



LAKE FRED TRITTON REVIEW 2024

INFORMATION RATING



Stocking group: Richmond Fish Stocking Association

Species stocked: Barramundi, Sooty Grunter

Stocking timeframe: 2012-2024

Fish timeframe: 2015-2024

Fisher timeframe: 2020-2024

Lake Fred Tritton link: <https://www.richmond.qld.gov.au/services/recreational-facilities>

Lake Fred Tritton is a small 9ha man-made lake at Richmond. It has been intermittently stocked with Barramundi by the Richmond Fish Stocking Association however the stocking history prior to 2008 is sketchy.

In 2008, 2009 and 2012 there were batch releases of tagged Barramundi that mostly ranged from 200-250mm in length. Additional tagging was carried out by members of the stocking group and Fisheries Queensland during electrofishing surveys.

From 2007-2013 there were 330 Barramundi tagged for 83 recaptures (25.2%) of individual fish and 110 recaptures including fish recaptured multiple times. There were 22 fish recaptured a second time and 6 fish recaptured a third time. Recaptures were recorded up to Jan 2021.

The longest time from tagging and recapture was 4,328 days (11.9 years) for a fish tagged in 2009 and recaptured in 2021 and grew from 399-750mm.

Growth was very variable however average growth by the end of the first year was 257mm and by the end of the fifth year was 530mm.

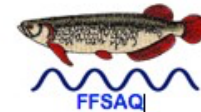
Fishers recapturing fish were mostly local from Richmond (69%), Cairns (Fisheries Queensland staff recapturing fish during electrofishing surveys), Charters Towers and Hughenden.



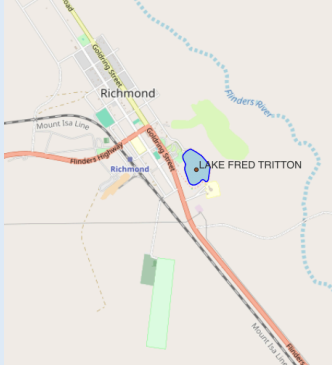

Product of Infish Australia



Supported by Suntag and FFSAQ



LAKE FRED TRITTON

| | | |
|-----------------------------------------------------------------------------------|-------------------------------------|------------------------------------------------------------------------------------|
|  | <p>Lat 20.73°S Lon 143.15°E</p> |  |
|-----------------------------------------------------------------------------------|-------------------------------------|------------------------------------------------------------------------------------|

MEASURE


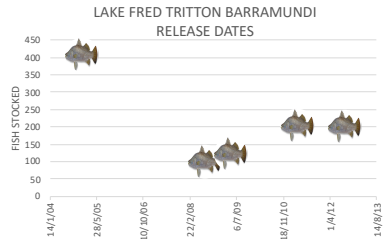


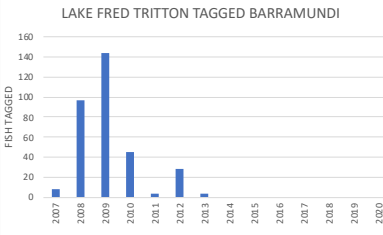
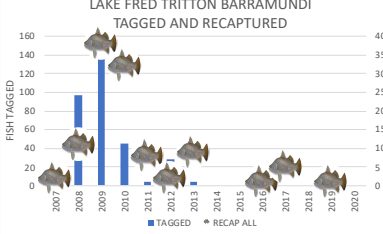
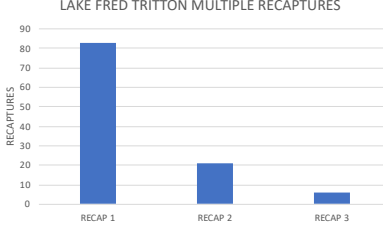
Surface area
Grid map

