

LAKE MAROON REVIEW JUNE 2025

INFORMATION RATING



Stocking group: Maroon-Moogerah Fish Management Association

Species stocked: Australian Bass, Golden Perch, Silver Perch, Mary River Cod

Stocking timeframe: 2014-2023

Fish timeframe: 2016-2025

Fisher timeframe: 2021-2025

DPI link: <https://www.daf.qld.gov.au/rsa/sips-dams-and-weirs/profile?dam=maroon-dam>

Lake Maroon boat ramp was closed from 20/2/2025 – 20/6/2025 due to civil works to improve dam amenities.

Lake Maroon has been regularly stocked with Australian Bass, Golden Perch, Silver Perch and Mary River Cod. While Bass and Golden Perch have been stocked in high numbers the ratio of fish tagged is 62 Bass to 2 Golden Perch for every 10,000 fingerlings stocked.



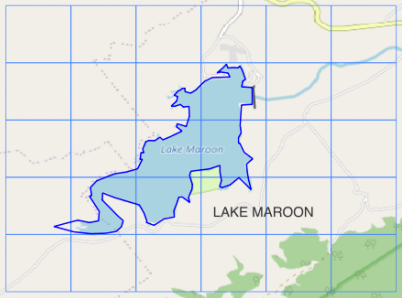
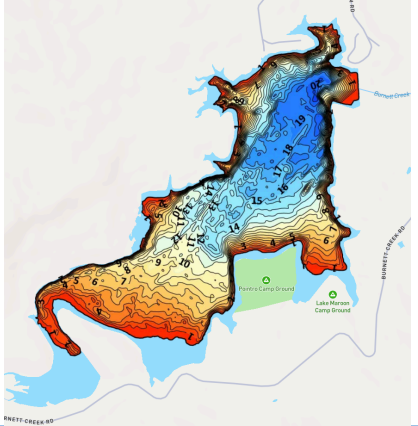
Based on recaptures Lake Maroon is mostly fished by locals and those living within 100km coming from Ipswich, Brisbane, Gold Coast and the Scenic Rim and is mostly an experiential fishery with a low-moderate harvest level.

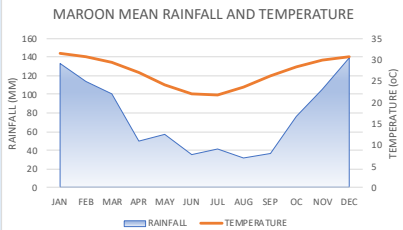
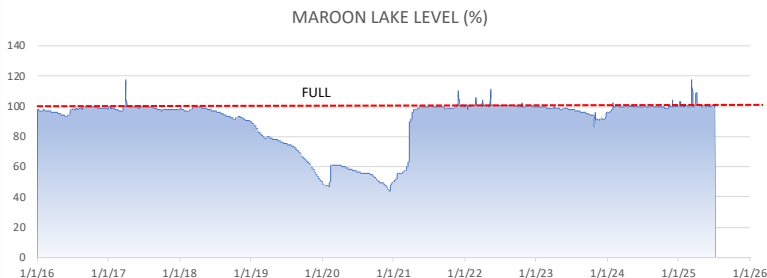
It is fished year-round with a slight drop in activity over winter. It is fished throughout the week with greatest activity over the weekend with 54% of recaptures occurring on weekends. However taggers prefer the weekdays with 72% of fish tagged then. Avoiding the busier times on the weekends could be influencing this.

The tag rate for Bass remained consistently high from 2016-2023 at an average of 8-10 fish/day however fell to 5.5 in 2024. Reports from fishers supported the fall in catch rate. As the lake was closed for a large part of the first half of this year there have not been enough days fished to provide a reliable tag rate. However the fall in catch rates has resulted in some tagger effort shifting to other lakes such as Wivenhoe and Moogerah where the catch rates are higher.

Despite Lake Maroon reaching 118% in Mar 2025, it doesn't spill like other lakes. No fish have been recorded as being caught outside the lake over the entire period of tagging.

The longest time out for a Bass after tagging is mostly around 13 years however 1 fish was recaptured after 19.4 years.

