



# King Parrot Creek Fish survey results 2022



## Survey sites

Since 2006, annual surveys have been undertaken at five long-term monitoring sites between Flowerdale and Kerrisdale (Figure 1). Data from this 15-year long monitoring program records one of the healthiest populations of Macquarie Perch (*Macquaria australasica*) in the catchment.

## Highlights

- A total of 342 fish were captured from King Parrot Creek, with equal representation (5) of native and introduced fish species. Spiny Freshwater Crayfish, Common Yabby, Eastern Long-neck Turtle and Platypus were also recorded.
- Recorded at all five survey sites, Macquarie Perch (n=100) were again the most abundant native species captured.
- Length frequency data indicates multiple age classes were present, with young of year (YOY) the most abundant at 24% of Macquarie Perch caught. Cohorts from the previous two breeding seasons were also well represented, indicating ongoing successful recruitment and survival.
- All Macquarie Perch captured were in excellent condition.

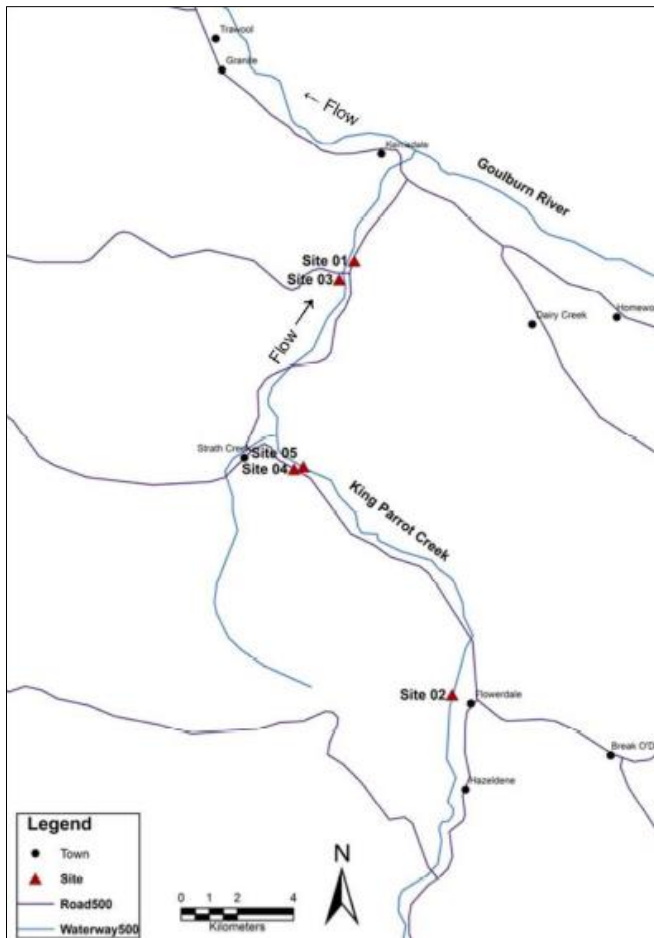


Figure 1. Map of survey sites in King Parrot Creek



Image 1:  
YOY Macquarie  
Perch

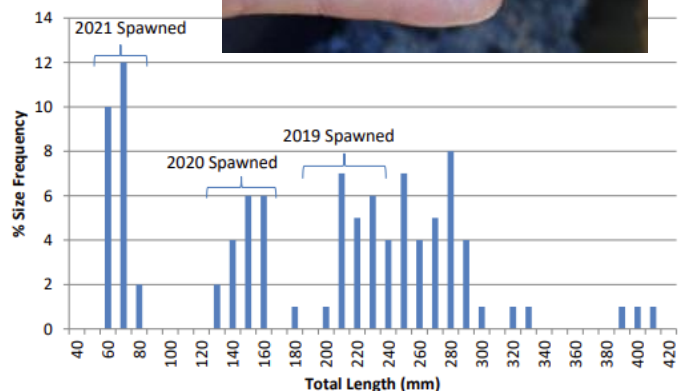
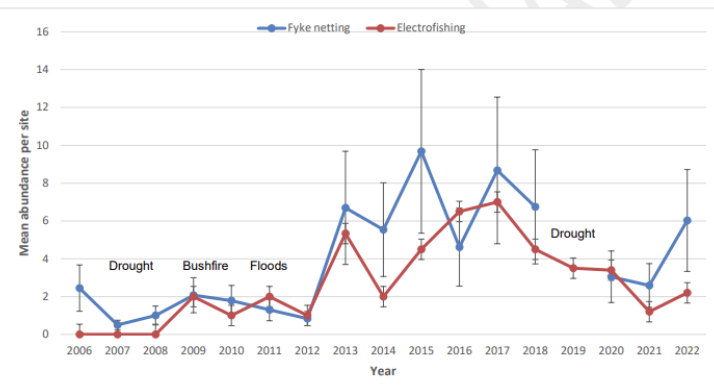