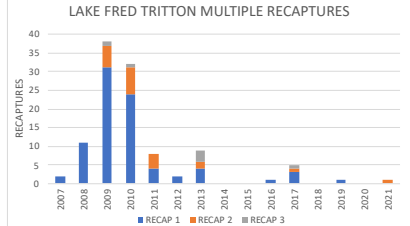
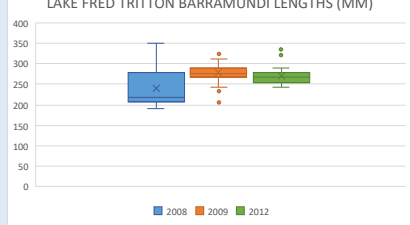
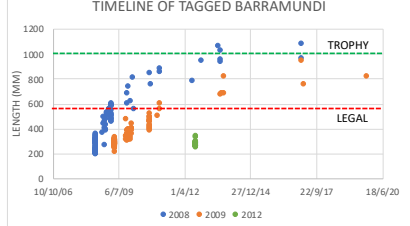
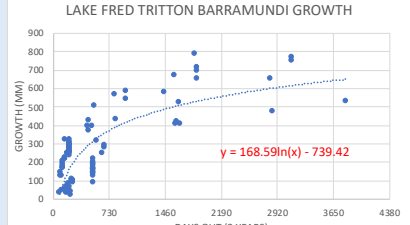
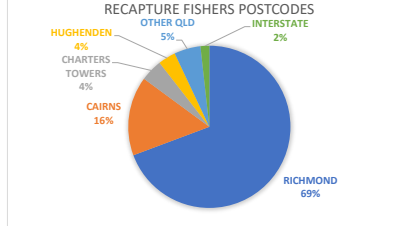
ACTUAL

