

# The Freshwater Crayfish of NSW Australia



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As a result of the Australian Crayfish Project, every described species of freshwater crayfish in New South Wales, Australia was researched in the wild and photographed. This book is the result of that work with all new pictures of all the NSW species. This full colour book covers the 41 different species of freshwater crayfish known from NSW. All the newest species are listed as well as 2 new ones that descriptions are currently underway with.

This full colour guide covers every species offering information on habitat, activities, description, conservation status, distribution and other attributes. For each of the 5 *Cherax* species, 32 *Euastacus*, 2 *Engaeus*, 1 *Gramastacus* and 1 *Tenuibranchiurus* species found in NSW, full colour photographs of each of these species will allow all enthusiasts and researchers a better opportunity to identify the various species found in NSW.

If you have a passion for crayfish like me then you will love this book.

As an enthusiast that has spent my life collecting and keeping crayfish as pets in my aquariums or growing them commercially I always wanted a quick ready guide to what the different crayfish looked like and where and where they were found. Unfortunately this type of information was not available in a book form so I wrote my own book.

It's the type of book I have always wanted and needed that gives information on what the crays look like and where they are found.

I am sure that anyone that reads this book will be more than satisfied with the information available.



**EUASTACUS CRAYFISH**

**The Blue Black Crayfish**  
*Euastacus jagahar* is a small but a small and quite a pretty species that has 22 pinnules and 30-35 mm CL.

**Habitat/Activities** - It is a small but *Euastacus* and these two species surprising as *E. salmansi* is a relatively tiny crayfish that populates the creek the water. *E. jagahar* is a hairy type but it is a very aggressive species that it does that even young small juveniles are its main reason to find this species. Avoid some habitat but do not seem to intrude rock but usually separate burrows with some rock. Burrows are generally small edges both in the main stream Shorps burrows generally only have one entrance burrows system, just a single. Winter brooders starting brooding around November early December. Few hatchlings breed every year, those few are the tangerine coloured eggs.

**Description** - Dorsally this crayfish is colour as you move down the sides of between individuals in their colour with a moody effect on cheba. Ventrally cream coloured with legs a blue colour. Thoracic spines absent, male crotch present. Note: 4 small carpal spines.

**Status & Distribution** - The conservation status is unknown. I would expect it to be a threatened species with its small distribution and population. This species has nothing going for it, it only survives in a small section of swamps, shares its habitat with *E. salmansi* a very aggressive species. The stream is infested with reeds that can obscure it easily. In addition it is in a high human activity area with dozens of tourists tramping over its habitat every day. The future of this species is grim. It has only been found in a small section of Shepparton Creek and a tributary of it, Burket Ranges, north east NSW, north of Kyneton.

**Aquarium Attributes** - Unsuitable as an aquarium pet. They are very rare and endangered. They just dig a hole and hide never to be seen again. They are not recommended.



**The Burrowing Crayfish *Engaeus cymus***

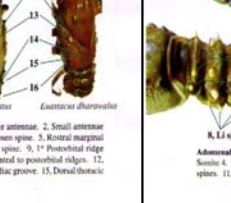
This is a territorial burrowing crayfish from the Snowy Mountain region of NSW. It is a bit of an enigma as it is the only species of *Engaeus* found this far north with all other *Engaeus* species restricted to the NSW Victorian border region and further south. After a taxonomic review by Howitt in 1996, *Engaeus parvulus* was synonymised with *Engaeus cymus*.

**Habitat/Activities** - This is a burrowing species that spends most of its time in its burrow system. They dig burrows into the water table and prefer areas with permeable water tables. This can be right at the creek edge or well into a paddock, so long as they can reach the water table they are happy. The bottom chambers of their burrows will be flooded and this is where they will be during the day. They seem to be vegetation and detritus feeders that will occasionally graze at night collecting terrestrial plant material that they will take to the burrow system. They breed around September with the females carrying the eggs and hatching them in the burrows. This is a very shy and secretive species that is near impossible to catch outside its burrow. Most burrows can be divided into two types. Firstly, we have large males living in isolated areas that you have a single entrance and several smaller chambers into the water table. Then you have the communal burrows with multiple entrances and multiple crayfish and a network of interconnecting burrows. Compared to other *Engaeus* species this one has relatively small, shallow and simple burrows, rarely extending over 2 m into deep to capture by digging out burrows in a relatively dry tank if the water table is close to the surface. This species does have a typical funnel entrance but females are generally small and less compact than other *Engaeus* species.

**Description** - All specimens collected have been an orange colour. This can vary from a yellow orange to a red orange but all a base orange colour. Tips of claws and legs tend towards a lighter shade. They are a hairy species with numerous long setae covering their bodies. Interspersed animals occasionally found but one on the other is the normal.

**Status & Distribution** - Conservation status is secure for this species. It is found in relatively remote areas and even though vast areas have been dramatically altered with clear fell forestry, burning and replanting with pines, this species still thrives in those areas. It has relatively large populations over relatively large areas. At the north of its range it is found in creeks, streams and swamps of the Goodoogalga and Cotter Rivers in the ACT and NSW between Canberra and Tamworth. This species extends south all the way down the Snowy Mountains into central Victoria. It is one of the few *Engaeus* species found over 1000 m.

**Aquarium Attributes** - Land Crayfish are a rare make poor aquarium pets. They tend to stress out and die relatively quickly in an aquarium situation. This species is particularly aggressive and only one per tank as they will continually fight, as soon as they see each other they charge in and attack. Not recommended as an aquarium pet.



Full Colour Photos

ENGAEUS CRAYFISH