



Australian Government



Native Fish Strategy

FISH FACTSHEET: MURRAY-DARLING RAINBOWFISH (CRIMSON-SPOTTED RAINBOWFISH, MURRAY RIVER RAINBOWFISH)



Scientific Name

Melanotaenia fluviatilis [Castelnaud, 1878]

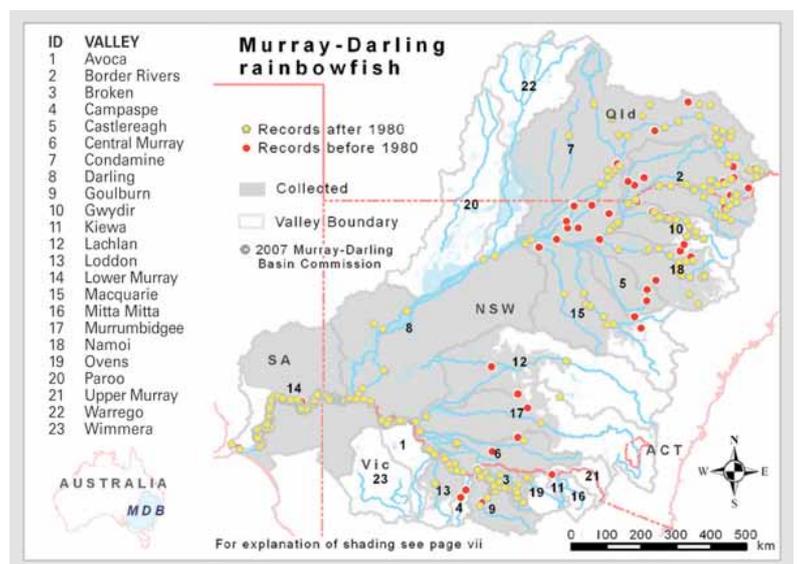
photo by Gunther Schmida

CONSERVATIONS STATUS

Uncommon.

DISTRIBUTION AND ABUNDANCE

Formerly widespread across the Basin, the Murray-Darling rainbowfish has declined in the Murray region, but is still patchily recorded from the middle and lower sections of the Murray, Murrumbidgee and Macquarie rivers, and parts of the Gwydir, Namoi and Bogan rivers in NSW. In Vic, cold winter temperatures limit it to the Murray and its tributaries such as the Goulburn and Broken rivers. The species is not present in the relatively upland ACT, and appears



to have disappeared from the Lower Lakes in SA. It is still common but localised/patchy in wetlands and vegetated edges of the main channel of the Lower Murray River in SA and the lower Victorian section below the Darling junction. It appears to be common in the Qld portion of the Basin, but may be confused with the Desert rainbowfish.

IDENTIFICATION

A small, strongly laterally compressed fish, the adults of which have a relatively deep body. Maximum length 90mm, commonly less than 70mm. The eyes are large and positioned towards the top of the head, and the mouth is moderately large, oblique and upturned, with several rows of small, conical teeth. There are two dorsal fins separated by a small gap, with the first short-based and the second long-based. There is a long-based anal fin and the tail is moderately forked. There is no lateral line and the scales are relatively large. Colouration varies with sex, age and habitat, but is generally silvery with a greenish iridescence and whitish on the lower head and belly. Younger individuals are translucent. The majority of scales have a brownish margin. There is a pink to-reddish spot on the operculum. Males have red spots on the dorsal, caudal and anal fins, and the fins of breeding males have a blackish margin. Females and immatures have clear fins.

BIOLOGY AND HABITAT

Rainbowfish are a tropical to sub-tropical group, and Murray-Darling rainbowfish is the southern-most species in the group. The species is generally found in the lowland parts of the Basin, and prefers slow-flowing rivers, wetlands and billabongs. It is a schooling species-schools of 30 or more are commonly seen swimming just below the water surface. Breeding is seasonal, generally spring-summer when water temperature exceeds 20°C, and males perform an elaborate courtship display. Fecundity is low (average 130 eggs, range 35-333) with females laying 5-20 eggs per batch, in 3-4 batches per day for several days. The eggs sink and lodge amongst aquatic plants, where they attach via adhesive threads. Eggs are 1.3-1.8mm diameter, and hatch after about 1 week, with the larvae ~2.0-3.7mm long. Individuals mature at 10-12 months old. Until recently it was not known that this species migrated, but individuals as small as 21mm have been recorded moving through a fishway on the Murrumbidgee River, most commonly in the

afternoon and dusk. The species is carnivorous, consuming aquatic invertebrates as well as terrestrial invertebrates that fall on the water surface. Some filamentous algae is also consumed.

POTENTIAL THREATS

Predation of adults by Redfin perch and larvae by Eastern gambusia are considered potential threats, as are loss of aquatic vegetation (spawning sites and cover) and cold-water pollution.

GENERAL REFERENCES

- Backhouse & Frusher 1980;
- Baumgartner 2003;
- Cadwallader & Backhouse 1983;
- Humphries et al . 2002;
- Koehn & O'Connor 1990;
- Lloyd & Walker 1986;
- McGuigan et al . 2000;
- Milton & Arthington 1984;
- Moffat & Voller 2002;
- Wedderburn & Hammer 2003

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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