## **Monitoring Macquarie perch in King Parrot Creek**

- \* During April 2015, fish surveys were conducted at five sites in King Parrot Creek between Flowerdale and Kerrisdale using fyke netting and backpack electrofishing techniques (see table 1).
- \* A total of 608 fish, comprising seven native and two introduced species were captured, with native fish accounting for 83% of the total catch (see table 2).
- \* Macquarie perch (*Macquaria australasica*) (n=386) was the most abundant species captured and was recorded at all five survey sites.
- \* The size range of Macquarie perch captured was between 62 and 350 mm total length (TL) (average = 149 mm TL).
- \* Over 77% of Macquarie perch collected were between 110 and 160 mm TL, while young of year accounted for 7% of the total Macquarie perch catch (see figure 1).
- \* The record number of Macquarie perch collected during this survey is attributed to consecutive years of strong recruitment, particularly during Spring 2013 (see figure 1 and figure 2).
- \* The abundance of river blackfish (*Gadopsis marmoratus*) and two spined blackfish (*Gadopsis bispinosus*) have also significantly increased over the past two years (see figure 2).
- \* Southern pygmy perch (*Nannoperca australis*) were also collected at one of the survey sites, which was very encouraging given this species has undergone extensive declines in recent years.
- \* No carp (Cyprinus carpio), goldfish (Carassius auratus) or redfin (Perca fluviatilis) were collected.
- \* Litter, discarded fishing line and illegal fishing traps continue to be threat.

Table 1. King parrot Creek site summary information.

| Site | Location                                                                      | Latitude  | Longitude | Date/s<br>sampled |
|------|-------------------------------------------------------------------------------|-----------|-----------|-------------------|
| 01   | Draytons Bridge at Fairview Road, Kerrisdale                                  | -37.17275 | 145.25305 | 9/4/15<br>14/4/15 |
| 02   | Moores Road, Flowerdale                                                       | -37.31008 | 145.28822 | 7/4/15<br>13/4/15 |
| 03   | Richards Bridge off King Parrot Creek Road, Strath Creek                      | -37.21027 | 145.23425 | 9/4/15<br>14/4/15 |
| 04   | Burslems Bridge on upper King Parrot Creek Road, Strath<br>Creek              | -37.24051 | 145.23402 | 8/4/15<br>14/4/15 |
| 05   | Private Property – Callandoon, off Broadford-Flowerdale<br>Road, Strath Creek | -37.24215 | 145.23880 | 8/4/15<br>13/4/15 |

Table 2. Catch summaries for King Parrot Creek during April 2015.

|                          |                      | 01<br>Draytons Bridge | Site<br>02<br>Moores Rd | 03<br>Richards Bridge | 04<br>Burslems Bridge | 05<br>Callandoon | TOTAL |
|--------------------------|----------------------|-----------------------|-------------------------|-----------------------|-----------------------|------------------|-------|
| Species name             | Common name          |                       |                         |                       |                       |                  |       |
| Macquaria australasica   | Macquarie perch      | 87                    | 29                      | 121                   | 101                   | 48               | 386   |
| Gadopsis marmoratus      | River blackfish      |                       | 3                       | 2                     | 15                    | 29               | 49    |
| Gadopsis bisinosis       | Two-spined blackfish |                       | 27                      |                       |                       |                  | 27    |
| Galaxias rostratus       | Riffle galaxias      | 3                     | 3                       | 1                     |                       |                  | 7     |
| Galaxias olidus          | Mountain galaxias    | 6                     |                         | 4                     | 4                     | 3                | 17    |
| Philypnodon grandiceps   | Flat headed gudgeon  | 2                     |                         | 2                     |                       | 1                | 5     |
| Nannoperca australis     | Southern pygmy perch |                       | 15                      |                       |                       |                  | 15    |
| Salmo trutta*            | Brown trout          | 34                    | 15                      | 16                    | 7                     | 5                | 77    |
| Oncorhynchus mykiss*     | Rainbow trout        | 23                    |                         | 2                     |                       |                  | 25    |
| Cherax destructor        | Yabby                | 4                     | 2                       | 7                     | 10                    | 1                | 24    |
| Euastacus armatus        | Freshwater crayfish  | 4                     | 5                       | 3                     | 4                     | 2                | 18    |
| Chelodina longicollis    | Common Turtle        |                       |                         | 1                     |                       |                  | 1     |
| Ornithorhynchus anatinus | Platypus             |                       | 2                       |                       |                       | 2                | 4     |
| TOTAL                    |                      | 163                   | 101                     | 159                   | 141                   | 91               | 655   |

