



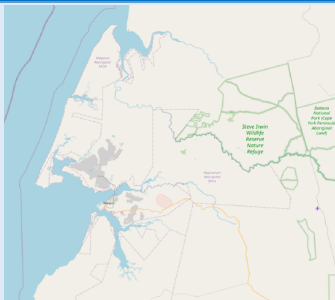
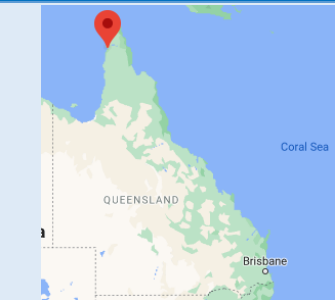
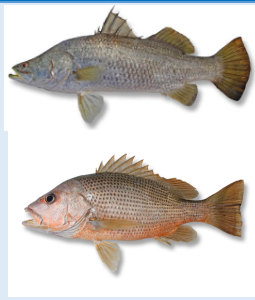
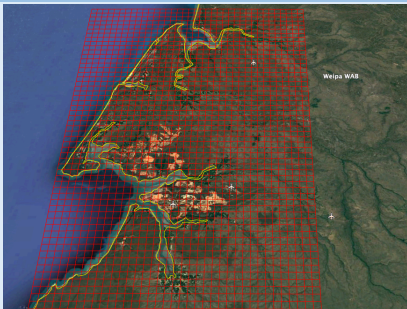
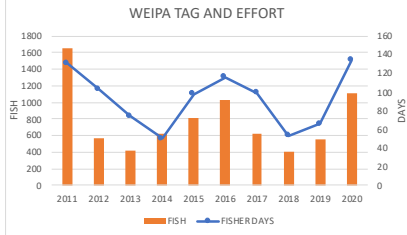
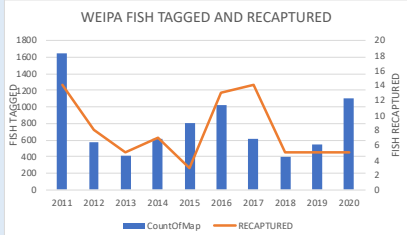
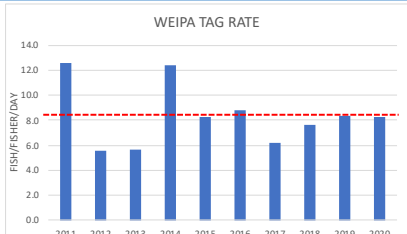
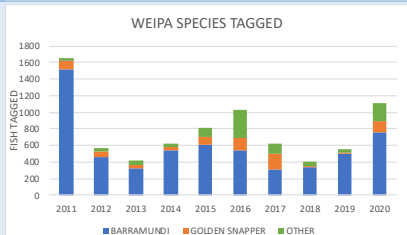
## WEIPA 2011-2020 2020 REVIEW

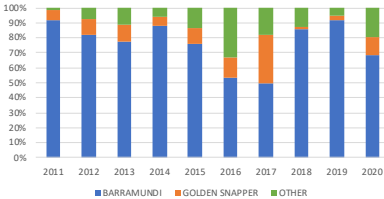
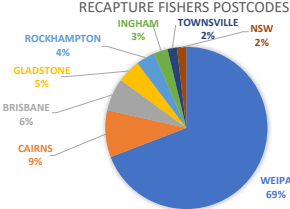

AVAILABLE		AVAILABLE	
Tagged fish	✓	Recaptures	✓
Postcodes	✓	Competitions	
Species		Barramundi	
Tag rates	✓	Fish sizes	✓
Growth	✓	Tag locations	
Fish movement	✓		
Species		Golden Snapper	
Tag rates	✓	Fish sizes	✓
Growth		Tag locations	
Fish movement	✓		



### Summary


- From 2011-2020 there were 7,755 fish tagged in the Weipa area for 79 recaptures (1.0%)
- Key species tagged were Barramundi 5,910 (76.2%) for 64 (1.1%) recaptures and Golden Snapper 840 (10.8%) for 7 (0.8%) recaptures accounting for 87.0% of all fish tagged
- There were 134 fisher days in 2020 which was the highest in the last 10 years and did not appear to be affected by Covid-19
- The tag rate for 2020 was 8.3 fish/fisher day and close to the 10 year average historic catch rate of 8.4 fish/fisher day
- For Barramundi the tag rate was a high 11.6 fish/fisher day in 2011 and a low of 3.1 in 2017 and was 5.6 in 2020
- For Golden Snapper the tag rate ranged was 0.2 fish/fisher day in 2018 down from 2.0 in 2017 however this was likely influenced by a change in those tagging
- Barramundi tagged in the Weipa area were mostly below the legal limit with just 11.4% being over the legal limit over the 10 years
- Barramundi growth was very variable but averaged just 81mm by the end of a year and 187mm by the end of year 5
- Of 64 Barramundi recaptured 30 (46.9%) were recaptured in the same area as tagged with the furthest movement being 20km upriver and 55km downriver
- All 7 Golden Snapper recaptured were caught in the same area as tagged with the longest time at liberty being 323 days (0.9 years)
- Weipa is mostly a localised fishery with 69% of recapture fishers being local while the remaining fishers came from widespread areas from Cairns to NSW