LAKE MAROON		LOCATION
	Lake Maroon 27.19°S 152.65°E	
LAKE	ACTUAL	GRAPH or MAP
Grid map Lake Maroon LMM		
Surface area Bathymetry	Surface area 3.5km ²	

ENVIRONMENTAL				
Mean monthly rainfall (mm) Mean air temperature (oC) All years	Rainfall High Low Temp High Low	Month Dec Aug Month Jan Jul	mm 139 32 oC 31 22	
Lake level 2016-2025 2025 Jan-Jun				

FISHERS	ACTUAL	GRAPH or MAP
DATA RELIABILITY		
Sample size (days fished)	Reliability level	
Tag days (blue arrow)	Samples	
Recaptures (orange arrow)	Confidence	
Confidence %	Error	
Error %		
2021-2025		
TYPE OF FISHERY		
Seasonality	Months most fished	
Mean rainfall (mm) and temperature (oC)	Fishers combined	
Days combined (224)	Nov	
Taggers	Oct	
Recapture fishers	Feb	
2021-2025		
Harvest or experiential	Bass legal fish harvest rate	
Harvest rate of recaptured legal Bass by recfishers (ex-taggers)	Legal fish	
2021-2025	Kept	
2025 Jan-Jun	Released	
Local or visitor fishery	Recapture fishers	
Where recapture fishers live	Local	
2021-2025	Visitors	
2025 Jan-Jun		
Recapture fishers by gender (ex-taggers)	Recaptures	
2021-2025	Male	
2025 Jan-Jun	Female	

LOW	MODERATE	MODERATE	HIGH		
10	41	68	271	384	664
80%	80%	90%	90%	95%	99%
20%	10%	10%	5%	5%	5%

MAROON FISHING SEASONALITY

RAINFALL (MM)

TEMPERATURE (oC) AND DAYS

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

RAINFALL

TEMPERATURE

DAYS FISHED

TYPE OF FISHER

HARVEST

EXPERIENTIAL

0% 20% 40% 60% 80% 100%

KEPT

RELEASED

TYPE OF FISHER

LOCAL

VISITOR

0% 20% 40% 60% 80% 100%

LOCAL

INTRASTATE

INTERSTATE

GENDER OF RECAPTURE FISHERS

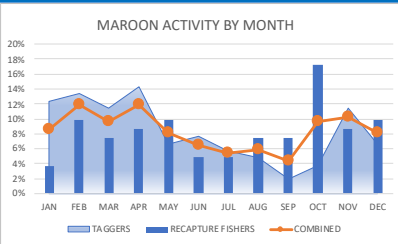
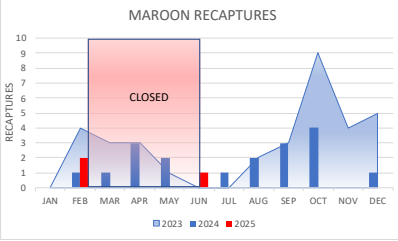
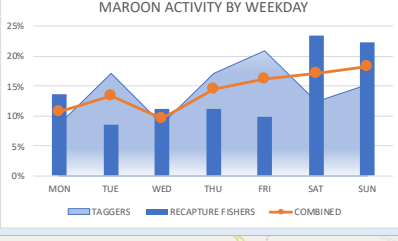
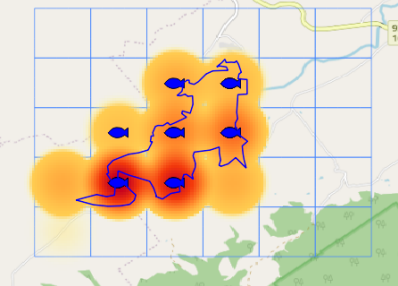
MALE

