A Conservation Hatchery

Breeding threatened species



Helping our threatened native aquatic species

Some of Victoria's most threatened native aquatic species will be bred at a new conservation facility being built at the Snobs Creek Hatchery.

These new facilities will allow scientists, Traditional Owners and industry to work together to select species, plan breeding and release programs, improve their genetic diversity and undertake community education.

All these steps will give our threatened aquatic species the best chance to thrive. This will help protect and enhance populations in response to extreme events, including fire, drought and floods, as well as support broader river rehabilitation efforts.

The first species of focus will be:

- a number of small Galaxiids species from the Gippsland area
- Macquarie Perch
- South Gippsland Spiny Crayfish
- Purple-spotted Gudgeon

This initiative is funded by the Victorian and Federal governments through the Bushfire Biodiversity Recovery Program, together with the Victorian Fisheries Authority and the Victorian Environmental Water Holder.









Background

Over 50 species of freshwater fish, crayfish and mussels are threatened in Victoria.

Many occur in small, fragmented populations, and are affected by habitat decline, changed flow regimes, increased frequency and severity of extreme weather events (including fires, droughts and floods), competition and predation by pest species, and illegal take.

Objectives

The new facilities will allow us to:

- Increase the number of species that can be bred and released into waterways:
 - once conditions improve after extreme events
 - to support aquatic habitat rehabilitation efforts.
- Breed and release culturally significant species.
- Establish 'insurance' populations for our most at risk freshwater species.
- Increase collaboration between state and commonwealth agencies and Traditional Owners to protect threatened freshwater species.
- Fill key knowledge gaps about captive breeding methods and genetic management of threatened freshwater species.
- Provide employment and engagement opportunities about breeding and releasing species.
- Provide opportunities to trial genetic mixing of some most at risk species (which has been recommended by genetic experts).
- Reduce the need for costly extractions and temporary holding of animals after extreme weather events.

What's happening?

- System and infrastructure design are underway and construction is expected to commence in early 2023.
- A workshop with Traditional Owners, government agency managers and scientists was held in April 2022. This enabled sharing an understanding of the current status of fish species, and included a discussion of management options to benefit species and culture and knowledge gaps in implementing restoration actions.

- A breeding and stocking strategy is being developed. There's a suite of potential freshwater species that could be captively bred. This includes small and large-bodied fish species, crayfish and mussels, of which some have particular cultural and recreational fishing significance.
- Broodstock of the first species in focus will be collected.
- The first release of captively bred fish is planned for Summer of 2023/24.

Captive breeding of our threatened freshwater species is an essential part of future conservation to prevent extinction.

It will help species' recovery from extreme events, as well as support broader river and wetland rehabilitation efforts.



A River Blackfish

Further information

Contact:

Arthur Rylah Institute (Research.ARI@delwp.vic. gov.au; Ph: 03 9450 8600) or Victorian Fisheries Authority (vfa.vic.gov.au; Ph: 136 186)



A Purple-spotted Gudgeon





