



LAKE MAROON REVIEW 2025

INFORMATION RATING



Stocking group: Maroon-Moogerah Fish Management Association

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

Stocking timeframe: 2014-2025

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>

Scroll through the dashboard to cover all subjects or for information on a specific subject go to:

LAKE MAROON OVERVIEW

LAKE MAROON LOCATION

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FISHER EFFORT

FISHER TRAVEL

WHERE RECAPTURE FISHERS LIVE

STOCKING

STOCKED FISH TAGGED

AUSTRALIAN BASS

GOLDEN PERCH

SILVER PERCH

MARY RIVER COD

LAKE MAROON OVERVIEW

Lake Maroon has been regularly stocked with Australian Bass, Golden Perch, and Silver Perch. While Bass and Golden Perch have been stocked in high numbers the ratio of fish tagged is 64 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 and a peak after winter. It is fished throughout the week with greatest activity over the weekend and on Fri. Lake Maroon boat ramp was closed from 20/2/2025 – 27/6/2025 due to civil works to improve dam amenities. This impacted on tagging effort.




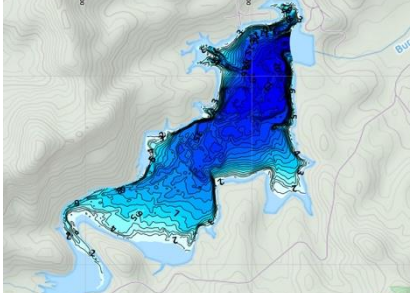
While the average catch rate in 2025 is high at 10.0 this is an aberration due to the low number of fishing days (7) and one trip recording 48 fish tagged. The catch rate is much lower than that figure suggests. The catch rate in 2024 was 5.5 fish/day and that was the lowest in the past 10 years. Reports from fishers support the fall in catch rate.

This has resulted in some tagger effort shifting to other lakes such as Wivenhoe and Moogerah where the catch rates were higher.

Lake Maroon is unique in that it doesn't spill over the spillway when the lake exceeds 100% and therefore there have not been any recaptures recorded from below the dam.

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

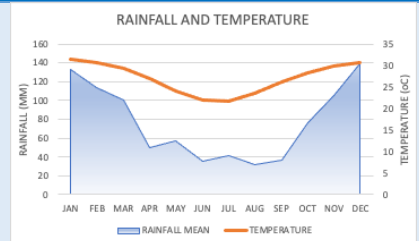
LAKE MAROON LOCATION

	<p>Lake Maroon 27. 19°S 152. 65°E</p>	
<h3>LAKE</h3>		
<p>Grid map Lake Maroon LMM</p>		
<p>Surface area Bathymetry</p>	<p>Surface area 3.5km²</p>	

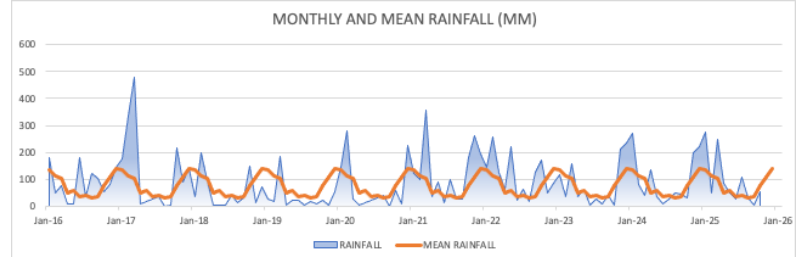
ENVIRONMENTAL CONDITIONS

Mean monthly rainfall (mm)
Mean air temperature (oC)
All years

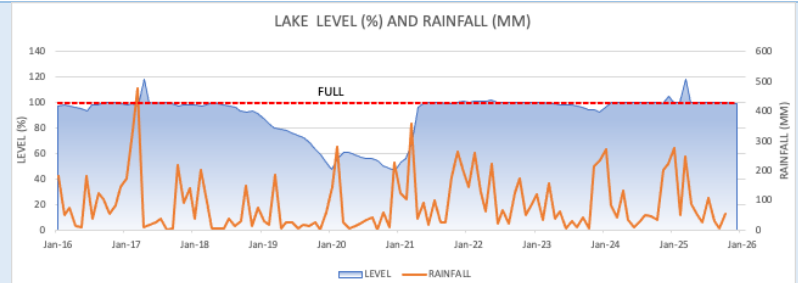
Rainfall	Month	mm
High	Dec	139
Low	Aug	32
Temp	Month	oC
High	Jan	31
Low	Jul	22



