



DALY RIVER CLASSIC BARRAMUNDI
2012-2021

AVAILABLE		AVAILABLE	
Tagged fish	✓	Recaptures	✓
Postcodes	✓	Competitions	✓
Species		Barramundi	
Catch rates	✓	Fish sizes	✓
Growth	✓	Survival	✓
Tag locations	✓	Fish Movement	✓

Observations

- The Barra Classic has been held on the Daly River since the early 1980's and run by the Darwin Game Fishing Club and this dashboard examines the last decade from 2012-2021
- The competition is normally held over 5 days in May however was cancelled in 2020 due to Covid and held in late April in 2021
- The number of fish tagged in the competition is highly variable and dependant on tides, late wet season river flows and the strength of recruitment in previous years with 1,486 fish tagged in 2012 and then 201 in 2013
- For the Barra Classic the trend in the overall catch rate and catch rate for legal fish has varied for the same reasons that the number of fish tagged has varied and the overall catch rate was highest in 2012 at 2.0 fish/fisher day and lowest in in 2019 at 0.3 fish/fisher day
- The recapture rate for Classic fish was 3.7% and slightly below the Fisheries rate of 5.0% but well below the rate of 43.8% in the Million Dollar Fish competition however there are likely to be a range of factors contributing to that difference
- The length of fish tagged in the Classic was highly variable depending on recruitment however the average length was around the legal minimum length of 550mm in most years with 663mm being the highest average length in 2015
- While strong recruitment is generally associated with above average wet seasons this appears to be variable with strong recruitment in 2017 and 2020 and poor recruitment in 2013 and maybe 2019
- The Daly River is a strong attractor of visiting fishers from other states and recaptures of fish tagged in the Classic highlight this with 60% of recaptures coming from fishers that live 2,000-3,000km from the river in all states except Tasmania

Infofish Australia

March 2022

Product of Infofish Australia

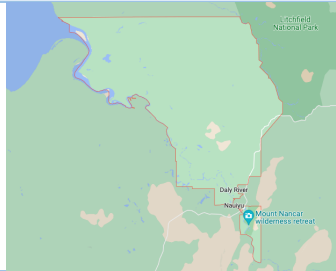


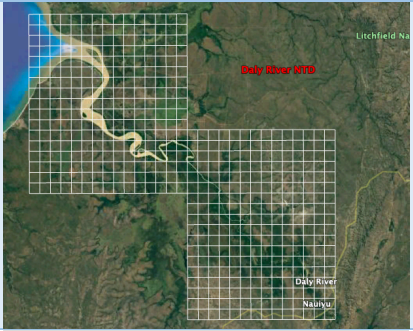
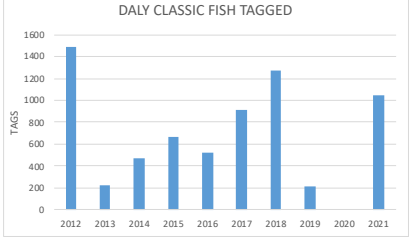
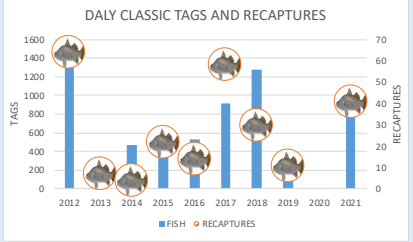
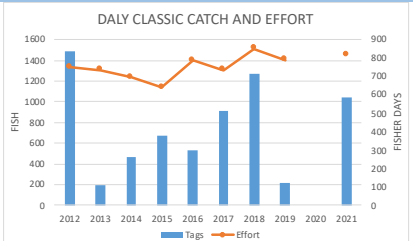
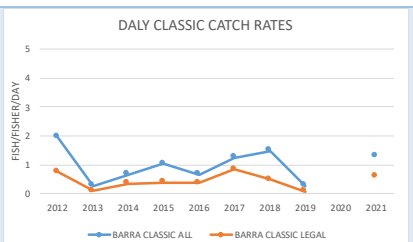