FEMALE

0% 20% 40% 60% 80% 100%

MALE

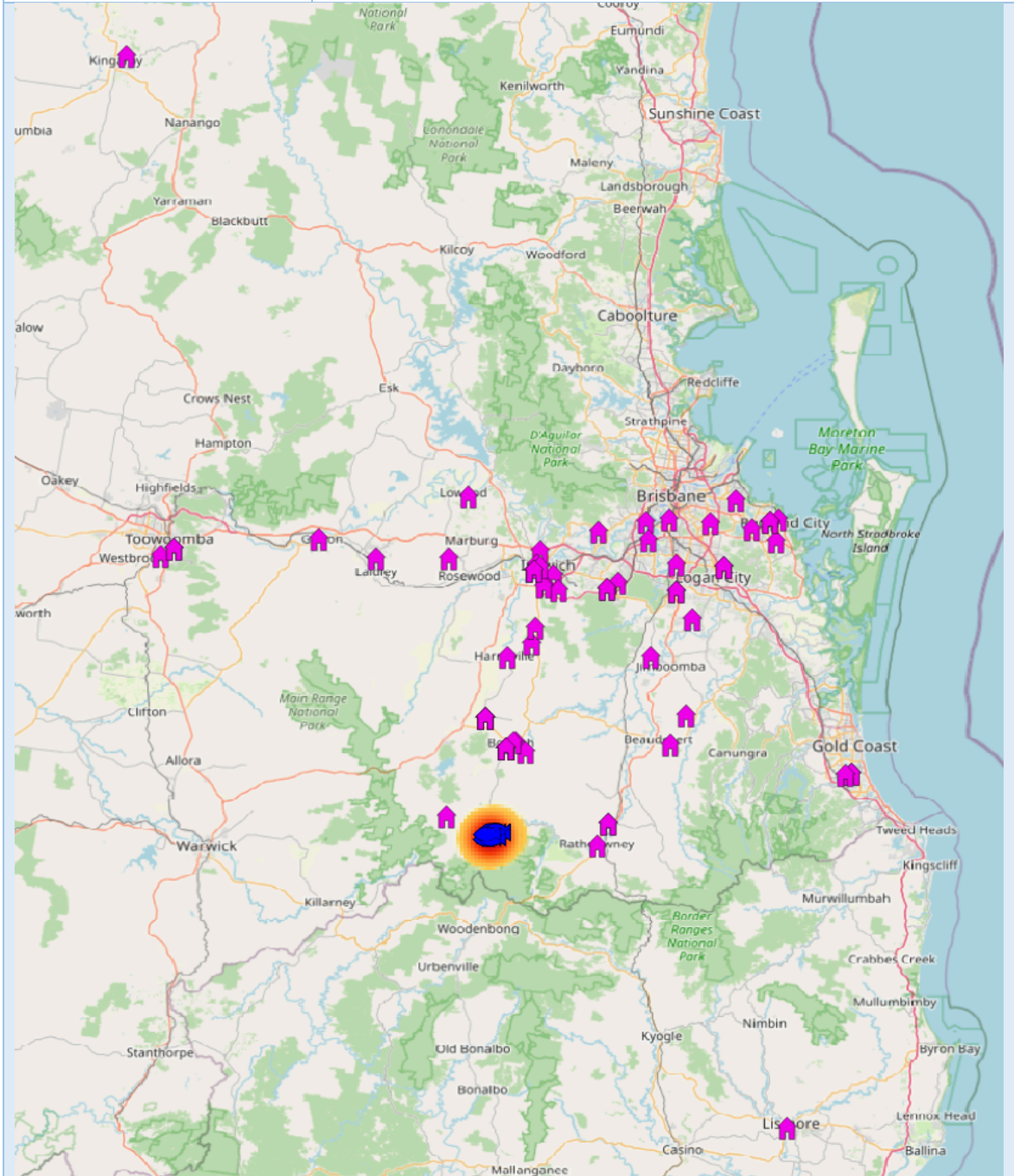
FEMALE




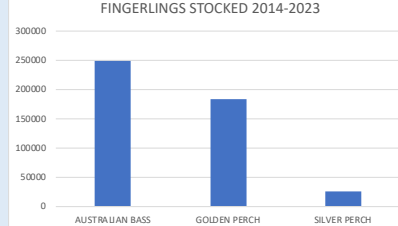
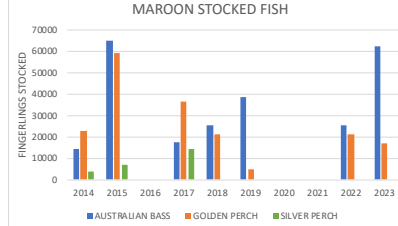
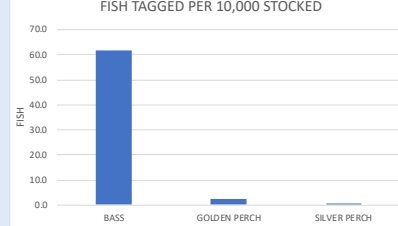

