

# THE FRESHWATER CRAYFISH (FAMILY PARASTACIDAE) OF QUEENSLAND

WITH AN APPENDIX DESCRIBING OTHER AUSTRALIAN SPECIES.

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(Figures 1–13.)

Freshwater crayfish occur in almost every body of fresh water from artificial dams and natural billabongs (standing water) to headwater creeks and large rivers (flowing water). Generally the species are of considerable size and therefore easily collected, but even so many of the larger forms are unknown scientifically. This paper deals with all the species that have been collected from Queensland. It also includes a few species from New South Wales and other States. No doubt additional species will be found and some of the more variable series, at present included under the one specific name, will be further subdivided.

From Queensland nine species are described as new, making a total of seventeen species (of three genera) recorded from that State. The type localities of all but two of these species are in Queensland but some are not restricted to the State. Clark's 1936 and subsequent papers have been used as the basis for further taxonomic studies of the Australian freshwater crayfish.

In Queensland the most widely distributed genus is undoubtedly *Cherax*. Ten of the species belong to this genus. These crayfish prefer the lower altitudes and a few species are able to live in somewhat brackish water. When the creeks dry out they burrow down until they reach the level of the ground water and thus survive till further rains. One species, *punctatus* Clark, is stated to be terrestrial. Four new species are recorded for this genus. Specimens of *dispar*, sp. nov., of south-eastern Queensland prefer the lower reaches of creeks where there is an abundant growth of freshwater plants. A very distinct subspecies, *dispar elongatus*, is described from the lakes and creeks of Fraser Island. *C. robustus*, sp. nov., also from Fraser Island, has evolved most probably from *depressus*, sp. nov., of the mainland. *C. depressus* occurs with *rotundus* at Mt. Coot-tha, Brisbane. *C. rhynchotus*, sp. nov., from Mapoon, Queensland, shows affinities with the Western Australian species.

Four new species of *Euastacus* are described, making a total of seven species of the genus to be recorded from Queensland. *E. hystricosus*, sp. nov., occurs at the headwaters of the Mary River, while a second *valentulus*, sp. nov., was collected from Currumbin Creek. *E. sulcatus*, sp. nov., is widely distributed through the Lamington National Park and *cunninghami*, sp. nov., is recorded only from the Cunningham's Gap area.

The genus *Tenuibranchiurus*, gen. nov., is erected for the reception of a new species, *glypticus*, somewhat resembling an *Engaeus* but differing in branchial structure. The species occurs at Caloundra, very close to the ocean beach, and at Mt. Gravatt, Brisbane. Specimens prefer the "wallum" swamps, where they dig deep burrows up to 3 feet or so in length in the dark, very humic soil. At both localities specimens were associated with *Cherax rotundus* Clark.

Crayfish grow considerably after reaching sexual maturity, so it is well to keep this fact in mind when describing new species, for there are often slight modifications, more particularly in the development of spines on the body and of the great chelae, both in juvenile and senile stages.