Supported by AFANT



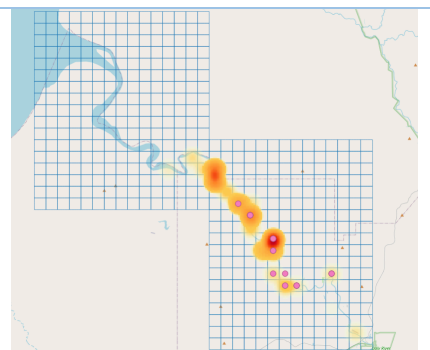
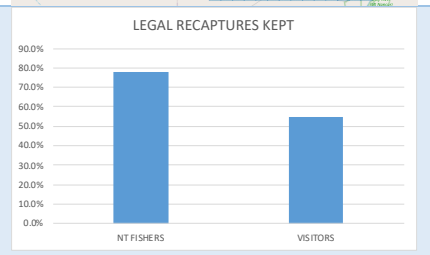
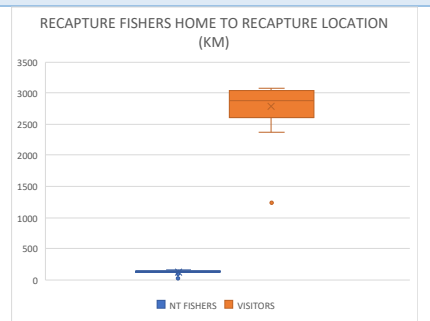
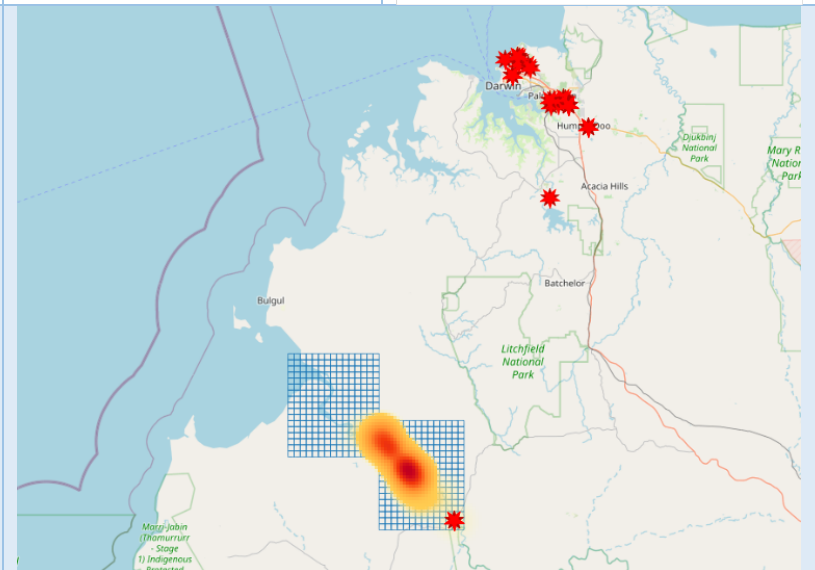
Supported by Darwin Game Fishing Club



MEASURE	ACTUAL			GRAPH or MAP
DALY RIVER				BARRAMUNDI
				
Grid map	Daly River	NTD		
Classic fish tagged 2012-2021	Highest Tagged 2012 1486	Lowest 2013 219	Now 2021 1046	
Classic fish recaptured from year tagged 2012-2021	Highest Recaptured 2017 58 6.3%	Lowest 2014 4 0.9%	Now 2021 41 3.9%	
Classic catch and effort number of fish fisher days 2012-2021	Highest Catch 2012 1486	Lowest 2013 201 2015 640	Now 2021 1046 815	
Classic catch rates fish 400mm+ legal fish 550mm+ fish/fisher/day	Highest Catch 2012 2.0	Lowest 2013 0.3 2019 0.1	Now 2021 1.3 2021 0.6	

