



Australian Government



# Native Fish Strategy

## FISH FACTSHEET: UN-SPECKED HARDYHEAD (FLY-SPECKED HARDYHEAD, NON-SPECKLED HARDYHEAD)



Scientific Name

*Craterocephalus stercusmuscarum fulvus* Ivantsoff, crowley & Allen, 1987

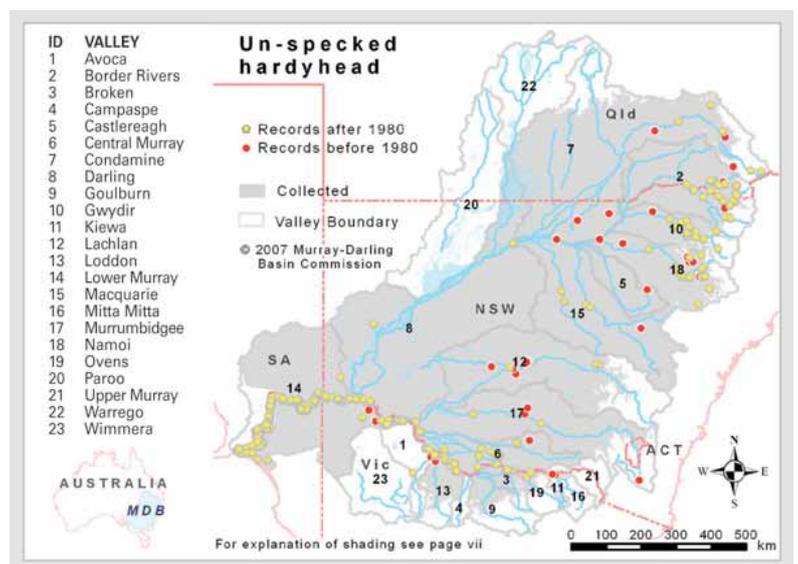
photo by Gunther Schmida

### CONSERVATIONS STATUS

Threatened.

### DISTRIBUTION AND ABUNDANCE

The Un-specked hardyhead is generally now found only in the lowland areas of the Basin, but more common in the northern Basin. It was formerly abundant but has suffered a significant reduction in distribution and is now considered rare in the southern part of its range, though still common in the north. In the south, populations are still present in the Lower Lakes (Alexandrina and Albert) and Lower Murray wetlands and main channel in SA, the central Murray and lower Murrumbidgee in NSW and extending upstream in the Murray to near Howlong,



though restricted or absent from most tributaries in Vic. Pre 1913 collections of 'hardyheads' by David Stead from upland sites (~780 m; the Cudegong above Rawden; the Murrumbidgee near Cooma) may also have been of this species, but no specimens were retained.

## IDENTIFICATION

A small, slender fish with moderately thick lips, a small protrusible mouth and short, blunt gill rakers. Maximum size 78mm; usually 50-60mm. The two small dorsal fins are short-based and the second is directly above the anal fin. The tail is forked, the pectoral fins are positioned high on the body and the anal fin has 6-9 rays. The midlateral scale count is generally 32-35 and the transverse scale count is 7-7.5. The scales on top of the head are large and irregular in shape. Body colour varies between localities. There is a dusky stripe from the snout, through the eye and operculum, extending to the base of the caudal fin, although along the body this stripe may be black, golden or silvery. Males are a bright golden yellow during the spawning season. This species is often referred to as the Fly-specked hardyhead. However, this name is not applicable to the subspecies that occurs in the Murray-Darling Basin, which lacks the dark spots of the northern, coastal subspecies.

## BIOLOGY AND HABITAT

The Un-specked hardyhead is found around the margins of large, slow-flowing, lowland rivers, and in lakes, backwaters and billabongs. It prefers slow-flowing or still habitats with aquatic vegetation and sand, gravel or mud substrates. It spawns from October to February, with a peak in spring when water temperatures are above 24°C, and is capable of multiple spawnings. Fecundity is low, with only 20-107 eggs laid. The eggs are transparent and demersal, with filamentous adhesive strands, and approximately 1.3-1.5mm diameter. Larvae are 3-5mm on hatching, after 4-7 days incubation. The Un-specked hardyhead is usually found in schools and little is known of its movements. However, recent research in the Murray and Murrumbidgee rivers has recorded it attempting to move upstream through fishways, with most movement in the afternoon or dusk periods. This species is carnivorous, eating small insects such as mosquito larvae, and microcrustaceans. In turn, it is probably eaten by birds and larger fish such as Golden perch.

## POTENTIAL THREATS

The precise reasons for the species' decline are not definitely known, but suspected to include increased salinisation (which affects macroinvertebrate and aquatic vegetation structure), habitat degradation, cold-water pollution, and impacts of alien species such as Eastern gambusia and Redfin perch.

## GENERAL REFERENCES

- Allen et al . 2002;
- Baumgartner 2003;
- Cadwallader & Backhouse 1983;
- Harris & Gehrke 1997;
- Higham et al . 2005;
- Ivantsoff & Crowley 1996;
- Llewellyn 1979;
- McCulloch 1913;
- MDBC 2004b;
- Wedderburn & Hammer 2003;
- (T. Raadik unpubl. data);
- (G. Wilson unpubl. data)

## PDF LINKS

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

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

**First published - January 2009**

**Murray-Darling Basin Authority**

GPO Box 1801 Canberra ACT 2601

Tel 02 6279 0100 Fax 02 6248 8053

[www.mdba.gov.au](http://www.mdba.gov.au)