Monthly rainfall (mm)
Mean monthly rainfall (mm)
2016-2025



Lake level
2016-2025



TYPE OF FISHERY

DATA RELIABILITY

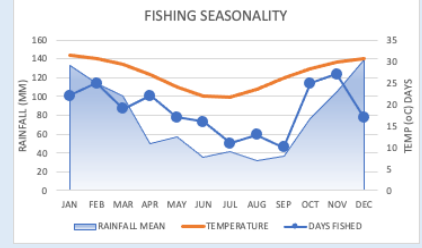
Sample size (days fished)
Tag days (blue arrow)
Recaptures (orange arrow)
Confidence %
Error %
2021-2025

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



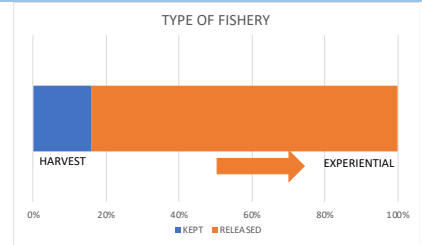
Seasonality
Mean rainfall (mm) and temperature (oC)
Days combined (224)
Taggers
Recapture fishers
2021-2025

Months most fished
 Fishers combined
 Nov
 Oct
 Feb



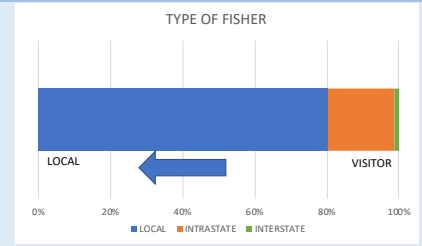
Harvest or experiential
Harvest rate of recaptured legal Bass by recfishers (ex-taggers)
2021-2025

Bass legal fish harvest rate
 Legal fish 75
 Kept 12 (16%)
 Released 63 (84%)



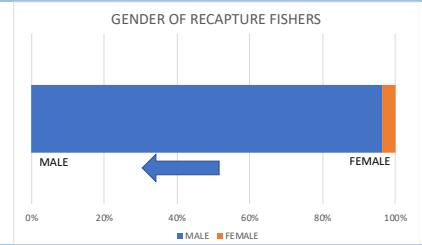
Local or visitor fishery
Where recapture fishers live
2021-2025

Recapture fishers 92
 Local 74 (80%)
 Visitors 18 (20%)



Recapture fishers by gender (ex-taggers)
2021-2025

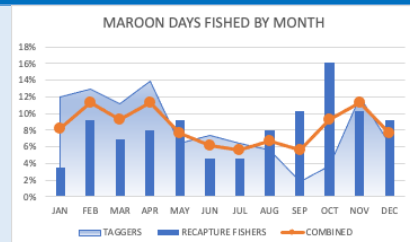
Recaptures 83
 Male 80 (96%)
 Female 3 (4%)



FISHER ACTIVITY

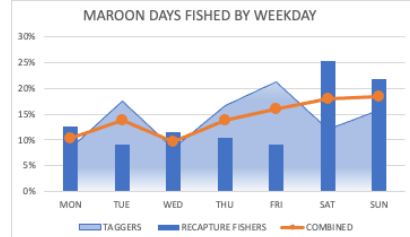
Monthly activity
Days fished
Taggers (110)
Recapture fishers (87)
2021-2025

	Month	%
Taggers	Apr	14%
	Feb	13%
Recap fishers	Oct	16%
	Sep	10%



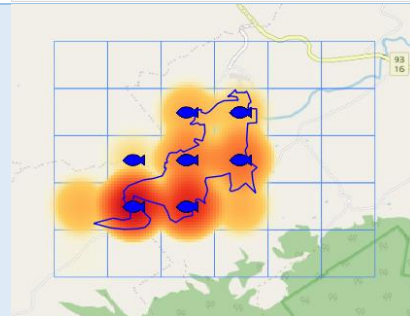
Weekday activity
Days fished
Taggers (110)
Recapture fishers (87)
2021-2025

