



Australian Government



Native Fish Strategy

FISH FACTSHEET: FLAT-HEADED GUDGEON (FLATHEAD GUDGEON, BIG-HEADED GUDGEON)



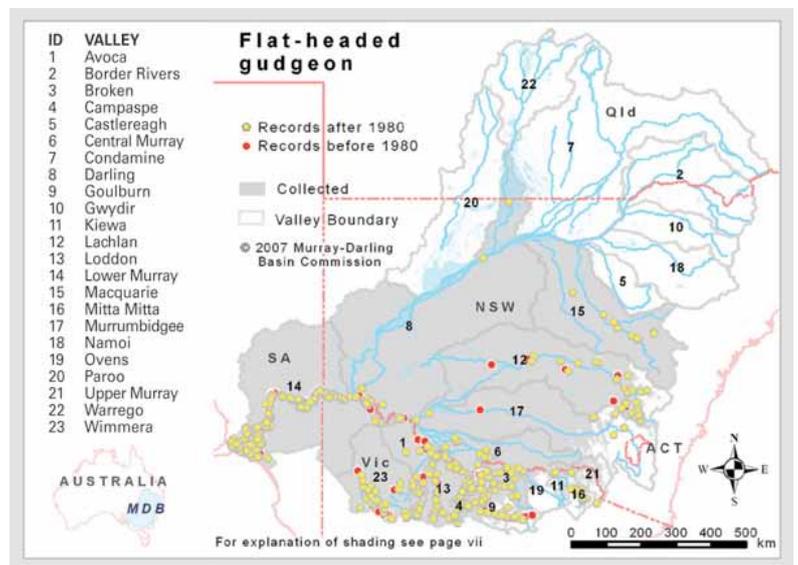
Scientific Name

Philypnodon grandiceps (Krefft, 1864)

photo by Gunther Schmida

DISTRIBUTION AND ABUNDANCE

The Flat-headed gudgeon is largely absent from upland areas of the Basin. Previously, it was considered to be a widespread and common inhabitant of the slope and lowlands in Vic, NSW and SA. However, the NSW Rivers Survey only recorded the species at 3 out of 40 sites in the Basin, indicating that the current distribution is patchy. Similarly, the Pilot Sustainable Rivers Audit only recorded 4, 2, and 40 individuals from 26, 21 and 24 sites on the Lachlan, Ovens and Lower Murray drainages, respectively. It appears to have declined in NSW, although it is reasonably common in wetlands and tributaries of the Lower Murray and along the edges of the Lower Lakes in SA. It is not present in the ACT or Qld portions of the Basin, but is in the upper Murrumbidgee just downstream of the ACT. It is also present in coastal streams in Vic, NSW, SA and Qld.



IDENTIFICATION

A small, fish with a broad, flat head and large mouth. Maximum size 115mm; usually 80mm. The eyes are positioned close together, high on the head. The gill openings are broad, extending forward to, or below the eye. There are two separate dorsal fins and a rounded tail. The dorsal colour is variable: it may be grey, brown, black, yellowish or reddish brown, often with a series of darker blotches on the back, sides and below the dorsal fins. The belly is usually lighter and may be yellowish. The anal and dorsal fins often have a series of faint, grey stripes with orange areas in between. There is often a black blotch at the base of the caudal fin. The mouth in males is larger, extending to at least below the pupil, whereas in the female it extends to below the front of the eye. Distinguished from the Dwarf flat-headed gudgeon by its larger size; the presence of gill openings on the underside of the head that extend forward to, or below the eye; and the larger number of pectoral fin rays (16-20, usually 18-19).

BIOLOGY AND HABITAT

This benthic species prefers slow-flowing areas of lowland streams or lakes and dams and is often found in weedy or muddy areas with abundant cover in the form of rocks or logs. It matures at 42-50mm length and breeds in spring and summer when water temperatures are between 18 and 27°C. Fecundity ranges from 500-900 eggs which are attached to solid objects such as rocks and wood and guarded by the male, which fans the eggs with its pectoral fins. The eggs are elongate, 1.5-2.2mm long and 0.7-0.9mm wide, and pointed at one end. They hatch after 4-6 days and the newly hatched larvae are about 3.8mm long. This species comprised 96% of the drifting larval fish fauna in the Campaspe River between 1995 and 2001, with the majority of this downstream drift occurring in late spring/early summer. Flow regime appears to play little part in breeding, and the species does not routinely utilise the floodplain for larval development. It is a carnivorous ambush predator of aquatic insects, molluscs, tadpoles, crustaceans and small fish.

POTENTIAL THREATS

None known.

GENERAL REFERENCES

- Cadwallader & Backhouse 1983;
- Harris & Gehrke 1997;
- Higham et al. 2005;
- Humphries et al. 2002;
- Lintermans & Phillips 2004;
- Koehn & O'Connor 1990;
- Larson & Hoese 1996a;
- Llewellyn 1971;
- Lloyd & Walker 1986;
- Pollard 1973;
- Pusey et al. 2004.

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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