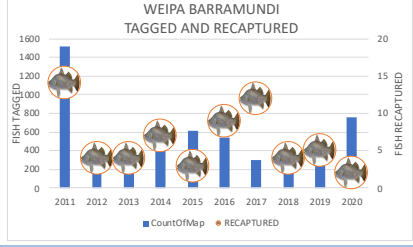
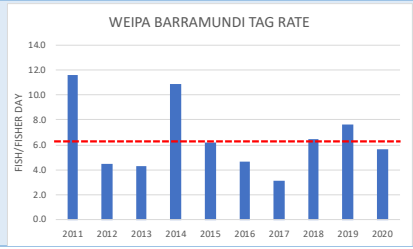
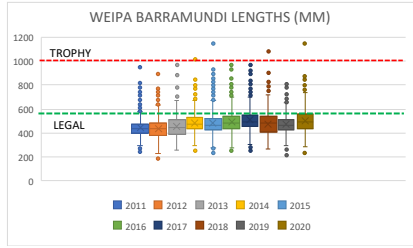
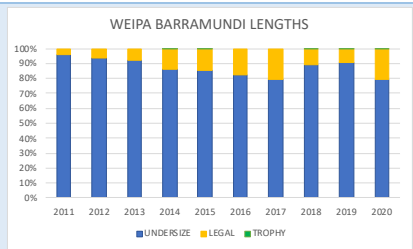
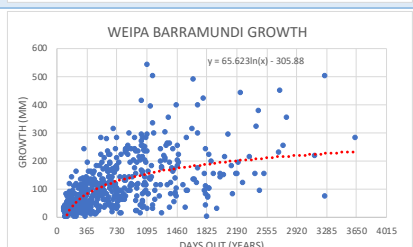
Infofish Australia  
March 2021

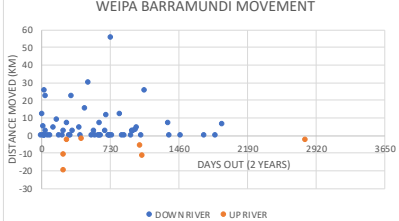
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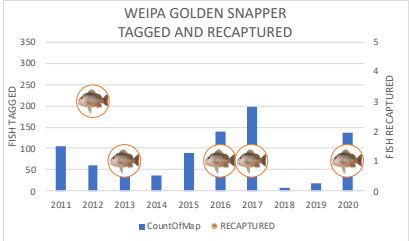
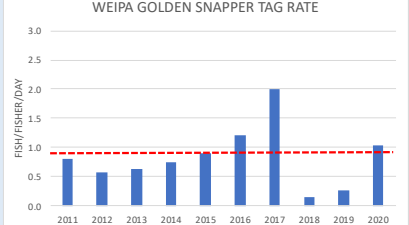
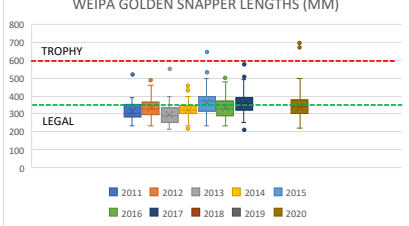
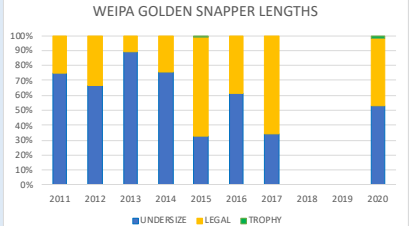
<b>Species composition</b> <b>Percentage tagged</b> <b>2011-2020</b>	<table><tr><td>Barramundi</td><td>76.2%</td></tr><tr><td>Dusky Flathead</td><td>10.8%</td></tr><tr><td>Mangrove Jack</td><td>3.0%</td></tr><tr><td>King Threadfin</td><td>2.2%</td></tr><tr><td>Goldspotted Rockcod</td><td>1.8%</td></tr></table>	Barramundi	76.2%	Dusky Flathead	10.8%	Mangrove Jack	3.0%	King Threadfin	2.2%	Goldspotted Rockcod	1.8%	
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<b>Postcodes of recapture</b> <b>fishers</b> <b>2011-2020</b>	<table><tr><td>Fishers with postcodes</td><td>111</td></tr><tr><td>Region</td><td>Fishers</td></tr><tr><td>Weipa</td><td>69%</td></tr><tr><td>Cairns</td><td>9%</td></tr><tr><td>Brisbane</td><td>6%</td></tr></table>	Fishers with postcodes	111	Region	Fishers	Weipa	69%	Cairns	9%	Brisbane	6%	
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<b>Previous report</b>	<p>Weipa tagging 1985-2014 available at <a href="http://infofishaustralia.com.au/weipa/">http://infofishaustralia.com.au/weipa/</a></p>											