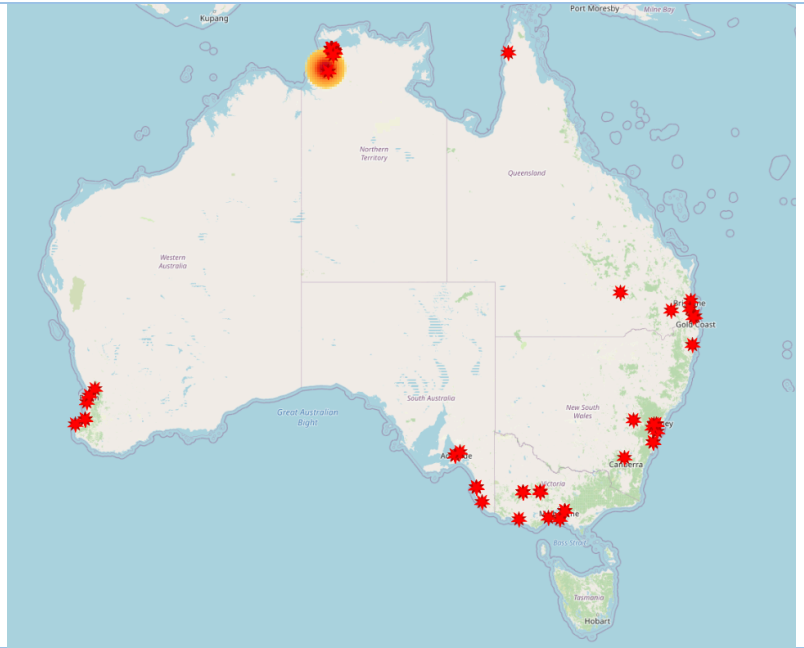
<p>Comparison of recapture rates Classic and Fisheries 2012-2021 Million Dollar Fish 2015-2021</p>	<table border="0"> <tr> <td>Classic</td> <td>3.7%</td> </tr> <tr> <td>Fisheries</td> <td>5.0%</td> </tr> <tr> <td>MDF</td> <td>43.8%</td> </tr> </table>	Classic	3.7%	Fisheries	5.0%	MDF	43.8%																			
Classic	3.7%																									
Fisheries	5.0%																									
MDF	43.8%																									
<p>Classic average and maximum length (mm) Bars show size range Dots show outliers 2012-2021</p>	<table border="0"> <tr> <td>Highest</td> <td>Lowest</td> <td>Now</td> </tr> <tr> <td colspan="3">Average length</td> </tr> <tr> <td>2015</td> <td>2017</td> <td>2021</td> </tr> <tr> <td>663</td> <td>533</td> <td>559</td> </tr> <tr> <td colspan="3">Max length</td> </tr> <tr> <td>2016</td> <td>2012</td> <td>2021</td> </tr> <tr> <td>1270</td> <td>1040</td> <td>980</td> </tr> </table>	Highest	Lowest	Now	Average length			2015	2017	2021	663	533	559	Max length			2016	2012	2021	1270	1040	980				
Highest	Lowest	Now																								
Average length																										
2015	2017	2021																								
663	533	559																								
Max length																										
2016	2012	2021																								
1270	1040	980																								
<p>Classic average length (mm)</p>																										
<p>Classic percentage sizes undersize <550mm legal-trophy 550-999mm trophy 1000mm+ 2012-2021</p>	<table border="0"> <tr> <td>Highest</td> <td>Lowest</td> <td>Now</td> </tr> <tr> <td colspan="3">Legal-trophy</td> </tr> <tr> <td>2017</td> <td>2019</td> <td>2021</td> </tr> <tr> <td>41%</td> <td>4%</td> <td>33%</td> </tr> <tr> <td colspan="3">Trophy</td> </tr> <tr> <td>2013</td> <td>2012</td> <td>2021</td> </tr> <tr> <td>4.5%</td> <td>0.1%</td> <td>0%</td> </tr> </table>	Highest	Lowest	Now	Legal-trophy			2017	2019	2021	41%	4%	33%	Trophy			2013	2012	2021	4.5%	0.1%	0%				
Highest	Lowest	Now																								
Legal-trophy																										
2017	2019	2021																								
41%	4%	33%																								
Trophy																										
2013	2012	2021																								
4.5%	0.1%	0%																								
<p>Top taggers 2012-2021 2019-2021</p>	<table border="0"> <tr> <td>2012-2021</td> <td>Fish</td> </tr> <tr> <td>Shane Compain</td> <td>155</td> </tr> <tr> <td>Terry Ryan</td> <td>134</td> </tr> <tr> <td>Eddie Carroll</td> <td>84</td> </tr> <tr> <td>Skevos Politis</td> <td>81</td> </tr> <tr> <td>Peter Politis</td> <td>81</td> </tr> </table>	2012-2021	Fish	Shane Compain	155	Terry Ryan	134	Eddie Carroll	84	Skevos Politis	81	Peter Politis	81	<table border="0"> <tr> <td>2019-2021</td> <td>Fish</td> </tr> <tr> <td>Chris Errity</td> <td>34</td> </tr> <tr> <td>James Park</td> <td>33</td> </tr> <tr> <td>Terry Ryan</td> <td>25</td> </tr> <tr> <td>Kelly Schipp</td> <td>22</td> </tr> <tr> <td>Stephen Bormann</td> <td>21</td> </tr> </table>	2019-2021	Fish	Chris Errity	34	James Park	33	Terry Ryan	25	Kelly Schipp	22	Stephen Bormann	21
2012-2021	Fish																									
Shane Compain	155																									
Terry Ryan	134																									
Eddie Carroll	84																									
Skevos Politis	81																									
Peter Politis	81																									
2019-2021	Fish																									
Chris Errity	34																									
James Park	33																									
Terry Ryan	25																									
Kelly Schipp	22																									
Stephen Bormann	21																									
<p>Timeline of Barramundi tagged and river flows 2012-2021 2013 low catch rate impacted by high river flow</p>																										