	Day	%
Taggers	Weekend	28%
	Weekdays	72%
Recaps	Weekend	47%
	Weekdays	53%



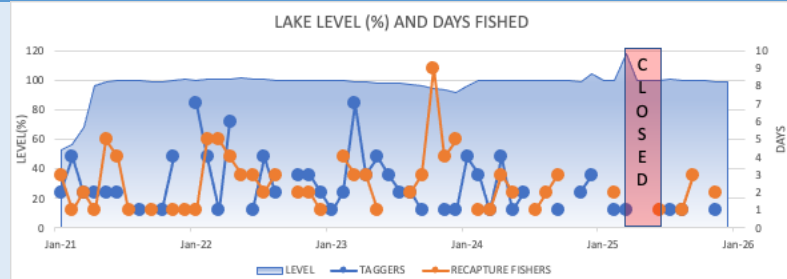
Activity by location
Taggers (red-orange heat map)
Recaptures (blue fish)
2021-2025

Tagged	941
Recaptured	92

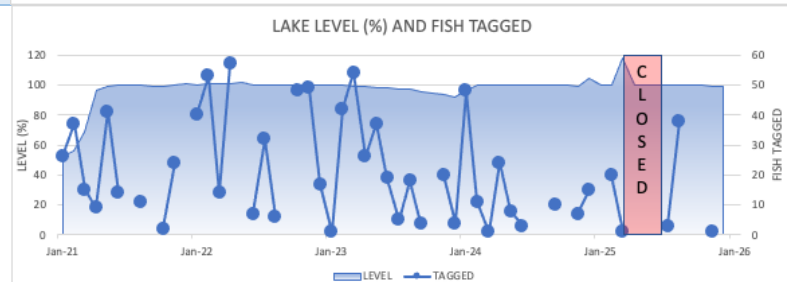


FISHER EFFORT

Lake level (%)
Days fished
Taggers
Recapture fishers
2021-2025

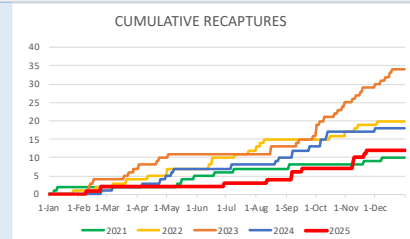


Lake level (%)
Fish tagged
2021-2025



Cumulative recaptures
2021-2025

Year	Recaps
2021	10
2022	20
2023	34
2024	18
2025	12



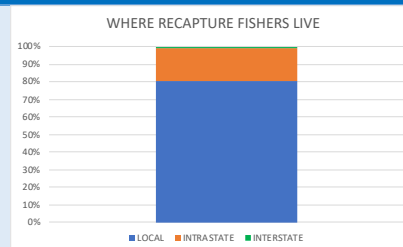
FISHER TRAVEL

Cumulative proxy travel distance (km) home to recapture location 2021-2025	<table border="1"> <thead> <tr> <th>Year</th> <th>Km</th> </tr> </thead> <tbody> <tr> <td>2021</td> <td>642</td> </tr> <tr> <td>2022</td> <td>1095</td> </tr> <tr> <td>2023</td> <td>1760</td> </tr> <tr> <td>2024</td> <td>714</td> </tr> <tr> <td>2025</td> <td>613</td> </tr> </tbody> </table>	Year	Km	2021	642	2022	1095	2023	1760	2024	714	2025	613	<p style="text-align: center;">CUMULATIVE PROXY TRAVEL DISTANCE (KM)</p>
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Proxy travel distance (km) home to recapture location by year 2021-2025		<p style="text-align: center;">RECAPTURE FISHERS PROXY TRAVEL</p>												
Proxy travel distance (km) home to recapture location Local Intrastate Interstate 2021-2025	<table border="1"> <thead> <tr> <th>Trips</th> <th>Range (km)</th> </tr> </thead> <tbody> <tr> <td>Local</td> <td>11-79</td> </tr> <tr> <td>Intrastate</td> <td>80-200</td> </tr> <tr> <td>Interstate</td> <td>93</td> </tr> </tbody> </table>	Trips	Range (km)	Local	11-79	Intrastate	80-200	Interstate	93	<p style="text-align: center;">RECAPTURE FISHERS PROXY TRAVEL</p>				
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Proxy travel average distance (km) Home to recapture location Local Intrastate Interstate 2021-2025	<table border="1"> <thead> <tr> <th>Trips</th> <th>Average distance (km)</th> </tr> </thead> <tbody> <tr> <td>Local</td> <td>42</td> </tr> <tr> <td>Intrastate</td> <td>101</td> </tr> <tr> <td>Interstate</td> <td>93</td> </tr> </tbody> </table>	Trips	Average distance (km)	Local	42	Intrastate	101	Interstate	93	<p style="text-align: center;">RECAPTURE FISHER'S PROXY AVERAGE TRAVEL</p>				
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WHERE RECAPTURE FISHERS LIVE