Surface area 9ha
Map RFR
Grid AY27

MAP or GRAPH



| FISH | ACTUAL | MAP or GRAPH | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------|----------|----------|-------|---------|---------|-----|--------------------------------------------------------------------------------------|-----|------------|------|------------------------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------|-------|-----|-----|-----|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BARRAMUNDI | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | |
| Fish stocked 2005-2018 | <table border="1"> <thead> <tr> <th>Year</th> <th>Fingerlings</th> </tr> </thead> <tbody> <tr> <td>2005</td> <td>406</td> </tr> <tr> <td>2008</td> <td>97</td> </tr> <tr> <td>2009</td> <td>121</td> </tr> <tr> <td>2011</td> <td>200</td> </tr> <tr> <td>Total</td> <td>1025</td> </tr> </tbody> </table> | Year | Fingerlings | 2005 | 406 | 2008 | 97 | 2009 | 121 | 2011 | 200 | Total | 1025 |  | | | | | | | | |
| Year | Fingerlings | | | | | | | | | | | | | | | | | | | | | |
| 2005 | 406 | | | | | | | | | | | | | | | | | | | | | |
| 2008 | 97 | | | | | | | | | | | | | | | | | | | | | |
| 2009 | 121 | | | | | | | | | | | | | | | | | | | | | |
| 2011 | 200 | | | | | | | | | | | | | | | | | | | | | |
| Total | 1025 | | | | | | | | | | | | | | | | | | | | | |
| DATA RELIABILITY | | | | | | | | | | | | | | | | | | | | | | |
| Sample size (fish/year) Tagged (blue arrow) Recaptured (orange arrow) Confidence % Error % 2019-2023 | <table border="1"> <thead> <tr> <th>Reliability level</th> <th>LOW</th> <th>MODERATE</th> <th>MODERATE</th> <th>HIGH</th> </tr> </thead> <tbody> <tr> <td>Samples</td> <td>10</td> <td>41</td> <td>68</td> <td>271</td> </tr> <tr> <td>Confidence</td> <td>80%</td> <td>80%</td> <td>90%</td> <td>90%</td> </tr> <tr> <td>Error</td> <td>20%</td> <td>10%</td> <td>10%</td> <td>5%</td> </tr> </tbody> </table> | Reliability level | LOW | MODERATE | MODERATE | HIGH | Samples | 10 | 41 | 68 | 271 | Confidence | 80% | 80% | 90% | 90% | Error | 20% | 10% | 10% | 5% |   |
| Reliability level | LOW | MODERATE | MODERATE | HIGH | | | | | | | | | | | | | | | | | | |
| Samples | 10 | 41 | 68 | 271 | | | | | | | | | | | | | | | | | | |
| Confidence | 80% | 80% | 90% | 90% | | | | | | | | | | | | | | | | | | |
| Error | 20% | 10% | 10% | 5% | | | | | | | | | | | | | | | | | | |
| TAGGED | | | | | | | | | | | | | | | | | | | | | | |
| Fish tagged 2007-2023 | <table border="1"> <thead> <tr> <th>Year</th> <th>Tagged</th> </tr> </thead> <tbody> <tr> <td>2007</td> <td>8</td> </tr> <tr> <td>2008</td> <td>97</td> </tr> <tr> <td>2009</td> <td>144</td> </tr> <tr> <td>2010</td> <td>45</td> </tr> <tr> <td>2011-13</td> <td>10</td> </tr> <tr> <td>Total</td> <td>330</td> </tr> </tbody> </table> | Year | Tagged | 2007 | 8 | 2008 | 97 | 2009 | 144 | 2010 | 45 | 2011-13 | 10 | Total | 330 |  | | | | | | |
| Year | Tagged | | | | | | | | | | | | | | | | | | | | | |
| 2007 | 8 | | | | | | | | | | | | | | | | | | | | | |
| 2008 | 97 | | | | | | | | | | | | | | | | | | | | | |
| 2009 | 144 | | | | | | | | | | | | | | | | | | | | | |
| 2010 | 45 | | | | | | | | | | | | | | | | | | | | | |
| 2011-13 | 10 | | | | | | | | | | | | | | | | | | | | | |
| Total | 330 | | | | | | | | | | | | | | | | | | | | | |
| Fish recaptured all recaptures 2007-2023 | <table border="1"> <thead> <tr> <th>Year</th> <th>Recaptured</th> </tr> </thead> <tbody> <tr> <td>2007</td> <td>2</td> </tr> <tr> <td>2008</td> <td>11</td> </tr> <tr> <td>2009</td> <td>38</td> </tr> <tr> <td>2010</td> <td>32</td> </tr> <tr> <td>2011-21</td> <td>27</td> </tr> <tr> <td>Total</td> <td>110 (33.0%)</td> </tr> </tbody> </table> | Year | Recaptured | 2007 | 2 | 2008 | 11 | 2009 | 38 | 2010 | 32 | 2011-21 | 27 | Total | 110 (33.0%) |  | | | | | | |
| Year | Recaptured | | | | | | | | | | | | | | | | | | | | | |
| 2007 | 2 | | | | | | | | | | | | | | | | | | | | | |
| 2008 | 11 | | | | | | | | | | | | | | | | | | | | | |
| 2009 | 38 | | | | | | | | | | | | | | | | | | | | | |
| 2010 | 32 | | | | | | | | | | | | | | | | | | | | | |
| 2011-21 | 27 | | | | | | | | | | | | | | | | | | | | | |
| Total | 110 (33.0%) | | | | | | | | | | | | | | | | | | | | | |
| Fish recaptured multiple times 2007-2023 | <table border="1"> <thead> <tr> <th>Recaptured</th> <th></th> </tr> </thead> <tbody> <tr> <td>Once</td> <td>83</td> </tr> <tr> <td>Twice</td> <td>21</td> </tr> <tr> <td>3 times</td> <td>6</td> </tr> </tbody> </table> | Recaptured | | Once | 83 | Twice | 21 | 3 times | 6 |  | | | | | | | | | | | | |
| Recaptured | | | | | | | | | | | | | | | | | | | | | | |
| Once | 83 | | | | | | | | | | | | | | | | | | | | | |
| Twice | 21 | | | | | | | | | | | | | | | | | | | | | |
| 3 times | 6 | | | | | | | | | | | | | | | | | | | | | |

