

The IUCN Red List of Threatened Species™ 2009 update

Freshwater Fish Facts



Total species assessed in = 3,120 (up by 510 since last year)

Total EX or EW = 104 (3%) [EX = 91; EW = 13]

Total threatened = 1,147 (37%) [CR = 270; EN = 241; VU = 636]

Total NT = 124 (4%)

Total LR/cd = 10 (<1%) *[an old Red List Category that is gradually being phased out]*

Total DD = 431 (14%)

Total LC = 1,304 (42%)



Elongate Bitterling (*Acheilognathus elongates*) – CR

Endemic to Lake Dianchi, this fish was assessed as CR last year because the population has dramatically declined due to introduced fishes in the lake, especially closely related cyprinid species such as *Acheilognathus macropterus*, *A. taenianalis*, *A. chankaensis* and *Rhodeus ocellatus*. These species share the same habitat with *Acheilognathus elongates* and are out-competing it. Water pollution has also resulted in loss of breeding sites due to the local extinction of many bivalve species which are the host of the young *Acheilognathus elongates*.



Kunming Snout Trout (*Schizothorax grahami*) – CR

Endemic to Lake Dianchi its tributaries and springs. However, the species is now absent from the lake (it has not been caught there in the past 20 years) and is only known from Muyang River, Lengshui River, Black dragon spring and Green Dragon spring. These four sites all belong to the Songhuaba Reservoir drainage. Its loss from the lake is likely due to introduced fish species, water pollution, over-fishing, and breeding sites lost due to siltation and blocked access. © Tony Whitten

The **Sampled Red List Index (SRLI)** freshwater fishes were assessed or reassessed for the Red List this year (535 species in total). These include species from Central America (38 species), South America (188 species), Africa (82 species), Australasia (22 species), and Asia (205 species). Three of these species are reassessments from previous years where there has been a genuine change in the species' status (see below).



The Brown Mudfish (*Neochanna apoda*) – VU

This species was assessed as Near Threatened in 1996; this year it moves into the Vulnerable category because of a genuine deterioration. This freshwater fish is endemic to New Zealand. The species has disappeared from many areas in its range and persists in often small fragmentary forest wetlands whose long-term survival is now precarious. Approximately 85-90% of New Zealand's wetlands have been lost or degraded through drainage schemes, irrigation and land development and these activities have resulted in a population decline of more than 30% over the last ten years for this species.



Popondetta Blue-eye (*Pseudomugil connieae*) – VU

This fish was assessed as Least Concern in 1996. It is now uplisted to Vulnerable due to habitat declines. The species occurs in three drainage basins, covering a total area of 15,928 km², in Papua New Guinea. Human population growth in the town of Popondetta is resulting in expanding urbanization and increasing agriculture, which are reducing the area of suitable habitat available for this fish. Urbanization, agriculture and logging are also all potential sources

of water pollution which are likely to negatively impact populations. The Popondetta Blue-eye is also a much sought after species in the aquarium trade, which poses a potential threat to the remaining wild populations. ©Gerald Allen



Australian Grayling (*Prototroctes maraena*) – NT

This species was assessed as Vulnerable in 1996. It has now been downlisted to Near Threatened as its status has genuinely improved since then. The species is known only from coastal drainages of south-eastern Australia; it also occurs in Tasmania and King Island in the Bass Strait. It is an amphidromous species: adults are found in flowing freshwater streams, where they spawn between February and May; the larvae are then swept downstream into estuaries and the sea, where they spend their first six months before returning to freshwater in the spring. Australian grayling were once a popular angling species, but the species is now of conservation concern and listed as a protected fish in New South Wales under the Fisheries Management Act 1994. Heavy penalties apply for taking or possessing them. The related New Zealand grayling (*Prototroctes oxyrhynchus*) became extinct in the 1930s. *P. maraena* has suffered declines in both population size and habitat quality in the past because of siltation and competition with the introduced Brown Trout, but now the species is the focus of active conservation measures and legislation and the population and quality of habitat have improved considerably. Nevertheless, its current improved status is dependent on these conservation efforts continuing into the future.