South Australia has an amazing array of freshwater plants and animals but record low inflows to the River Murray means that many of these are now under extreme threat.

The freshwater habitats that they rely on for food, shelter and breeding have been drying at an alarming rate, especially since 2006.

Several freshwater native fish species have been driven to the edge of extinction in South Australia.

The Yarra pygmy perch story

Its wild habitat in the Coorong, Lower Lakes and Murray Mouth region has experienced extreme drying, and the freshwater Yarra pygmy perch is now endangered.

During 2007-2008 urgent action was needed to ensure Yarra pygmy perch survival. Fish were rescued from their drying habitat to become part of special captive breeding programs at a number of locations, including Cleland Wildlife Park.

The next step for recovery of these fish was to find them suitable ‘surrogate refuge’ homes while their wild habitats were under stress.

Several suitable surrogate refuge homes were found and young fish bred in captivity have been released into some of these sites. Offspring produced in surrogate homes will be released into wild sites once conditions improve.

The Yarra pygmy perch is an important part of local and regional biodiversity and ecosystems.

How to spot a Yarra pygmy perch

Yarra pygmy perch (Nannoperca obscura) are usually less than 6.5 cm long with a golden to dusky brown-grey body marked by darker spots and fading to a paler colour on the belly. This species has a v-shaped notch in the single dorsal fin (the fin on its back) and the pupil is not perfectly round.

Critically endangered in SA

The Yarra pygmy perch is currently listed as:

- Vulnerable nationally
- Critically Endangered in South Australia and is protected under the Fisheries Management Act 2007.
- Threatened in Victoria.

Two separate populations of Yarra pygmy perch

Two genetically distinct populations of Yarra pygmy perch occur in separate parts of South Australia:

- SA Murray-Darling Basin (SAMDB)
- South-East.

The SAMDB population was once widely spread throughout the Lower Murray, Lake Alexandrina, Hindmarsh Island and associated wetlands. Since 2006, their habitat has deteriorated or disappeared and they are now at risk of being lost from this area and becoming locally extinct.

The South-East population has undergone similar changes due to drought. Yarra pygmy perch were previously widespread in permanent habitats throughout this area, but they have been lost from many sites and decreased in numbers at others. Today they remain at only five sites: Mosquito Creek/Bool Lagoon, Lower Drain M, Henry Creek, Lake Bonney and Crescent Pond. Numbers continue to fall.
**What does it eat?**

This carnivorous species will eat any small macroinvertebrates (such as insect larvae) that will fit into its mouth and is an effective mosquito predator.

**Breeding**

Yarra pygmy perch breed in spring when water temperatures are between 16-24°C. Eggs are laid in vegetation and the juveniles remain close to this cover as they grow. The fins of breeding males develop some black colouration.

**What is its habitat like?**

Yarra pygmy perch typically occur in still or slow-flowing permanent waters such as streams, lakes, ponds and wetlands as long as there is plenty of aquatic vegetation.

The type of dense aquatic vegetation they seem to prefer can be submerged (such as milfoil, foxtail and water ribbon) or emergent reeds (such as club rushes and bulrushes) and they can also use overhanging edge vegetation such as grasses as protective cover.

Yarra pygmy perch love aquatic plants, which is where they live, eat and breed, so it is important to conserve and enhance this aquatic component of their habitat to ensure their survival in the wild.

**Threats**

The drainage of swampy areas to reclaim land for agriculture has had major negative impacts on populations of Yarra pygmy perch. This situation has been made worse by vegetation loss and the introduction of redfin.

The prolonged drought in South Australia, especially since 2006-2007, has resulted in reduced water flows, lower water levels, disconnection with the River Murray channel and increasing salinity, all of which have further impacted Yarra pygmy perch populations.

**How to help**

- Join a local catchment management group and become involved in revegetation and site enhancement projects.
- Leave snags (tree branches) and rocks in the water as they provide habitat for fish and macroinvertebrates.
- Don’t remove or interfere with vegetation in and around water as it provides important aquatic habitat.
- If you catch an introduced fish such as redfin don’t return it to the water.
- Never remove native fish from the water.
- If you find an interesting fish take a photo of it and email it to research@nativefishsa.asn.au
- Try not to add to pollutants entering our waterways. You can do this by reducing your use of fertilisers and pesticides, washing your car on the lawn to filter out debris, and picking up dog and cat droppings.
- Reduce water usage in the home to leave more for our water dependent wildlife.

**Planning for the future**

Managing threatened populations in the region is a priority action in Securing the Future: A long-term plan for the Coorong, Lower Lakes and Murray Mouth. Securing the Future outlines priority actions aimed at building resilience in the environment and maintaining the ecosystem in a state from which it can recover when freshwater flows improve.

The goal is a healthy, productive and resilient wetland system that maintains its status as a wetland of international importance.

**Further Information**

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**Reference**

Action Plan for South Australian Freshwater Fishes 2009
Native Fish Australia (SA) Inc.
www.nativefishsa.asn.au