<sup>\*</sup> Denotes exotic species

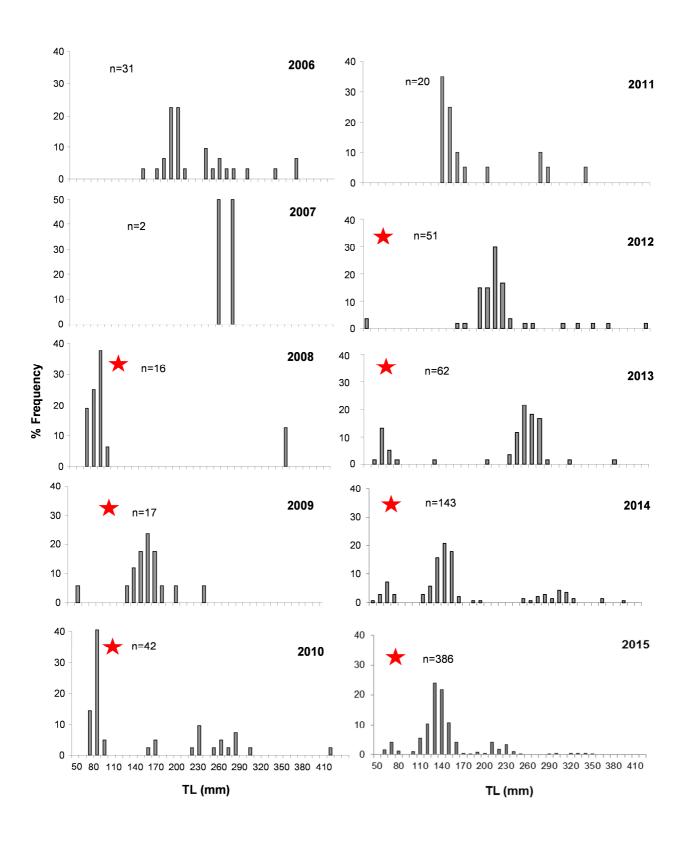
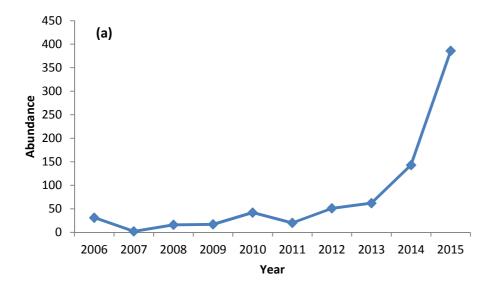
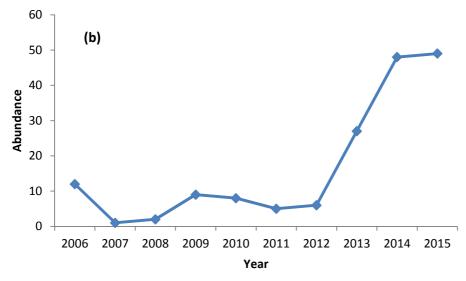


Figure 1. Total length (TL) frequency of Macquarie perch captured in King Parrot Creek between 2006 and 2015. Note: red stars indicate observations of natural recruitment.





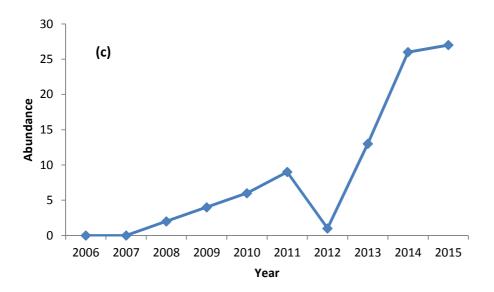


Figure 2. Abundance of (a) Macquarie perch; (b) River blackfish and (c) two-spined blackfish between 2006 and 2015.