<p>Years fish survive after tagging tags and recaptures 1990-2021</p>	<p>Recaptures in</p> <table border="0"> <tr><td>Year 1</td><td>2124</td></tr> <tr><td>Year 2</td><td>1044</td></tr> <tr><td>Year 5</td><td>77</td></tr> <tr><td>Year 10</td><td>3</td></tr> <tr><td>Longest years out</td><td>11.9</td></tr> </table>	Year 1	2124	Year 2	1044	Year 5	77	Year 10	3	Longest years out	11.9			
Year 1	2124													
Year 2	1044													
Year 5	77													
Year 10	3													
Longest years out	11.9													
<p>Daly Barramundi recruits growth 2018 (typical year) May-Oct 2018 (Fisheries) May-Jun 2019 (Classic)</p>	<p>Average length (mm)</p> <table border="0"> <tr><td>Year 1</td><td>May-Jun</td><td>257</td></tr> <tr><td></td><td>Jul-Aug</td><td>278</td></tr> <tr><td></td><td>Sep-Oct</td><td>349</td></tr> <tr><td>Year 2</td><td>May-Jun</td><td>477</td></tr> </table>	Year 1	May-Jun	257		Jul-Aug	278		Sep-Oct	349	Year 2	May-Jun	477	
Year 1	May-Jun	257												
	Jul-Aug	278												
	Sep-Oct	349												
Year 2	May-Jun	477												
<p>Daly Barramundi recruits and river flow (not adjusted for effort) 2012-2021 Year 1 (Fisheries) Year 2 (Classic)</p>	<p>Strong recruitment 2014 2017 2020 Poor recruitment 2013 2019* * no year 2 Classic data</p>													
<p>Barramundi movement for Classic fish 2012-2021</p>	<p>Recaptures 58 Same area 31 (82%) Down river 11 (19%) Up river 16 (28%) Max distance 82km</p>													
<p>Heat map showing where fish were tagged in Classic 2012-2021</p>	<p>Fish tagged 6794 Fish with locations 1727 (25.4%) Hottest spot S bends</p>													
<p>Recaptures (green dots) for fish tagged in Classic 2012-2021</p>	<p>Total recaptures 251</p>													

