



Australian Government



Native Fish Strategy

FISH FACTSHEET: DESERT RAINBOWFISH



Scientific Name

Melanotaenia splendida tatei (Zietz, 1896)

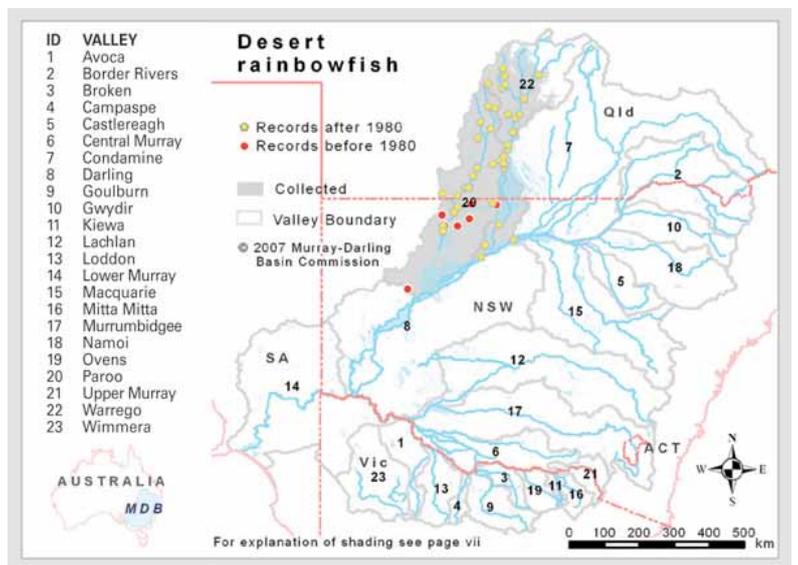
photo by Neil Armstrong

CONSERVATIONS STATUS

Rare.

DISTRIBUTION AND ABUNDANCE

The Desert rainbowfish is widespread and abundant in the larger rivers of the Lake Eyre Basin and the Western Plateau of the NT. This species has only recently been identified from the Murray-Darling Basin, where it is recorded from the arid rivers in the north-western Basin. It is found only in the Paroo and Warrego rivers, and hybrids with Murray-Darling rainbowfish



have been identified in the lowermost Warrego River and the Darling River from around the Bogan River down to at least Menindee. Any rainbowfish captured in or near the Darling River need to be carefully examined, as confusion or hybridisation with Murray-Darling rainbowfish is likely.

IDENTIFICATION

A small, strongly laterally compressed fish reaching approximately 90mm in length. The eyes are large and positioned towards the top of the head, and the mouth is moderately large, oblique and upturned. 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. Colouration varies with sex, age and habitat, but is generally silvery and iridescent, with a yellow and green chequered pattern on the unpaired fins and pale stripes along the sides. Unlike Murray-Darling rainbowfish, there is no pink to reddish spot on the operculum, but otherwise the two species are very similar in scale counts, number of fin rays etc. The easiest way to distinguish them is by colour. Currently, three subspecies of *M. splendida* are recognised, but morphological differences are slight and colour patterns are highly variable, making identification in the field difficult. Recent genetic investigations have identified hybrids between the Desert rainbowfish and the Murray-Darling rainbowfish, further confounding the identification of these species in some areas.

BIOLOGY AND HABITAT

As its name suggests, Desert rainbowfish is an arid-adapted species, found in a variety of slow-flowing and still habitats, including ephemeral rivers, waterholes, lakes, flowing bores and stock dams. These habitats are often quite turbid and highly variable in terms of permanence.

Like other rainbowfish, the Desert rainbowfish is a schooling species and commonly seen swimming just below the water surface. Breeding is probably dependant on local conditions, occurring when water temperatures are above about 20°C and after good rains. Adults mature at about 30-35mm length and males perform a courtship display among aquatic vegetation. The eggs are laid amongst aquatic plants or on the exposed roots of riparian vegetation (although aquatic plants and roots are not very

common where this species occurs, compared to the other subspecies). In aquaria, females lay 80-100 small eggs (0.8-0.95mm diameter), often in daily batches, and the eggs hatch after 7 days at 24°C. The newly hatched larvae are 4-5mm long.

The species is omnivorous, consuming small aquatic invertebrates as well as filamentous algae.

POTENTIAL THREATS

None known. Interactions with Eastern gambusia may be a threat as numbers of Desert rainbowfish at some localities appeared to decline significantly after flooding in the early 1990s facilitated the spread of gambusia.

GENERAL REFERENCES

- Larson and Martin 1989;
- Leggett and Merrick 1987;
- McGuigan et al . 2000;
- Pusey et al . 2004;
- Wager and Unmack 2000;
- (P. Unmack unpubl. data).

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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