



# CAIRNS STOCKED BARRAMUNDI 2011-2020 2020 ANNUAL UPDATE

# Stocked tagged fish, recaptures, survival and growth

The following dashboard provides a summary of tagged Barramundi released by the Cairns Area Fish Stocking Group over the past 10 years.

# **Summary**

- → From 2011-2018 there were 6 releases of tagged Barramundi in Trinity Inlet and the Barron River with a total of 4,350 fish released
- → The average size of released fish ranged from 205-349mm
- ★ The number of recaptures from each release is low when compared with other areas where similar sized fish were tagged and stocked (up to 10% for similar fish stocked in the Fitzroy River)
- ♦ Only the release in the Barron River on 30/10/2018 had a reasonable recapture rate at 5.6%
- ♦ Winter releases in 2014 (911 fish) and 2018 (1,294 fish) yielded just 1 recapture
- → Given the sizes of fish when released the survival rate should be high but the winter releases do not appear to reflect that
- → Due to the low number of recaptures the growth rate needs to be treated with caution but was estimated at 111mm in the first year after release
- → 79% of recaptures from fish released in 2018 were in the same area as tagged (within 1km) with the maximum distance moved being 8km
- → All recaptures were made by fishers from Cairns and close surrounds

Infofish Australia December 2020

#### **CAIRNS STOCKING BARRAMUNDI STOCKING LOCATIONS MEASURE ACTUAL GRAPH** Fish tagged and released 2011 Mulgrave River 255 CAESG BARRAMUNDI RELEASES 2014 Babinda Creek 2018 **Barron River** 545 2018 Trinity Inlet 1739 2012 2013 2014 2015 2016 2017 2018 2019 2020 ■MULGRAVE ■BABINDA ■BARRON ■TRINITY **Release dates** Mulgrave 27/3/2011 CAFSG BARRAMUNDI RELEASES Babinda 27/7/2014 Barron/Trinity 1 1/6/2018 600 Barron/Trinity 2 30/10/2018 6/7/09 18/11/10 1/4/12 14/8/13 27/12/14 10/5/16 22/9/17 4/2/19 18/6/20 Average Low High Fish lengths (mm) on BARRAMUNDI AVERAGE LENGTH ON RELEASE release Mul 349 280 440 Bab 210 300 251 B/T1 150 260 205 B/T2 304 200 390 BARRON/TRINITY 1 BARRON/TRINITY 2 **Recaptures Tagged Recaptured** FISH RELEASED AND RECAPTURE RATE Mul 255 4 (1.6%) Bab 911 1 (0.1%) 600 296 Bar 1 1 (0.3%) Tri 1 998 0 (0.0%) 249 Bar 2 14 (5.6%) 2018B1 2018T1 2018B2 Tri 2 741 6 (0.8%) Growth from 2018 release Number of fish CAIRNS BARRAMUNDI GROWTH 180 160 140 (MW) 120 100 80 60 40 Year 1 growth 111mm Year 2 growth 165mm

Fish movement from 2018 release	Number of fish 19 Recaptured same 15 (78.9%) Maximum distanc 8km		CAIRNS BAR  10 9 9 8 7 7 8 8 9 10 10 10 10 10 10 100 100 100 100	RAMUNDI DISTANCE MOVED  300 400 500 600 700  DAYS OUT
Postcodes of recapture fishers 2018	Number of recapt 21 Postcode 4870 19 4869 1 4868 1			
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## **DATA SOURCES**

Data used in the Cairns Barramundi Crystal Bowl:

→ Tag records and recapture records for the Cairns area at http://crystalbowl.infofishaustralia.com.au/

## **BASIS FOR ANALYSIS**

- ★ Growth calculated using linear trendline from recaptures where fish were out for 90 days or more and had positive growth
- → Tag and recapture locations based on Infofish grid maps for the area with 1km² grids
- → Distance moved was calculated between the grids where fish were tagged and recaptured using Google Earth and was the shortest distance by water between the two locations

## PREVIOUS REPORTS

→ Tagging stocked fish in the Cairns Area 2002-2013