<p>Recaptures by visiting fishers (pink dots) for fish tagged in Classic 2019-2021</p>	<p>Recaptures by visiting fishers 45</p>										
<p>Percentage of legal fish recaptured and kept for Classic fish 2019-2021</p>	<p>NT fishers (27 legal fish) 78% Visitors (42 legal fish) 55%</p>	<p>LEGAL RECAPTURES KEPT</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Percentage</th> <th>Legal Fish Count</th> </tr> </thead> <tbody> <tr> <td>NT FISHERS</td> <td>78.0%</td> <td>27</td> </tr> <tr> <td>VISITORS</td> <td>55.0%</td> <td>42</td> </tr> </tbody> </table>	Category	Percentage	Legal Fish Count	NT FISHERS	78.0%	27	VISITORS	55.0%	42
Category	Percentage	Legal Fish Count									
NT FISHERS	78.0%	27									
VISITORS	55.0%	42									
<p>Distance from recapture fisher's home to recapture location for Classic fish 2019-2021</p>	<p>Average distance (km) NT fishers 119 Visiting fishers 2783</p>	<p>RECAPTURE FISHERS HOME TO RECAPTURE LOCATION (KM)</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Average Distance (km)</th> </tr> </thead> <tbody> <tr> <td>NT FISHERS</td> <td>119</td> </tr> <tr> <td>VISITORS</td> <td>2783</td> </tr> </tbody> </table>	Category	Average Distance (km)	NT FISHERS	119	VISITORS	2783			
Category	Average Distance (km)										
NT FISHERS	119										
VISITORS	2783										
<p>Where NT fishers live that recaptured fish from Classic 2019-2021</p> <p>Total 27 (40%)</p>											

Where visiting fishers live that recaptured fish from Classic 2019-2021

QLD	7
NSW	9
ACT	1
VIC	10
TAS	0
SA	7
WA	6
Total	40 (60%)



DATA SOURCES

Data used in the Daly Barramundi Crystal Bowl are:

- Tag records from Barra Classic competition provided by Northern Territory Fisheries and available from <http://crystalbowl.infofishaustralia.com.au/>
- Tag records provided from monitoring by electrofishing by Northern Territory Fisheries and available from <http://crystalbowl.infofishaustralia.com.au/>
- Recapture records of tagged fish collected by AFANT and available from <http://crystalbowl.infofishaustralia.com.au/>
- Locations based on Infofish grid maps Daly River (NTD), Daly River Nancar (DRN), Daly River Ooloo (DRO), Daly River Claravale (DRC) and Channel Point (CPD) where location specified
- River flow records for Daly River at the Mount Nancar station G8140040 from <https://nt.gov.au/environment/water/water-data-portal>

BASIS FOR ANALYSIS

- Tag data were available for all years from the Barra Classic however there are no tag records for the last day of the Classic in 2015 – 17/5/2015
- Recruitment has been assessed using Fisheries monitoring data for fish from 0-400mm from May-Sep as year 1 recruits and Classic fish from 400-550mm as year 2 recruits and the data have not been adjusted for effort so that reduces the reliability of the recruitment data
- Locations have been plotted at the grid scale (2km²) where there were sufficient data to identify the location in map NTD and a heat map produced showing tagging however only 25.4% of locations had sufficient data to identify a grid so the map may not reflect the overall effort
- Survival was based on the survival rate since 1990 of tags in each year until exhausted which resulted in a 50% survival/attrition rate per year
- For recapture fishers where they live was obtained for the fisher's address, town or suburb, or postcode which ever was available
- Distance from recapture fisher's home to recapture location calculated as the straight line distance using Google Earth