

RECOMMENDATION

BIDYANUS BIDYANUS - SILVER PERCH

The Fisheries Scientific Committee, established under Part 7A of the *Fisheries Management Act 1994* (the Act), has made a recommendation to list *Bidyanus bidyanus*, silver perch, as a VULNERABLE SPECIES in Schedule 5 of the Act.

The listing of Vulnerable Species is provided for by Part 7A, Division 2 of the Act.

The Fisheries Scientific Committee has found that:

1. Silver perch, *Bidyanus bidyanus* (Mitchell, 1838) of the family Terapontidae, is also known by the common names bidyan, and black or silver bream.
2. *Bidyanus bidyanus* has been recorded widely throughout the Murray-Darling Basin. Hatchery raised *B. bidyanus* have been stocked in impoundments and river systems throughout NSW. The species is described and figured in Merrick, J.R., 1996, Family Terapontidae - Freshwater grunters or perches, in McDowall, R.M. (ed.) Freshwater fishes of south-eastern Australia, where details of its distribution are also given.
3. *Bidyanus bidyanus* prefers fast-flowing waters, especially where there are rapids. This species migrates to spawn. Historical records show that the species was widespread and abundant in most of the Murray-Darling drainage, excluding the cool, high, upper reaches of streams on the western side of the Great Diving Range. The species once formed a significant component of the commercial catch in inland NSW, and was regularly captured by anglers in rivers throughout the State.
4. *Bidyanus bidyanus* has suffered a population decline in NSW. It is now absent in the wild from the majority of its former range. Only one natural population is known, which occurs downstream of Torrumbarry Weir in the Murray River. This population is considered secure and self-sustaining. A reproducing population of unknown origin may occur in the Edward River, an anabranch system of the Murray River which flows through Deniliquin. A translocated population also occurs in Cataract Dam near Sydney.
5. *Bidyanus bidyanus* has the following official conservation status:
 - listed as threatened in Victoria;
 - listed as vulnerable in the IUCN Red List of Threatened Species;
 - protected in NSW (in rivers) and South Australia; and
 - listed as 'potentially threatened' by the Australian Society for Fish Biology.

6. The causes of decline in *Bidyanus bidyanus* are likely to include:
 - increased egg mortality in weir pool environments caused by lack of water movement;
 - spawning failures due to cold water releases from dams;
 - predation by, and competition with, introduced species such as redfin perch and gambusia;
 - EHN disease, which is carried by redfin perch; and
 - construction of barriers to migration and recolonisation such as weirs and dams without fishways.
7. The introduction of hatchery reared *Bidyanus bidyanus* into rivers is potentially damaging to the genetic integrity of the species in nature.
8. The widespread stocking of hatchery reared *Bidyanus bidyanus* for recreational fishing and aquaculture has not led to establishment of self-sustaining populations of the species with the exception of the population in Cataract Dam. This has not significantly reduced the likelihood of its further decline in nature.
9. In light of 4, 5, 6, 7 and 8 above, the Fisheries Scientific Committee is of the opinion that *Bidyanus bidyanus* is likely to become endangered in nature, unless the circumstances and factors threatening its survival or evolutionary development cease to operate. Therefore, the species qualifies for inclusion in Schedule 5 of the *Fisheries Management Act 1994* as a VULNERABLE SPECIES.

Dr Andrew Sanger
Chairperson
Fisheries Scientific Committee