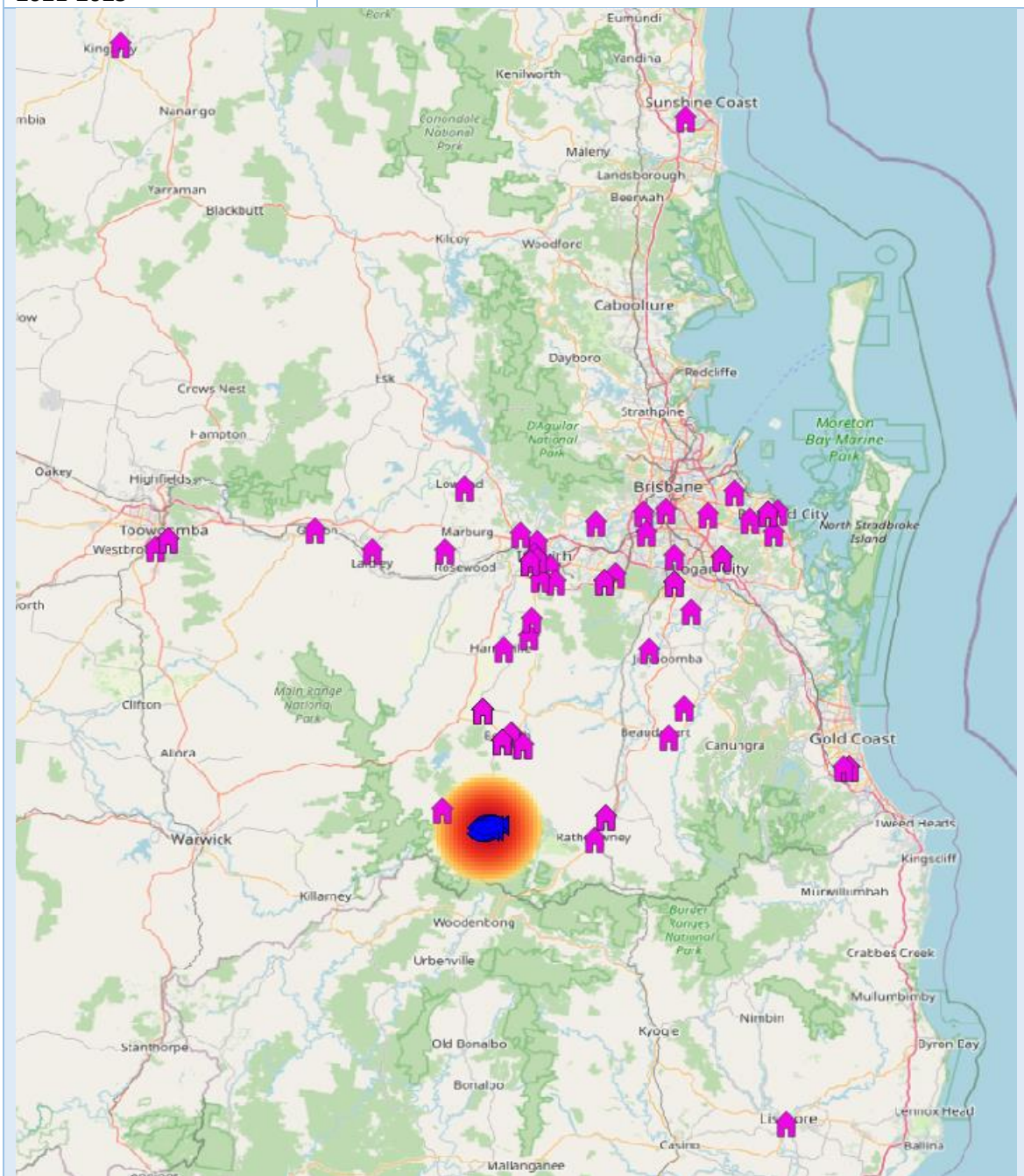
Where recapture fishers live 2021-2025




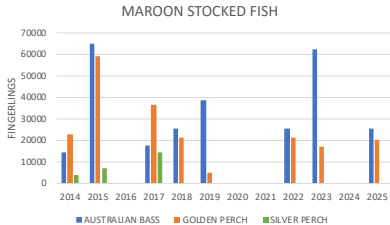
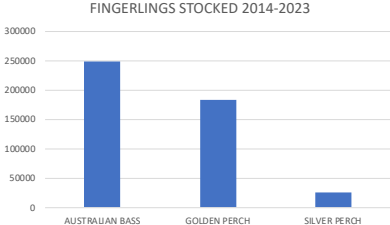
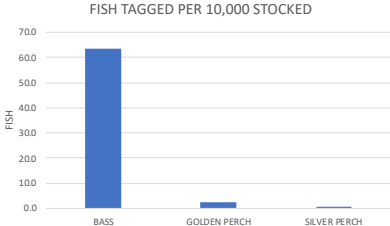
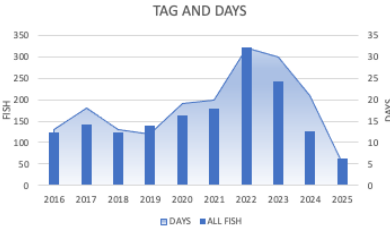
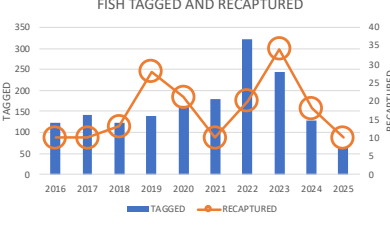
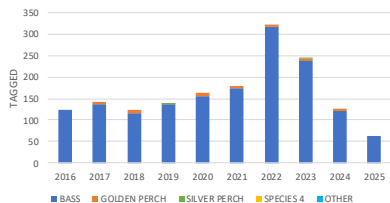
Recapture fishers	92
Local	74 (80%)
Intrastate	17 (18%)
Interstate	1 (1%)



Lake Maroon Where fishers recapturing fish live 2021-2025

Recapture fishers	92
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STOCKING			
AUSTRALIAN BASS	GOLDEN PERCH		SILVER PERCH
			
Fingerlings stocked each year 2014-2025			
Fingerlings stocked 2014-2023	Bass Golden Perch Silver Perch	Fingerlings 249,000 183,000 25,500	
Fish tagged 2016-2025 per 10,000 fish stocked	Tagged/10,000 fingerlings Bass Golden Perch Silver Perch	63.4 2.2 0.8	
STOCKED FISH TAGGED			
Tag and effort taggers fish tagged days fished 2016-2025	High Tagged 2022 315 Days 2022 32	Low 2015 112 2019 12	Now 2025 70 2025 7
			
Fish tagged Recaptured 201-2025	Tagged Recaptured Recapture rate Tagged 2025	1630 174 10.7% 70	
Species tagged 2016-2025	Bass Golden Perch Silver Perch	Tagged 1588 40 2	

AUSTRALIAN BASS



DATA RELIABILITY

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

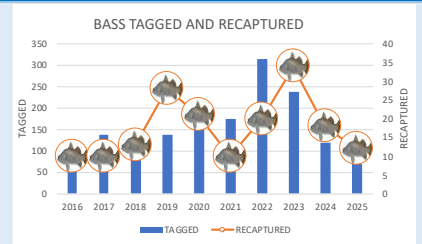
Reliability level	LOW	MODERATE	MODERATE	HIGH
Samples	10	41	68	271
Confidence	80%	80%	90%	90%
Error	20%	10%	10%	5%



