Threatened

Common Name

Macquarie perch (White eye, Mountain perch, Black bream)

Scientific Name

Macquaria australasica Cuvier, 1830



Identification

A medium sized fish with a deep, laterally compressed body. Maximum length 465 mm and maximum weight 3.5 kg; usually less than 350 mm and 1 kg. The body colour is generally black-grey or bluish grey, and some individuals are distinctly mottled, particularly small juveniles. The tail is rounded, the eye is large and white, and there are prominent pores on the snout and around the eyes. The mouth is large and the jaws equal in length.

Biology and Habitat

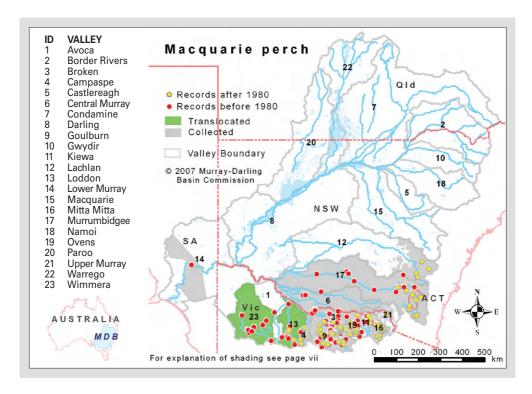
It is thought that there may be at least two forms contained within Macquarie perch, one of which occurs in the western rivers (the Murray-Darling form) and one in eastern or coastal rivers (the Shoalhaven and Hawkesbury-Nepean systems) (the coastal form). More is known of the ecology of the Murray-Darling form than the coastal form, although many aspects of their ecology are similar. Males are reported to reach sexual maturity at 2 years of age and approximately 210 mm total length, and females at 3 years

and 300 mm. In the Cotter River, ACT, males mature at about 140-150 mm and in Lake Dartmouth ripe males have been recorded down to lengths of 117 mm. Spawning occurs from October to December, with fish from lakes moving into tributaries to spawn. The spawning sites are located at the foot of pools and the eggs drift downstream and lodge amongst gravel and cobble in riffles. Hatching usually occurs after 10-11 days at water temperatures of 15-17°C and the newly hatched larvae being about 7 mm long. Radio-tracking studies have shown that adult and sub-adult fish are largely crepuscular and nocturnal, and occupy well-defined homesites during the day.

A quiet and docile species, Macquarie perch feed on shrimps and small benthic aquatic insect larvae, particularly mayflies, caddisflies and midges, but in lakes cladocerans can also be a significant dietary item.

Distribution and Abundance

The Murray-Darling form is typically found in the cool, upper reaches of the Murray-



Darling River system in Vic, NSW and the ACT. It is still known to exist in the upper reaches of the Murrumbidgee, Lachlan and Murray catchments in NSW; the Goulburn, Broken, Ovens and Mitta Mitta catchments in Vic; and the Paddys, Cotter and Murrumbidgee rivers in the ACT. The species has been stocked or translocated into a number of reservoirs including Talbingo, Cataract, Khancoban and Coliban reservoirs, and translocated into streams including the Yarra, Mongarlowe and Wannon rivers, and Sevens Creek. The populations of Macquarie perch in Dartmouth Reservoir and Lake Burrinjuck initially supported significant recreational fisheries but both have declined dramatically, with the species now virtually absent from the latter. Most of the remaining populations are relatively small and isolated, although populations in the upper Murrumbidgee and Goulburn river systems are locally abundant.

Potential Threats

Threats include interactions with alien species such as trout and Redfin perch, exposure to

Epizootic Haematopoietic Necrosis Virus (carried by Redfin perch), and habitat modification such as sedimentation, clearing of riparian vegetation, construction of dams and weirs which act as barriers to migration and recolonisation, and cold-water discharges from dams which prevent successful breeding.

General References

Cadwallader 1977, 1981; Cadwallader & Eden 1979; Cadwallader & Rogan 1977; Douglas 2002; Douglas et al. 2002; Harris & Rowland 1996; Ingram et al. 2000; Koehn et al. 1995; Lintermans 2002, 2006; McKeown 1934; Wharton 1973.

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Office location: Level 3, 51 Allara Street, Canberra City ACT Telephone: (02) 6279 0100, international + 61 2 6279 0100 Facsimile: (02) 6248 8053, international + 61 2 6248 8053

Email: info@mdbc.gov.au

Internet: http://www.mdbc.gov.au

For further information contact the Murray-Darling Basin Commission office on (02) 6279 0100

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