ACTIVITY					
Monthly activity Days fished Taggers (105) Recapture fishers (81) 2021-2025 2025 Jan-Jun	Taggers	Month	%		
		Apr	14%		
		Feb	13%		
		Jan	12%		
		Oct	17%		
		May	10%		
Monthly activity Recaptures 2023-2025 2025 Jan-Jun	Maroon was closed from 20/2/2025-20/6/2025 No recaptures				
Weekday activity Days fished Taggers (105) Recapture fishers (81) 2021-2025 2025 Jan-Jun	Taggers	Day	%		
		Weekend	28%		
		Weekdays	72%		
		Recaps	Weekend		46%
		Weekdays	54%		
Location activity Tagged (red-orange heat map) Recaptures (blue fish) 2021-2025 2025 Jan-Jun	Tagged Recaptured		892 85		

EFFORT														
Lake level (%) Days fished Taggers Recapture fishers 2021-2025 2025 Jan-Jun	<p>MAROON LAKE LEVEL AND DAYS FISHED</p>													
	Cumulative recaptures 2021-2025 2025 Jan-Jun	<table><thead><tr><th>Year</th><th>Recaps</th></tr></thead><tbody><tr><td>2021</td><td>10</td></tr><tr><td>2022</td><td>20</td></tr><tr><td>2023</td><td>34</td></tr><tr><td>2024</td><td>18</td></tr><tr><td>2025 Jan-Jun</td><td>3</td></tr></tbody></table>	Year	Recaps	2021	10	2022	20	2023	34	2024	18	2025 Jan-Jun	3
Year	Recaps													
2021	10													
2022	20													
2023	34													
2024	18													
2025 Jan-Jun	3													

TRAVEL			
Cumulative proxy travel distance (km) home to recapture location 2021-2025 2025 Jan-Jun	Year	Km	
	2021	642	
	2022	1095	
	2023	1760	
	2024	714	
	2025 Jan-Jun	226	
Distance (km) home to recapture location by year 2021-2025 2025 Jan-Jun			
Distance (km) home to recapture location Local Intrastate Interstate 2021-2025 2025 Jan-Jun	Trips	83	
	Range (km)		
	Local	11-55	
	Intrastate	60-200	
	Interstate	93	
Average distance (km) Home to recapture location Local Intrastate Interstate 2021-2025 2025 Jan-Jun	Trips	83	
	Average distance (km)		
	Local	26	
	Intrastate	78	
	Interstate	93	

WHERE RECAPTURE FISHERS LIVE														
Where recapture fishers live 2021-2025 2025 Jan-Jun	Recapture fishers	83												
	Local	38 (46%)												
	Intrastate	44 (53%)												
	Interstate	1 (1%)												
<div>WHERE RECAPTURE FISHERS LIVE</div> <table border="1"> <thead> <tr> <th>Residence Type</th> <th>Count</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Local</td> <td>38</td> <td>46%</td> </tr> <tr> <td>Intrastate</td> <td>44</td> <td>53%</td> </tr> <tr> <td>Interstate</td> <td>1</td> <td>1%</td> </tr> </tbody> </table>			Residence Type	Count	Percentage	Local	38	46%	Intrastate	44	53%	Interstate	1	1%
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Local	38	46%												
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Interstate	1	1%												
Lake Maroon Where recapture fishers live 2021-2025 2025 Jan-Jun	Recapture fishers (83)													



STOCKING		
AUSTRALIAN BASS	GOLDEN PERCH	SILVER PERCH
		
Fingerlings stocked 2014-2023	<div><div>Fingerlings</div><div>Bass249,182</div><div>Golden Perch183,063</div><div>Silver Perch25,529</div></div>	
Fingerlings stocked each year 2014-2023	Able to be tagged from 2016-2025	
Fish tagged 2016-2025 per 10,000 fish stocked 2014-2023	<div><div>Tagged/10,000 fingerlings</div><div>Bass62</div><div>Golden Perch2</div><div>Silver Perch1</div></div>	
Species tagged 2016-2025 2025 Jan-Jun	<div><div>Tagged</div><div>Bass1539</div><div>Golden Perch40</div><div>Silver Perch2</div><div>Total1581</div></div>	

AUSTRALIAN BASS



DATA RELIABILITY

Sample size (fish/year)
Tagged (blue arrow)
Recaptures (orange arrow)
Confidence %
Error %
2021-2025

