



Australian Government



Native Fish Strategy

FISH FACTSHEET: SOUTHERN PURPLE-SPOTTED GUDGEON (PURPLE-SPOTTED GUDGEON)



Scientific Name

Mogurnda adspersa [Castelnaud, 1878]

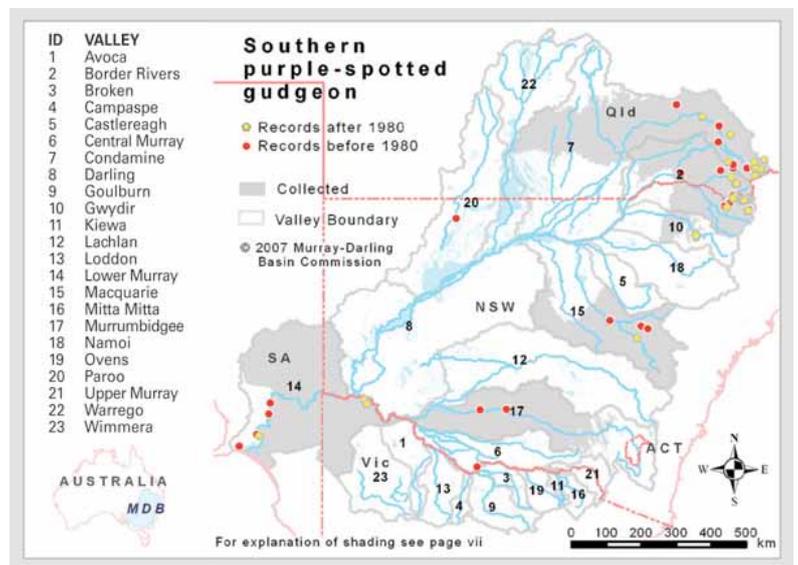
photo by Gunther Schmida

CONSERVATIONS STATUS

Threatened.

DISTRIBUTION AND ABUNDANCE

This gudgeon is present in coastal streams of northern NSW and Qld as well as the Murray-Darling Basin. In the Basin it has undergone a significant decline and is now presumed extinct in SA (where a single translocated population occurs) and Vic. It is patchily distributed and rare in northern NSW, but still locally abundant in the Border Rivers, Moonie River and Condamine-Balonne system in Qld. A new population was recently discovered in the Macquarie catchment in NSW. It was formerly patchily distributed in the Murrumbidgee, Lachlan and Murray rivers and tributaries of the Darling in NSW; and tributaries of the Murray and Wimmera



rivers in Vic. Records in the mid 1990s from the Cardross Lakes near Mildura were the first from Vic in more than 50 years, but recent surveys of this lake system have failed to relocate the species.

IDENTIFICATION

An attractive, small, robust fish with a rounded head, small mouth, and gape that extends to the anterior margin of the eye. Maximum size 152mm; commonly 60-120mm. The tail is rounded, and there are two dorsal fins, the first short-based and lower than the longer and taller second dorsal. The back is dark brownish to yellowish brown (but can be iridescent blue in general with a series of blue blotches towards the tail), fading to lighter brown or cream on the belly. A row of darkish blotches are present on the sides from the start of the second dorsal fin to the start of the caudal fin, surrounded by numerous red and white spots. Males have 3-4 brown-to-purple facial stripes extending from behind the eye to the back of the operculum. Females generally have two stripes, which are less prominent. There are numerous red spots on the dorsal, anal and caudal fins.

BIOLOGY AND HABITAT

The Southern purple-spotted gudgeon is a slow-moving ambush predator, consuming small fish and aquatic macroinvertebrates and also worms and tadpoles. It is a benthic species, usually associated with good cover such as cobble and rocks in the Queensland parts of its range, or aquatic vegetation in its southern range. It is found in slow moving or still waters of creeks, rivers, wetlands and billabongs, and prefers slower flowing, deeper habitats.

Males mature at 45mm and females at 49mm. The male has an elaborate courtship display and pairing and spawning occurs in summer when water temperature exceeds 20°C. Females can spawn several times during a spawning season. The eggs are adhesive and 280-1300 are deposited in a single batch on a rock, log or aquatic plants. The eggs are elongate, pointed at both ends, transparent and 1.0-1.3mm wide and 2.0-3.8mm long. The male stays to guard and fan the eggs, which hatch after 3-9 days depending on water temperature. Newly hatched larvae are approximately 4mm long.

Purple-spotted gudgeons are carnivorous, obtaining food from the benthos, the water column and the water surface.

POTENTIAL THREATS

The precise reasons for the decline of this species are unknown, but interactions with alien species (particularly Eastern gambusia and Redfin perch), and fluctuations in water levels with river regulation, are thought to be significant.

GENERAL REFERENCES

- Boxall et al . 2002;
- Cadwallader & Backhouse 1983;
- Hamlyn-Harris 1931;
- Hansen 1988;
- Larson & Hoese 1996a;
- Merrick & Schmida 1984;
- Moffat & Voller 2002;
- Morris et al. 2001;
- Raadik 1995;
- Raadik & Harrington 1996.

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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