to a Gouldian Finch nest to band five young that were about two weeks old. One nestling was found dead on the ground below the nest. Another nestling was found in the jaws of a Spotted Tree Monitor. The monitor was adjacent to the nest which was situated about 300 mm from the small (about 55 mm) diameter entrance. The nestling was retrieved from the monitor but it was already dead. The goanna disappeared further down the hollow. About five days later another dead nestling was found on the ground below the nest and the nest was empty. It was not known whether the remaining nestling fledged successfully or was eaten by the monitor (or other predator) during a re-visit to the nest.

### CONCLUSION

The predation on the Gouldian Finch by the Olive Python was probably a chance event. It is likely that Masked and Long-tailed Finches are taken as prey more frequently because they come in to water holes to drink at the same time as Gouldian Finches and far out-number the latter. Olive Pythons have been observed behaving in a

similar way in the Kimberleys, Western Australia; on these occasions, Long-tailed Finches were taken as prey (Gambold, pers. comm.). The Olive Python was able to handle prey much larger than finches. It appeared to escape attack by the captured parrots by holding them under water for a minimum of 10 minutes before consuming them. Flocking behaviour, in mixed species groups, would be advantageous to birds in this situation, especially for the Gouldian Finch which is in lower numbers compared with the other species.

About 22 per cent (n = 55) of Gouldian Finch nests are preyed on, compared with 16 per cent abandoned and the remainder successful (Tidemann, in press). Until this event, monitors had not been identified as nest predators although they had been suspected. Nest sites in hollows that are blocked beyond the nest may be safer than the type reported here.

Observations of predation are rare in relation to its occurrence. There is no evidence, however, to suggest that predation is causing the numbers of Gouldian Finches to remain low (Tidemann *et al.* 1992).

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