



Australian Government



Native Fish Strategy

FISH FACTSHEET: POUCHED LAMPREY



Scientific Name

Geotria australis Gray, 1851

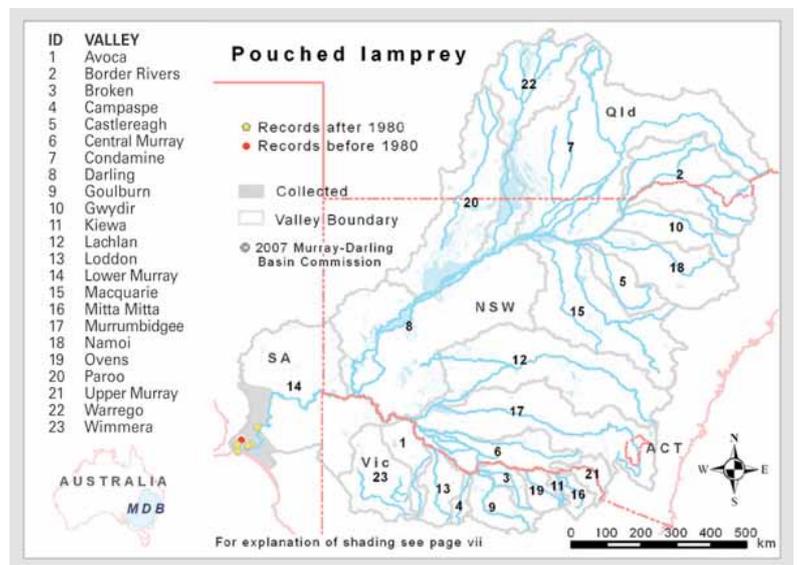
photo by Michael Hammer

CONSERVATIONS STATUS

Rare.

DISTRIBUTION AND ABUNDANCE

Generally restricted to the lower Murray River in the Basin, but otherwise found in coastal rivers in Vic, SA, Tas and WA. This species is now rarely recorded in the Basin because of its cryptic habits, but could formerly be seen in large numbers on spawning runs in the lower Murray at migration barriers such as weirs. There are recent records of this species in SA from below the Goolwa Barrage and in the Lower Lakes.



IDENTIFICATION

Medium sized, slender and elongated, with a scaleless, eel-like body. Adults are commonly 500-700mm long in freshwater situations (larger than the Short-headed lamprey). Two, low dorsal fins are situated well back on the body near the rounded caudal fin, and paired pectoral and pelvic fins are absent. Lampreys lack jaws; instead adults have a well-developed suctorial oral disc with blunt teeth in irregular spirals. Fimbriae (fringing filaments) are present surrounding the oral disc (absent in Short-headed lamprey), and the eyes of adults are lateral in position (rather than dorsolateral in Short-headed lamprey). Adults and ammocetes both have seven small oval gill apertures on each side of the body behind the head. During the spawning run, adult males develop a large pouch below the head. Newly metamorphosed young adults are bright silvery with blue bands along the back. The bands persist throughout the marine phase and early in the return to freshwaters, before fading and disappearing, leaving the adults a muddy grey-brown. The larval juvenile life phase (ammocete) is usually less than 120mm long, worm-like, lacks eyes and tooth plates, and the dorsal fins are very low, not extending very far above the body surface. Sandy-brown to blue in colour, these ammocetes are darker on the dorsal surface. They can be distinguished from ammocetes of the Short-headed lamprey by the position of the vent, which is below the start of the second dorsal fin.

BIOLOGY AND HABITAT

Little is known of the species' ecology in the Basin, so information below is drawn from studies in Western Australia. Most of the adult life is spent at sea. Young adults migrate upstream from the sea, usually in mid-winter, to breed. The spawning run can involve distances of hundreds of kilometres, and like the Short-headed lamprey is thought to be mainly by nocturnal movements. The spawning run lasts for about 15-16 months, before spawning the following spring. Ammocetes are sedentary, and live in soft substrates (mud and silt) for about 4.25 years, before metamorphosing (at around 80-120mm length) and migrating down to the sea, usually in late winter. Details of spawning are not known but spawning probably occurs in headwater streams and adults probably die after spawning. Females lay on average 58,000 eggs, which are small (~1.1mm diameter). The ammocetes are toothless, probably feeding on algae, detritus and micro-organisms filtered

from the water. After metamorphosis to adulthood, they become parasitic on other fish, rasping a hole in the side and feeding on blood and/or muscle. Adults cease feeding prior to their spawning migration.

POTENTIAL THREATS

Barriers to fish movement can interfere with spawning migrations, although the species can climb wet vertical surfaces.

GENERAL REFERENCES

- Allen et al. 2002;
- Cadwallader & Backhouse 1983;
- Hammer 2004;
- Hardisty et al. 1986;
- Koehn & O'Connor 1990;
- Potter 1996b;
- Potter et al. 1996;
- Wedderburn & Hammer 2003

PDF LINKS

Fishes of the Murray-Darling Basin: An introductory Guide;

<http://mdba.gov.au/files/publications/MDBA-Fish-species-book.pdf>



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