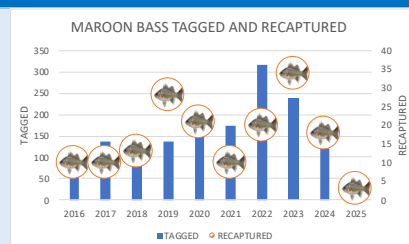
Reliability level	LOW		MODERATE		MODERATE	HIGH	
Samples	10	41	68	271	384	664	
Confidence	80%		80%	90%	90%	95%	99%
Error	20%		10%	10%	5%	5%	5%



TAGGED AND TAG RATE

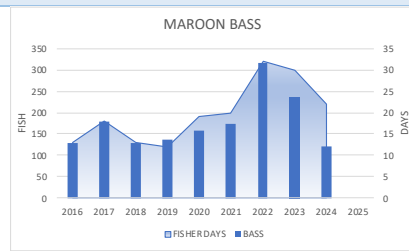
Bass tagged and recaptured
2016-2025
2025 Jan-Jun

Tagged 1539
Recaptured 167
Recapture rate 10.9%
Tagged 2025 Jan-Jun 21

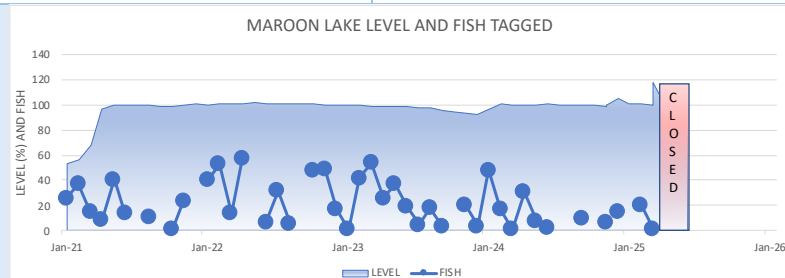


Tag and effort taggers
fish tagged
days fished
2016-2025
2025 Jan-Jun

High Tagged 2022 315
Low 2015 112
Now 2025 NA
Days 2022 32
2019 12
2025 NA

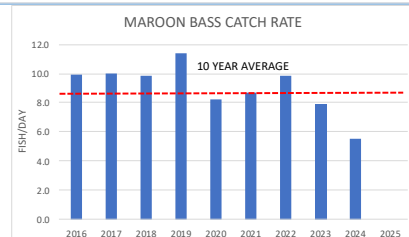


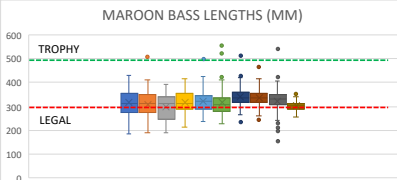
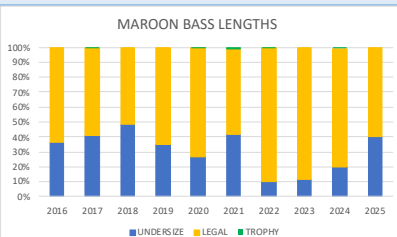
Tag and effort taggers
fish tagged
lake level
2016-2025
2025 Jan-Jun



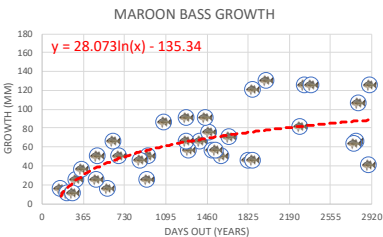
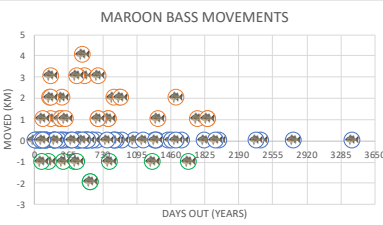
Tag rate
Fish/day
2016-2025
2025 Jan-Jun

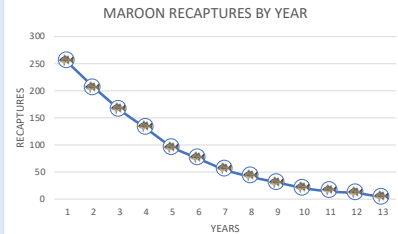
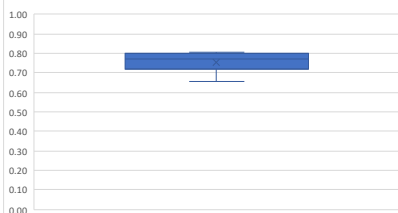
High 2019 11.4
Low 2024 5.5
Now 2025 NA
10 year average 8.8