	
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MEASURE	ACTUAL	GRAPH or MAP
Barramundi		
Barramundi tagged and recaptured 2011-2020	TAGGED 5910 RECAPTURED 64 RECAPTURE RATE 1.1%	
Tag rate Barramundi Fish/fisher day 2011-2020	HIGHEST TAG RATE 2011 11.6 LOWEST TAG RATE 2017 3.1 NOW TAG RATE 2020 5.6 10 YEAR AVERAGE 6.4	
Average length (mm) Bars show smallest to largest fish Dots show outliers 2011-2020	HIGHEST Average length 2017 510 LOWEST Average length 2012 438 NOW Average length 2020 505 Largest 2015 1150 2019 810 2020 1150	
Fish lengths percentage Undersize <580mm Legal 580-1000mm Trophy 1000+mm 2011-2020	HIGHEST Legal 2017 20.3 LOWEST Legal 2011 4.2 NOW Legal 2020 20.6 Trophy 2019 0.4 2011 0 2020 0.1	
Barramundi growth at the end of each year based on recaptures of tagged fish All years	Recaptures 542 Growth end of year (mm) Year 1 81 Year 2 127 Year 3 153 Year 4 172 Year 5 187	
Grid locations of tagged fish (map WAB) 2011-2020	Grids where most fish caught Not for publication	

<p><b>Barramundi movements within rivers and creeks distance moved (km) recaptures 2011-2020</b></p>	<p>Recaptures 64 Recaptured same area 30 (46.9%) Longest movement in rivers 20km upstream 55km downstream</p>	<p>WEIPA BARRAMUNDI MOVEMENT</p> 
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MEASURE	ACTUAL	GRAPH or MAP
Golden Snapper		
Golden Snapper tagged and recaptured 2011-2020	TAGGED 840 RECAPTURED 7 RECAPTURE RATE 0.8%	
Tag rate Golden Snapper Fish/fisher day 2011-2020	HIGHEST TAG RATE 2017 2.0 LOWEST TAG RATE 2018 0.2 NOW TAG RATE 2020 1.0  10 YEAR AVERAGE 0.9	
Average length (mm) Bars show smallest to largest fish Dots show outliers 2011-2020	HIGHEST Average length 2015 366 LOWEST Average length 2011 313 NOW Average length 2020 343  Largest 2015 650 2014 460 2020 700	
Fish lengths percentage Undersize <350mm Legal 350-600mm Trophy 600+mm 2011-2020	HIGHEST Legal 2015 66.3 LOWEST Legal 2013 10.6 NOW Legal 2020 45.7  Trophy 2015 1.1 2017 0 2020 1.4	
Golden Snapper growth at the end of each year based on recaptures of tagged fish from 2011-2020	Recaptures 7 Insufficient data	
Grid locations of tagged fish (map WAB) 2011-2020	Grids where most fish caught Not for publication	

<b>Golden Snapper movement</b> <b>Distance moved (km)</b> <b>2011-2020</b>	Recaptures 7 Recaptured same area 7 (100%) Longest time out 323 (0.9 days)	
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## Data sources

Data used in the Weipa Crystal Bowl are:

- Tag records and recapture records for the area at <http://crystalbowl.infofishaustralia.com.au/>

## Basis for analysis

- Tag rates calculated as number of fish tagged/fisher day for taggers with a minimum of 12 fisher days (at least 1 per month) to provide an acceptable tag rate
- For Barramundi undersized fish are <580mm, legal fish are ≥580 and <1000mm and trophy fish are >1000mm
- For Golden Snapper undersized fish are <350mm, legal fish are ≥350 and <600mm and trophy fish are ≥600mm
- Growth calculated using a logarithmic or linear trendline from recaptures where fish were out for 90 days or more and had positive growth
- Locations based on Infofish grid map WAB and other grid maps where fish were recaptured outside the area
- Movement distance calculated as the shortest distance by water from the tag to the recapture location