



Fact Sheet

Western School Prawn (River Prawn) (*Metapenaeus dalli*)



Western School Prawns are a popular recreational fishing species in the Swan Canning Riverpark. Their abundance has declined since the 1950s but they still occupy a special place in the hearts and minds of Perth's people.

Description

Small elongated prawn up to 190mm total length. Uniform grey colour, large eyes, rostrum extended beyond eyes, long and flexible antennae.

Distribution

Western School Prawns occur in the Indo-Pacific from south-eastern Java, north western Australia and along the Western Australian coast¹. It is absent in marine records below 31°S, where it is apparently restricted to estuaries².

Habitat

Generally found on sandy and muddy bottoms in rivers, estuaries and inshore coastal waters to 50m³. While they do occur in sheltered ocean waters, they can remain in estuaries for their entire life cycle.

The stock in the Swan Canning Riverpark is considered estuary-dependent because the entire life-cycle is completed in the estuary². Here, school prawns are restricted to the middle and lower estuary in winter, but spread to the upper estuary in summer as conditions in those areas become more saline². This is also true of this species in the Peel Harvey, although the salinity of the upstream areas is markedly lower than in the Swan⁴.

Biology

These prawns live for up to 2 years and reach maturity at approximately 1 year. Spawning is thought to occur in the mid to upper Swan-Canning estuary from November through to March and where salinity is >30ppt². Fertilised eggs are thought to drop to the bottom and hatch 12-



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24hrs later. The larvae are then considered to be pelagic and remain in plankton for up to two weeks before metamorphosing into juveniles and burying themselves in the sand³. School prawns are omnivorous and will emerge at night to feed on small invertebrates and detritus.

Threats

Historically, both commercial and recreational fishers targeted this species in the Swan Canning Riverpark. Commercial landings peaked at 14 tonnes in 1959 but declined to 3 tonnes by 1975. The commercial fishery no longer targets prawns. School prawns are still targeted by recreational fishers. Many fish, including bream, flathead and blowies predate on this species.

Significant recreational catches of Western School Prawns were last reported in the late 1990s and available evidence suggests their numbers remain low. Environmental factors, and not fishing pressure, are thought to be responsible for the decline in Western School Prawn abundance, although it needs to be acknowledged that the season allows for prawns to be taken during their reproductive period.

A collaborative project involving the Swan River Trust, Challenger Institute, Murdoch University, Recfishwest, the WA Fish Foundation and the Department of Fisheries is piloting a stock enhancement project to help improve the river prawn population. It is intended to couple the restocking with research to better understand factors affecting the prawns natural recruitment.

Conservation

River prawning remains a popular past-time with many fishers in Perth⁵ and, while no license is required to fish for them, there are restrictions on their capture. Recreational fishers are restricted to catching prawns by hand-trawl nets (length $\leq 4\text{m}$, mesh $\geq 16\text{mm}$) or hand-scoop nets only. A personal daily bag limit of 9L applies. The Swan-Canning Riverpark is closed to trawl netting between 1 August and 31 October to allow prawns to reach maturity prior to capture. Hand-scoop netting can occur year round.

To provide habitat protection, there are several areas permanently closed to prawn fishing. This includes the waters of the Swan River within 100 metres of the Pelican Point Nature Reserve and the Milyu Nature Reserve (Como).

References:

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3. Smith, K., Lenanton, R., Valesini, F (2007). Preliminary survey to determine abundance of river prawns (*Metapenaeus dalli*) in the Swan-Canning estuary. Report to the Swan River Trust.
4. Potter, I.C., Baronie, F.M., Manning, R.J.G. and Loneragan, N.R. (1989). Reproductive biology and growth of the western school prawn, *Metapenaeus dalli*, in a large Western Australian estuary. Australian Journal of Marine and Freshwater Research 40: 327-340.
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