

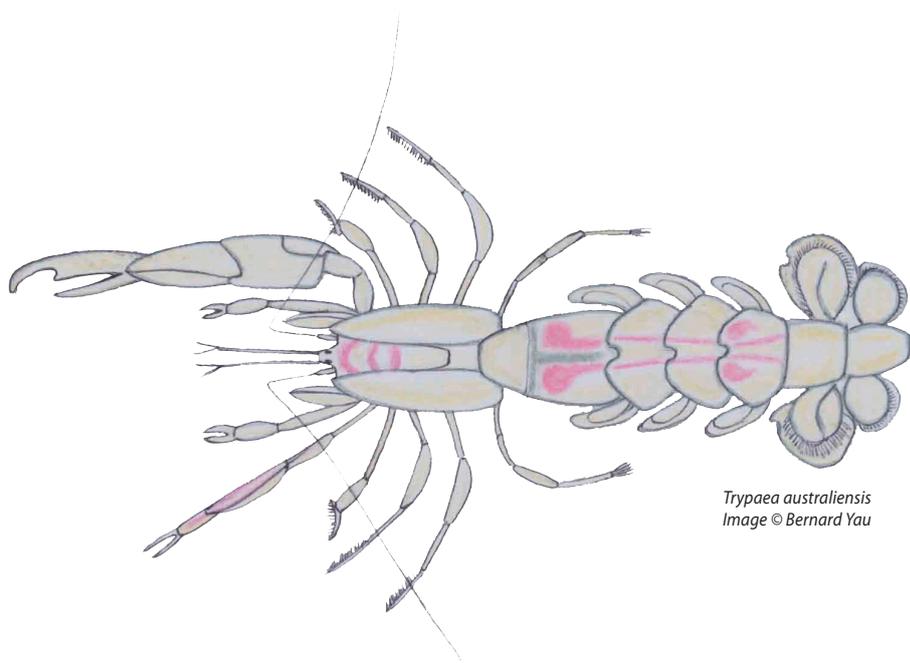
# Ghost Nipper

## (*Trypaea australiensis*)

### EXPLOITATION STATUS MODERATELY FISHED

A significant level of exploitation is estimated in some areas of the species' range, but the overall level of exploitation is likely to be low to moderate.

SCIENTIFIC NAME	STANDARD NAME	COMMENT
<i>Trypaea australiensis</i>	ghost nipper	Also known as pink nipper and yabby.



*Trypaea australiensis*  
Image © Bernard Yau

### Background

A number of species of burrowing shrimps occur on intertidal sand and mud flats in NSW. The ghost nipper (*Trypaea australiensis*) occurs in estuaries between northern Queensland and central Victoria, and is commonly harvested for use as bait by recreational fishers. Large numbers are caught by individual fishers, and there is also a small commercial fishery which supplies bait shops. Ghost nippers are harvested from intertidal flats at low tide using a tubular pump, known as a 'yabby pump'. In certain areas harvest rates can be significant, especially during peak recreational fishing periods (such as the summer holiday period), however significant areas are also closed to the harvesting of bait. There are also sub-tidal populations of ghost nippers in many areas which are effectively protected from harvesting.

Ghost nippers dig complex burrow structures in soft but stable sediments, and feed on small particles of organic matter. The claw on one side of the animal is larger than that on the other side, and males generally have a much larger claw than females. Females carry fertilized ova in bunches under the abdomen, until they hatch into free swimming zoea larvae. Ghost nippers are thought to be a relatively fast growing species, with a life span of less than 4 years. Because they occur in large numbers and are active burrowers to a depth of 25 cm or more, ghost nippers are considered to be a very important component of the ecology of intertidal flats, affecting the distribution of particle sizes in the substrate and allowing oxygen penetration below the surface. Although numbers harvested are significant,

there is no accurate information available on the total recreational harvest. The commercial harvest is small (less than 5 t per year) and is significantly less than the harvest by recreational fishers. It is thought that the total harvest may have declined in recent years due to the increasing popularity of artificial baits and lures with recreational fishers.

## Additional Notes

- Nippers are harvested mainly for bait by recreational fishers, and by commercial fishers in the Estuary General fishery (for sale to recreational fishers for use as bait).
- An annual commercial harvest of less than 5 t is reported; recreational landings are not accurately estimated.
- Anecdotal reports suggest there may have been a decline in total harvest in recent years as 'soft plastic' lures have become popular with anglers.
- Annual commercial landings have not been reported due to privacy considerations.
- A bag limit of 100 nippers was recently introduced in September 2007.

## Catch

### *Recreational Catch of Ghost Nipper*

The annual recreational harvest of ghost nipper in NSW is not accurately known but is likely to be many times greater than the commercial harvest.

## Further Reading

- Butler, S.N., M. Reid and F.L. Bird (2009). Population biology of the ghost shrimps, *Trypaea australiensis* and *Biffarius arenosus* (Decapoda: Thalassinidea) in Western Port, Victoria. *Memoirs of Museum Victoria* **66**: 43-59.
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- McPhee, D. P. and G. A. Skilleter (2002). Harvesting of intertidal animals for bait for use in a recreational fishing competition. *Proceedings of the Royal Society of Queensland* **110**: 93-101.
- Rotherham, D. (2004). Fisheries biology, ecology and recreational harvesting of ghost shrimp (*Trypaea australiensis*) in south-eastern Australia. School of Earth and Environmental Sciences, University of Wollongong. **PhD Thesis**: 307 pp.
- Rotherham, D. and R. J. West (2007). Spatial and temporal patterns of abundance and recruitment of ghost shrimp *Trypaea australiensis* across hierarchical scales in south-eastern Australia. *Marine Ecology-Progress Series* **341**: 165-175.
- Rotherham, D. and R. J. West (2003). Comparison of methods for sampling populations of ghost shrimp, *Trypaea australiensis* (Decapoda : Thalassinidea : Callianassidae). *Fisheries Research* **60** (2-3): 585-591.

Please visit the CSIRO website, <http://www.marine.csiro.au/caab/> and search for the species code (CAAB) 28 803004, common name or scientific name to find further information.