

BACK BOX

Praying mantis preys on birds and frogs

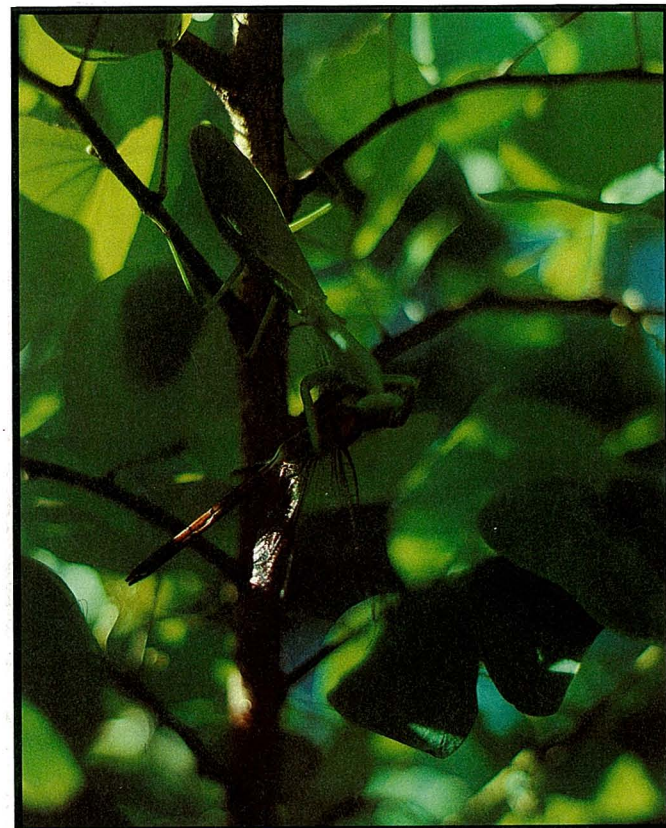
If insects were to take over the world (as has often-times been supposed) then the praying mantis would surely rule supreme. This voracious creature, with its mobile triangular head and huge eyes, is strictly carnivorous. It consumes other insects with a relish that disdains such niceties as killing them first.

The mantis strategy is to quietly hide itself among foliage, exploiting the camouflage that most of these insects have evolved. With front legs raised in suppliant gesture — praying perhaps — it waits, sometimes motionless, sometimes swaying gently back and forth. Then, when the unsuspecting prey wanders within reach, a quick grasp of its serrated forelimbs and . . .

It is told that the female, if hungry, will devour her mate after copulation or even, if ravenous, during it. She begins with the superfluous head, apparently.

If the mantid does not discriminate on the basis of sex, or even species, neither does it trouble with such distinctions as scientific Classes. The following account by Dr Michael Ridpath, of the CSIRO Division of Wildlife Research, relates how he observed one species of mantid attacking frogs and birds.

'During my residence in the Darwin suburb of Fannie Bay since March 1971, I have frequently heard a distinctive call from trees at night (often



Here seen eating a dragonfly, this praying mantis also eats frogs, birds, and gekkos.

several times in one night) mainly during the second half of the monsoonal period, from January till May. The call is a high-pitched squawk, normally comprising only one syllable, but occasionally drawn out and repeated. During February–April 1974 I was able to locate the sources of several of these calls. They were the distress calls of green tree frogs *Litoria caerulea*, which were being attacked by a large green mantid *Hierodula wernerii*. The call is quite different from the usually heard deep hoarse croaking (probably territorial) of this frog.

'The mantid holds the frog with its two fore-feet, the spines on which pierce the frog's skin. My observations suggest that the frog's neck or one of its limbs is often grasped first. Eventually the process of stabbing and ripping extends to the soft underbelly of the frog. Using its mandibles the mantid then slowly eats the frog while it is still alive. Judging from the length of time some distress calls have been heard, this may take up to three hours. Distress calls have been heard only at night, including dawn. 'At about 11 o'clock on the morning of 29 November,

1975, I saw an adult-sized brown honeyeater *Lichmera indistincta* caught about 2 metres from the ground in the foliage of a coral creeper in the garden of the same house. I found that the bird was held from underneath by the same species of mantid (back to the ground) and was unable to escape even though fluttering hard for about two minutes. I was able to release it by pulling firmly. At about 9 o'clock on the following morning I watched a brown honeyeater feeding in the pink flowers of the same creeper. It suddenly became distressed, called loudly and fluttered vigorously without being able to move from its position; however, this time the bird escaped from the mantid after about one minute.'

Dr Ridpath measured the weight of one of the ensnared frogs at 25 grams; the mantid weighed 7 grams and was less than 9 cm long. Brown honeyeaters generally range from 8 to 12 grams.

In the literature, Dr Ridpath has found a few similar accounts. Since his own first observations, he has subsequently seen *H. wernerii* eating a large dragonfly and heard a report of it eating gekkos.

Andrew Bell

Predation on frogs and small birds by *Hierodula wernerii* (Giglio-Tos) (Mantidae) in tropical Australia. M.G. Ridpath. *Journal of the Australian Entomological Society*, 1977, 16, 153–4.