TAGGED AND TAG RATE

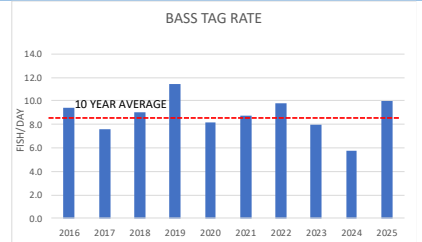
Bass
Tagged
Recaptured
2016-2025

Tagged	1588
Recaptured	176
Recapture rate	11.1%
Tagged 2025	70
Recaptured 2025	12

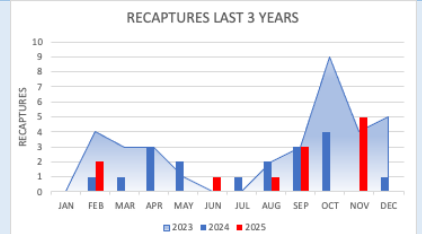


Tag rate
Fish/day
2016-2025

High	Low	Now
2019	2023	2025
11.4	5.8	10.0
10 year average		8.6



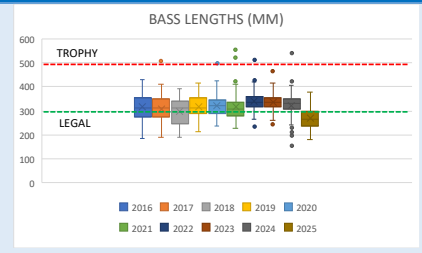
Monthly recaptures
2023-2025



LENGTHS

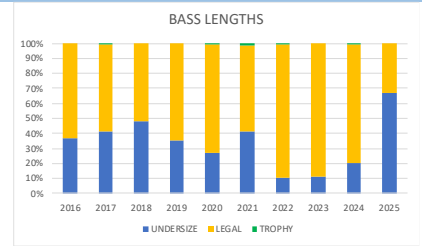
Average length (mm)
Bars show length range
Dots show outliers
2016-2025

High	Low	Now
Average length		
2022	2018	2025
338	296	269
Largest		
2021	2018	2025
555	395	380



Fish length percentage (%)
Undersize <300mm
Legal 300-499mm
Trophy 500+mm
2016-2025

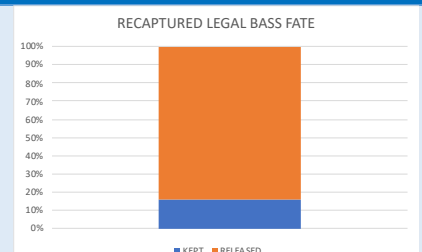
High	Low	Now
Legal		
2022	2018	2025
90%	52%	33%
Trophy		
2021	2023	2025
1%	0%	0%



FATE

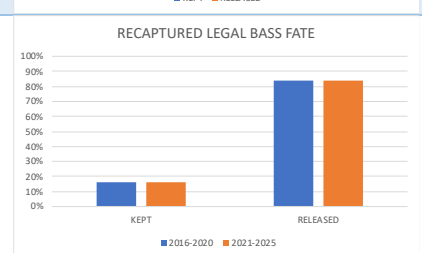
Recfishers (ex-taggers)
legal Bass recaptured
kept or released
Legal length 300mm
2016-2025

Recaptures	143
Kept	23 (16%)
Released	120 (84%)



Change in release rate of legal Bass
2016-2020
2021-2025

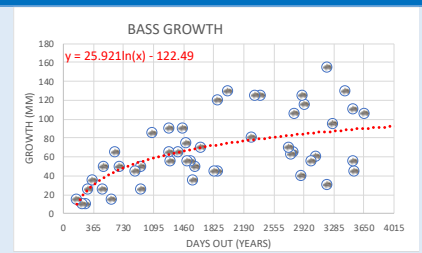
No change in release rate of legal Bass	
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GROWTH

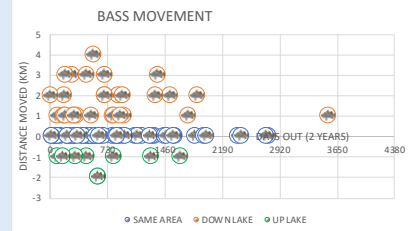
Bass growth based on recaptures at end of each year at liberty
2016-2025

Recaptures	57
Annual growth (mm)	
Year 1	30
Year 2	48
Year 3	59
Year 4	66
Year 5	72