| Timeline of multiple recaptures 2007-2023 | |  | | | | | | | | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------|--------|----------|--------|--------|---------|-----------------|------------------------------------------------------------------------------------|-----------|--------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------|
| Fish sizes in batch releases of tagged fish Bars show range Dots show outliers 2008-2012 | <table border="1"> <thead> <tr> <th>Released</th> <th>Average length</th> </tr> </thead> <tbody> <tr> <td>3/8/08</td> <td>240</td> </tr> <tr> <td>9/5/09</td> <td>278</td> </tr> <tr> <td>15/9/12</td> <td>270</td> </tr> </tbody> </table> | Released | Average length | 3/8/08 | 240 | 9/5/09 | 278 | 15/9/12 | 270 |  | | | | |
| Released | Average length | | | | | | | | | | | | | |
| 3/8/08 | 240 | | | | | | | | | | | | | |
| 9/5/09 | 278 | | | | | | | | | | | | | |
| 15/9/12 | 270 | | | | | | | | | | | | | |
| Timeline of tagged stocked fish released in batches 2008-2021 | <table border="1"> <thead> <tr> <th>Date Released</th> <th>Recaptured</th> </tr> </thead> <tbody> <tr> <td>3/8/08</td> <td>97</td> </tr> <tr> <td>9/5/09</td> <td>121</td> </tr> <tr> <td>15/9/12</td> <td>28</td> </tr> </tbody> </table> <p>Longest time out 3,826 days (10.5 years)</p> | Date Released | Recaptured | 3/8/08 | 97 | 9/5/09 | 121 | 15/9/12 | 28 |  | | | | |
| Date Released | Recaptured | | | | | | | | | | | | | |
| 3/8/08 | 97 | | | | | | | | | | | | | |
| 9/5/09 | 121 | | | | | | | | | | | | | |
| 15/9/12 | 28 | | | | | | | | | | | | | |
| Growth of tagged stocked fish 2008-2021 | <table border="1"> <thead> <tr> <th>Year</th> <th>Growth(mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>257</td> </tr> <tr> <td>2</td> <td>374</td> </tr> <tr> <td>3</td> <td>443</td> </tr> <tr> <td>4</td> <td>492</td> </tr> <tr> <td>5</td> <td>529</td> </tr> </tbody> </table> | Year | Growth(mm) | 1 | 257 | 2 | 374 | 3 | 443 | 4 | 492 | 5 | 529 |  |
| Year | Growth(mm) | | | | | | | | | | | | | |
| 1 | 257 | | | | | | | | | | | | | |
| 2 | 374 | | | | | | | | | | | | | |
| 3 | 443 | | | | | | | | | | | | | |
| 4 | 492 | | | | | | | | | | | | | |
| 5 | 529 | | | | | | | | | | | | | |
| Postcodes of recapture fishers 2007-2021 | <table border="1"> <thead> <tr> <th>Number of recaptures</th> <th>Region</th> </tr> </thead> <tbody> <tr> <td>116</td> <td>Richmond</td> </tr> <tr> <td>69%</td> <td>Cairns</td> </tr> <tr> <td>16%</td> <td>Charters Towers</td> </tr> <tr> <td>4%</td> <td>Hughenden</td> </tr> </tbody> </table> | Number of recaptures | Region | 116 | Richmond | 69% | Cairns | 16% | Charters Towers | 4% | Hughenden |  | | |
| Number of recaptures | Region | | | | | | | | | | | | | |
| 116 | Richmond | | | | | | | | | | | | | |
| 69% | Cairns | | | | | | | | | | | | | |
| 16% | Charters Towers | | | | | | | | | | | | | |
| 4% | Hughenden | | | | | | | | | | | | | |

DATA SOURCES

Data used in the Lake Fred Tritton stocked Barramundi Crystal Bowl:

- Tag records and recapture records for Lake Fred Tritton at <http://crystalbowl.infofishaustralia.com.au/>

BASIS FOR ANALYSIS

- Tag locations based on Infofish grid map RFR for the lake with a single grid AY27 covering the lake due to its small size
- Growth based on fish out for 90 or more days and had positive growth