



# **Native Fish Strategy**

FISH FACTSHEET: GOLDEN PERCH (YELLOWBELLY, CALLOP, MURRAY PERCH)



Scientific Name

Macquaria ambiqua ambiqua (Richardson, 1845)

photo by Gunther Schmida

# **DISTRIBUTION AND ABUNDANCE**

The Golden perch is widespread throughout the Murray-Darling Basin, where it is widespread in the lower and mid reaches, but has declined in some areas. For example, in the Canberra region the species had effectively disappeared from the upper Murrumbidgee catchment above Lake Burrinjuck and has only re-established after successful lake stockings commencing in the early 1970s. The species is widely stocked in farm dams, lakes and streams in some States and forms the basis for popular recreational fisheries. A closely related but genetically distinct species has been identified from the Lake Eyre and Bulloo drainages in central Australia.



#### **IDENTIFICATION**

A medium to large fish with a deep, laterally compressed body. Maximum weight 23kg and maximum length 760mm; usually less than 400mm and 4kg. The body colour being generally olive-green with a yellow or cream belly. The mouth is large with the lower jaw protruding slightly. The tail is rounded.

# **BIOLOGY AND HABITAT**

Golden perch are predominantly found in the lowland, warmer, turbid, slow flowing rivers. In the Broken River they have been shown to prefer deep, slow flowing pool habitats and were often associated with snags and other cover. The species is long-lived, with the maximum validated age for an individual of 26 years, although most individuals live less than 10-12 years. Males are reproductively mature at 2 years and females at 4 years, and are generally thought to spawn in floods during spring and summer when water temperature exceeds about 20¡C. However, recent evidence from the Murray River suggests that this species is able to spawn during relatively stable, bankfull irrigation flows. Spawning was significantly increased during the 2005 environmental water release in the mid-Murray.

Adult and immature fish are migratory and extensive upstream movements of more than 1000 kilometres have been recorded for some adult fish, although movements of this scale are not common. Outside the breeding season, individuals occupy home ranges of about 100 m for weeks or months before relocating to another site where a new home range is established. Upstream movements by both immature and adult fish are stimulated by small rises in streamflow and most movement in the Murray occurs between October and April. Recent research in the Murray River has also suggested that some fish may move downstream to spawn. Golden perch are highly fecund, with a 2.3kg female holding up to 500,000 eggs. Water-hardened eggs are large (~3-4mm diameter), semi-buoyant and drift downstream. Hatching occurs after 1-2 days and newly hatched larvae are about 3.5mm long. Regular breeding has been recorded in some lakes in the Canberra region (Googong, Lake Burley Griffin), but these events are usually small-scale and insufficient to support viable fisheries. The species is an opportunistic carnivore. The diet of adult fish consists mainly of shrimps, yabbies, small fish and benthic aquatic insect larvae. Juvenile fish consume more of the smaller items such as aquatic insect larvae and microcrustaceans.

# POTENTIAL THREATS

River regulation has disrupted migrations and spawning behaviour, and cold-water pollution has eliminated some populations below large dams. Barriers to migration and recolonisation posed by weirs and dams are also threats.

# **GENERAL REFERENCES**

- Anderson et al. 1992; Baumgartner et al. 2006; Crook 2004; Crook et al. 2001; Harris & Rowland 1996; King et al. 2005; Koehn & Harington 2005;
- Baumgartner et al . 2006;
- Crook 2004; Crook et al . 2001;
- Harris & Rowland 1996; King et al . 2005;
- Koehn & Harington 2005;
- Mallen-Cooper & Stuart 2003;
- O'Connor et al. 2005;
- Phillips 2003; Reynolds 1983; Ye 2005.
- Reynolds 1983;
- Ye 2005.

# **PDF LINKS**

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

 $\label{lem:mdba.gov.au/files/publications/MDBA-Fish-species-book.pdf} \begin{subarray}{ll} http://mdba.gov.au/files/publications/MDBA-Fish-species-book.pdf \end{subarray}$ 



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