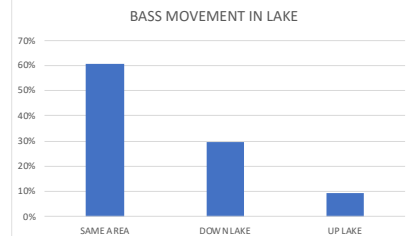
MOVEMENT

**Bass movements
2016-2025**



**Bass movements
2016-2025**

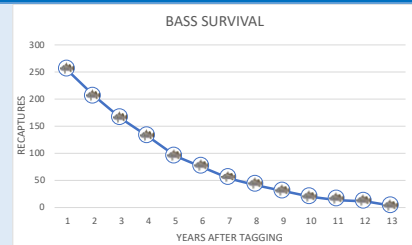
Recaptures	94
Same area	57 (61%)
Down lake	28 (30%)
Up lake	9 (10%)
Outside lake	0



SURVIVAL

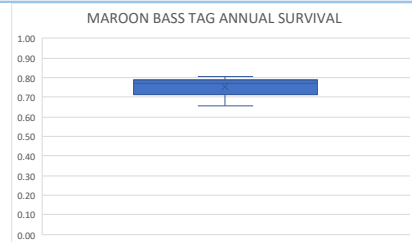
**Bass survival based on
recaptures
by years out after tagging
All years**

Survival rate by years out	
Year	Recaptures
1	204
5	83
10	15
13	1
Longest time (years)	9.4



**Annual survival rate
All years**

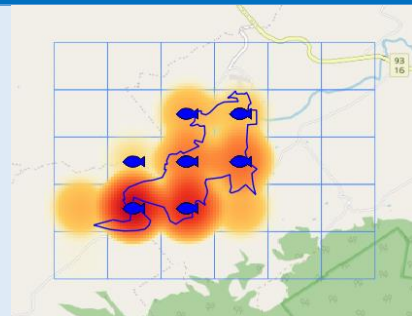
Average annual survival	
Rate	0.75 (75%)
Range	0.66-0.81



TAG LOCATIONS

**Tagged fish locations (red-orange heat map)
Recaptures (blue fish)
2016-2025**

Tagged	1588
Recaptured	176



GOLDEN PERCH



TAGGED AND TAG RATE

Golden Perch tagged and recaptured 2016-2025	Tagged	40		
	Recaptured	0		
	Recapture rate	0%		
	Tagged 2025	0		
Tag rate Fish/day 2016-2025	High	Low	Now	
	2018	2016	2025	
	0.5	0	0	
	10 year average		0.2	

TAG LOCATIONS

Tagged fish locations (red-orange heat map) Recaptures (none) 2016-2025	Tagged	40	
	Recaptured	0	

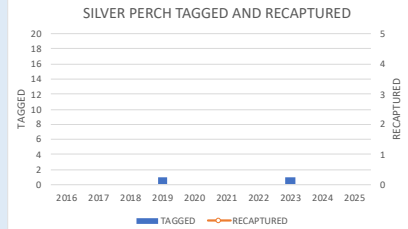
SILVER PERCH



TAGGED

Silver Perch tagged and recaptured 2016-2025

Tagged	2
Recaptured	0
Recapture rate	0%
Tagged 2025	0



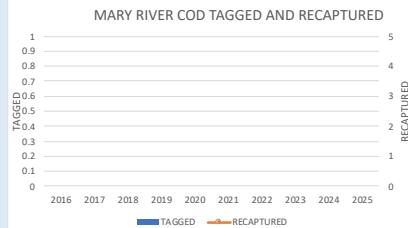
MARY RIVER COD



TAGGED

Saratoga Tagged Recaptured 2016-2025

Tagged	0
Recaptured	0
Recapture rate	0%
Tagged 2025	0



Data sources

Data used in the Lake 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.
- 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/day for taggers with a minimum of 12 days to provide a reliable catch rate.
- Undersized Bass are <300mm, legal fish are ≥ 300 and <500mm and trophy fish are ≥ 500 mm.
- 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 lake.
- Survival rates are calculated based on a model that uses the reduction in the numbers of recaptures each year after tagging.
- Where recapture fishers live Local <80km (1 hour travel), intrastate elsewhere Qld, interstate not Qld.