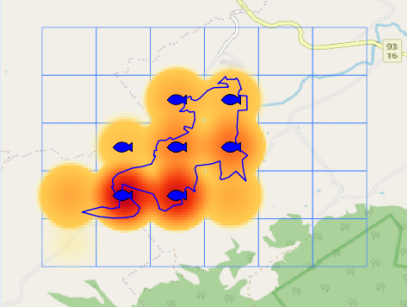



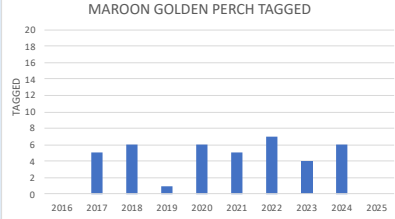
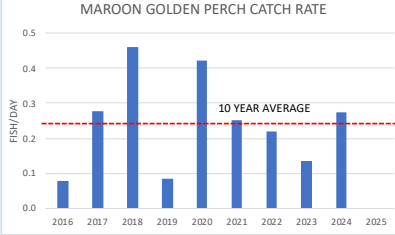
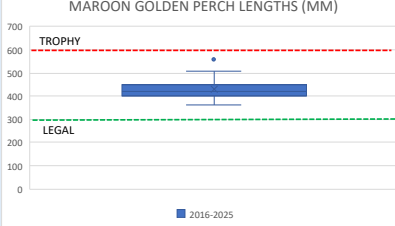
LENGTHS				
Average length (mm) Bars show length range Dots show outliers 2016-2025 2025 Jan-Jun	High	Low	Now	
	Average length			
	2022	2018	2025	
	338	296	304	
	Largest			
	2021	2018	2025	
555	395	360		
Fish length percentage (%) Undersize <300mm Legal 300-499mm Trophy 500+mm 2016-2025 2025 Jan-Jun	High	Low	Now	
	Legal			
	2022	2018	2025	
	90%	52%	60%	
	Trophy			
	2021	2023	2025	
1%	0%	0%		

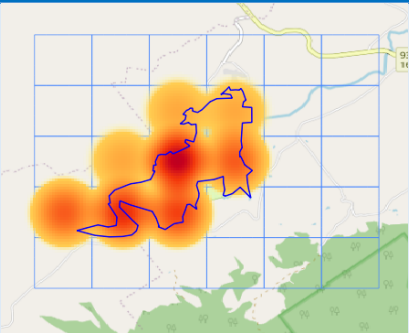
FATE													
Recfishers (ex-taggers) legal Bass kept or released Legal length 300mm 2016-2025 2025 Jan-Jun	Recaptures	137		<div>RECAPTURED LEGAL BASS FATE</div> <table><thead><tr><th>Fate</th><th>Count</th><th>Percentage</th></tr></thead><tbody><tr><td>Kept</td><td>22</td><td>16%</td></tr><tr><td>Released</td><td>115</td><td>84%</td></tr></tbody></table>	Fate	Count	Percentage	Kept	22	16%	Released	115	84%
	Fate	Count	Percentage										
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	Released	115	84%										
	Kept	22 (16%)											
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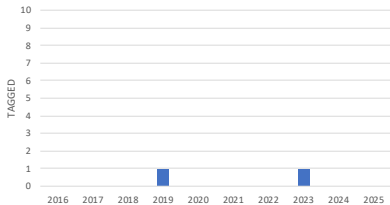
GROWTH				
Bass growth based on recaptures at end of each year at liberty 2016-2025 2025 Jan-Jun	Recaptures	55		
	Annual growth (mm)			
	Year 1	30		
	Year 2	50		
	Year 3	61		
	Year 4	69		
Year 5	75			
MOVEMENT				
Bass movements 2016-2025 2025 Jan-Jun	Recaptures	87		
	Same area	54 (62%)		
	Down lake	24 (28%)		
	Up lake	9 (10%)		
	Outside lake	0		