Figure 2. Size frequency histogram (% of occurrence) of Macquarie Perch captured in 2022

## 2022 results

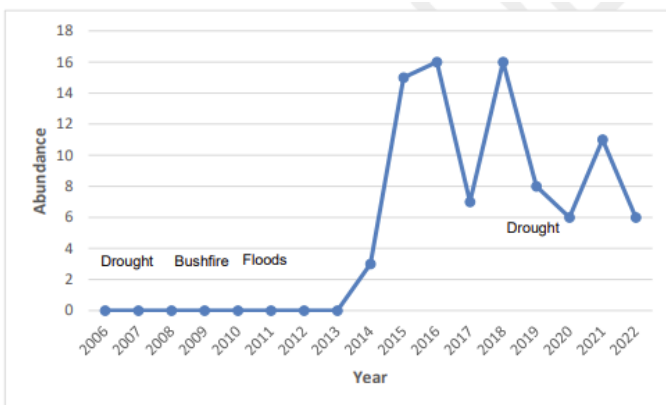
An increase in the relative abundance of river blackfish (*Gadopsis marmoratus*) indicates the species is beginning to recover from the cease to flow period in 2019.



**Figure 3. Mean abundance of river blackfish per site during surveys of the King Parrot Creek between 2006 and 2022**

Two-spined blackfish (*Gadopsis bispinosus*) were not recorded during this year's survey. This species is only found in the most upstream survey site, requiring additional surveys in this reach to more confidently assess population changes.

The number of southern pygmy perch (*Nannoperca australis*) were slightly less than the previous year. Despite this, the species continues to show recovery Millennium Drought where they were undetected in the survey reach between 2006 and 2013.



**Figure 4. Abundance of southern pygmy perch during surveys between 2006 and 2022**

Like previous years, the number of Redfin Perch (*Perca fluviatilis*, n=2) and common carp (*Cyprinus carpio* n=3) captured remains low. The number of Brown Trout (*Salmo trutta*, n=118) captured in 2022 was comparable to 2021 (n=128), with most of these fish 100-140 mm in length (estimated age of 1 year). This result highlights that in 2020 conditions were favourable for the species.

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Image 2 (left): River blackfish



Image 3 (right): Southern pygmy perch

## Recommendations

- A number of illegal weirs that have been barriers to fish passage for many years during low flow periods were dismantled last year. Many of these have been rebuilt.
- People are reminded it is illegal to construct weirs, without authorisation of a Works on Waterways permit. These permits are obtained from the GB CMA and are issued for all approved works undertaken within waterways.
- Raise community awareness of the importance of maintaining connectivity between habitat pools along the King Parrot Creek, particularly with the valued population of threatened Macquarie perch present.
- Continue long term fish monitoring in King Parrot Creek in 2023 and commence citizen science records of platypus presence.
- Continue to monitor water quality and flows over summer periods, in years when there is low rainfall. This knowledge will enable triggers for action to occur if conditions become unfavourable.



Image 4 (left): platypus

This project is funded by the Victorian Government. Arthur Rylah Institute (DELWP) is engaged to undertake these surveys on behalf of the Goulburn Broken CMA.