Arthur Rylah Institute for Environmental Research

Applied Aquatic Ecology

Field Survey - Update

King Parrot Creek Fish Assessments



Location	King Parrot Creek
Dates	18 th and 19 th March 2019
Data collected and methods	Backpack electrofishing was undertaken at five long-term monitoring sites between Kerrisdale and Flowerdale. Fyke netting was unable to be conducted due to the current low/no water flow conditions. Water quality was recorded at all sites.
Survey notes, dominant species and highlights	Upper site is maintaining flow. Three middle sites have stopped flowing but are sustaining reasonable water quality and several deep refuge pools with a small number of fish residing. All fish captured were in good condition with no visible parasites. The lower site had poor water quality with little/no refuge pools (very few fish). The following describes survey sites in order of upstream to downstream.
	Moores Road, Flowerdale: Continuous flow throughout site. Water quality remains reasonable (water temperature = 24°C; dissolved oxygen = 5.71mg/L). Several deep pools remain with good food availability (i.e. freshwater shrimp). Three native and one introduced fish species were captured. Native fish species included river blackfish (5), southern pygmy perch (8) and riffle galaxias (3). Introduced fish species included brown trout (11). Other fauna captured included common yabby (9) and spiny freshwater crayfish (2). No Macquarie perch were collected from this site.
	Callandoon Property, Strath Creek: Series of isolated pools (no continuous flow). Water quality remains reasonable (water temperature = 21°C; dissolved oxygen = 5.33mg/L). A number of deep refuge pools sustaining with good food availability (i.e. freshwater shrimp). Green algae was observed in the shallows of one pool. Four native and one introduced fish species were captured. Native fish species included Macquarie perch (8) (two of which were young of year), river blackfish (2), flathead gudgeon (5), mountain galaxias (1). Introduced species included redfin (1). Other fauna species included common yabby (12).
	Burslems Bridge, Strath Creek: Series of isolated pools (no continuous flow). Water quality remains reasonable (water temperature = 23.5°C; dissolved oxygen = 5.93mg/L). A number of deep refuge pools are sustaining with good food availability (i.e. freshwater shrimp). Two native fish species were captured including mountain galaxias (10) and flat head gudgeon (1). Other fauna species included common yabby (4). No Macquarie perch were collected from this site.
	Richards Bridge, Strath Creek: Series of isolated pools (no continuous flow). Water quality remains reasonable (water temperature = 18°C; dissolved oxygen = 4.78mg/L). A number of deep refuge pools are sustaining with good food availability (i.e.

freshwater shrimp). Three native and four introduced fish species were captured. Native fish species included Macquarie perch (5) (three of which were young of year), flathead gudgeon (16), mountain galaxias (4). Introduced species included redfin (1), brown trout (11), rainbow trout (1), mosquito fish (8). Other fauna species included common yabby (5).

Draytons Bridge, Kerrisdale: Series of shallow isolated pools (no continuous flow). Water quality is poor (water temperature = 22.5°C; dissolved oxygen = 3.88mg/L). Green algae present in most remaining pools. Three Macquarie perch and one common yabby were collected. Macquarie perch were translocated to Moores Road, Flowerdale site as per translocation permit approvals.

Overall, the abundance of fish (particularly Macquarie perch) captured during electrofishing surveys are comparative to surveys undertaken during 2018.

We plan to undertake fyke netting surveys during late autumn if flows in the creek improve.

The Goulburn Broken Catchment Management Authority (GBCMA) will continue to monitor water quality over the coming weeks. We encourage any landowners to regularly check the creek and report fish concerns to the GBCMA.

Survey team

Joanne Sharley and Renae Ayres



Adult Macquarie perch



Young of year Macquarie perch



Southern pygmy perch



Large pool at Moores Rd



Refuge pool at Richards Bridge



Refuge pool at Draytons Bridge

Disclaimer – Please note these are field observations from a recent survey. This information will undergo quality assurance and analysis. Also note that water quality is not comparable across sites given that measurements were taken at different times of the day. Please contact Joanne Sharley for further details (joanne.sharley@delwp.vic.gov.au, Ph: 0408 565 613) NB: Red text indicates threatened species



Environment, Land, Water and Planning