SURVIVAL		
Bass survival based on recaptures by years out after tagging All years	Survival rate by years out	
	Year	Recaptures
	1	254
	5	94
	10	53
	13	2
		
Survival rates each year after tagging All years	Average survival each year	
	0.75 (75%)	
	Range	
	0.66-0.81	
	Longest time out (years)	
	19.4	

TAG LOCATIONS		
Golden Perch locations Tagged fish (red-orange heat map) Recaptures (blue fish) 2016-2025 2025 Jan-Jun	Tagged 1539 Recaptured 167	

GOLDEN PERCH		ACTUAL	GRAPH or MAP
			
TAGGED AND TAG RATE			
Golden Perch tagged and recaptured 2016-2025 2025 Jan-Jun	Tagged 40 Recapture rate 0% Tagged 2025 Jan-Jun 0	Recaptured 0	
Catch and effort taggers number of fish fisher days 2016-2025 2025 Jan-Jun	High Tagged 2022 7 Days 2022 32	Low 2016 1 2019 12	Now 2025 NA 2025 NA
Tag rate Fish/day 2016-2025 2025 Jan-Jun	High 2018 0.5 10 year average	Low 2016 0.1	Now 2025 NA 0.2
			
LENGTHS			
Average length (mm) Bars show length range Dots show outliers 2016-2025 2025 Jan-Jun	Fish Average length Largest	40 429 560	

TAG LOCATIONS			
Golden Perch locations	Tagged	40	
Tagged fish (red-orange heat map)	Recaptured	0	
Recaptures (none)			
2016-2025			
2025 Jan-Jun			

SILVER PERCH	ACTUAL		GRAPH or MAP																						
																									
TAGGED																									
Silver Perch tagged and recaptured 2016-2025 2025 Jan-Jun	Tagged 2 Recapture rate 0%	Recaptured 0	<div>MAROON SILVER PERCH TAGGED</div>  <table><caption>MAROON SILVER PERCH TAGGED</caption><tr><th>Year</th><th>Tagged</th></tr><tr><td>2016</td><td>0</td></tr><tr><td>2017</td><td>0</td></tr><tr><td>2018</td><td>0</td></tr><tr><td>2019</td><td>2</td></tr><tr><td>2020</td><td>0</td></tr><tr><td>2021</td><td>0</td></tr><tr><td>2022</td><td>0</td></tr><tr><td>2023</td><td>1</td></tr><tr><td>2024</td><td>0</td></tr><tr><td>2025</td><td>0</td></tr></table>	Year	Tagged	2016	0	2017	0	2018	0	2019	2	2020	0	2021	0	2022	0	2023	1	2024	0	2025	0
Year	Tagged																								
2016	0																								
2017	0																								
2018	0																								
2019	2																								
2020	0																								
2021	0																								
2022	0																								
2023	1																								
2024	0																								
2025	0																								

Data sources

Data used in the Maroon Crystal Bowl are:

- Tag records and recapture records for the impoundment at <http://crystalbowl.infofishaustralia.com.au/>.
- Dam level data from SEQwater at <https://www.seqwater.com.au/historic-dam-levels>.
- Stocked fish records from Fisheries Queensland and from <https://www.data.qld.gov.au/dataset/queensland-freshwater-fish-stocking-records/>.
- Rainfall data from Station 040677 Maroon Dam and temperature data from Station 040983 Beaudesert Drumley Street from <http://www.bom.gov.au/>.
- Bathymetric data from Infofish surveys.

Basis for analysis

- Data reliability for fishers based on the sample size over the past 5 years for days fished by taggers and by fishers recapturing fish.
- Data reliability for fish based on average number of fish tagged and recaptured per year over the past 5 years.
- Catch rates calculated as number of fish tagged/fisher/day for T20 fishers (taggers) with a minimum of 12 fisher days (at least 1 per month) to provide a reliable catch rate.
- Undersized fish are <300mm, legal fish are ≥300 and <500mm and trophy fish are ≥500mm.
- Growth calculated using logarithmic curve from recaptures where fish were out for 90 days or more and had positive growth.
- Locations based on Infofish grid map LMM for the impoundment and other grid maps where fish were recaptured outside the impoundment.
- Survival rates are calculated based on a model that uses the reduction in the numbers of recaptures each year after tagging.
- Recapture fisher's residence Local <60km (1 hour travel), intrastate elsewhere Qld, interstate not Qld.