

Inland Fisheries Service

Report to anglers



June to August 2018



Talk trout Tasmania

Come and hear the latest from the Inland Fisheries Service.

How is the fishery performing?

How close is the Carp Management Program to success?

How are we supporting the Tasmanian recreational trout fishery?

Ask your questions.

***Great Lake Community Centre
Miena, Tasmania***

Friday 12 October 2018

7.30 to 9.00 pm

www.ifs.tas.gov.au

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Hot topics

The 2018-19 trout season begins

Over the weekend of 4 and 5 August, the 2018-19 angling season took off with a bang!

Thousands of anglers around the state tried their luck with some fantastic fish caught.

Our Officers were out with five teams patrolling 46 waters right across the state. We inspected 699 angling licences, 546 brown trout and 195 rainbow trout.

There were some absolute stand out waters. We highly recommend you consider visiting:

Tooms Lake: The fishing here was unbelievable. We inspected 69 anglers with some outstanding catches. All fish were in marvellous condition. Six fish inspected were in the 2.5 kg bracket. Trolling and drift spinning accounted for the most of the fish taken. Bait anglers around the edge of the lake were also catching some nice fish.

Blackmans Lagoon: Wow! Our Officers attended this water on Sunday morning. The 28 anglers inspected caught 97 fish with roughly a 50:50 ratio between brown and rainbow trout. All were in outstanding condition with fantastic flesh colour. Our officers saw fish up to 2.5 kg. Lure and fly anglers accounted for most of the fish.

Four Springs Lake: As usual, this water was extremely popular. We inspected 178 anglers, with 261 brown trout and 53 rainbow trout caught. Again, lure and fly anglers caught the bulk of the fish, although bait anglers did have some success.

Penstock Lagoon: We visited Penstock Lagoon on Sunday afternoon, and spoke with six anglers who reported a catch of 27 brown trout and 6 rainbow trout. Wet flies accounted for all of the fish, with nymphs fished deep working very well. We were very happy to see that anglers released a large percentage of their catch, ensuring that there are plenty of fish left for the rest of the season.

Mersey River: The Mersey was in flood because of high rainfall last week. Bait anglers did extremely well, with some good catches taken in the Merseylea area around Railton. Worms used for bait in flooded backwaters were the best method, with plenty of fish foraging for food over flooded pasture.

Lake Kara: Lake Kara was very popular on the opening morning. Anglers using lures and Powerbait caught plenty of rainbow trout.

Compliance with IFS and MAST regulations was generally very good. Please follow Inland Fisheries and MAST regulations while you spend time fishing our inland waterways. They are there to ensure your safety and to protect our valuable fishery resource.

Our Officers did detect and deal with 23 offences:

Offence	Legislation	Count
Fish in closed water	Inland Fisheries	4
Take undersized fish	Inland Fisheries	2
Exceed bag limit	Inland Fisheries	1
Fish without angling licence	Inland Fisheries	4
Fail to display boat registration	MAST	1
Fail to carry minimum safety equipment	MAST	3
Fail to wear PFD	MAST	6
Operate vessel without boat licence	MAST	1
Operate unregistered vessel	MAST	1
Total		23

The signs are that it is going to be another great trout season in Tasmania. Plenty of rain has filled our rivers and lakes. The fish are hungry and in excellent condition. With so many waters firing over the opening weekend, why not plan a trip for this weekend!

Know the bag and size limits



Our inland fisheries are amongst the best trout fisheries available in the world.

Over the first couple of weeks of this season, we have become aware that some anglers are not following size and bag limits. Of particular concern is

- taking undersized fish
- exceeding bag limit, and
- exceeding the number of fish permitted over 500 mm.

The Inland Fishing Code, supplied each year with your licence, is a great pocket reference to keep in your tackle box. The regulations are readily available on our website, the InFish App and on signage at major angling waters around the state.

If our Fisheries Officers discover anglers not following these regulations, it will result in an infringement notice and fine of \$163. We may also seize the fish.

It is your responsibility to know the correct way to measure your catch and to know the size and bag limits for where you fish.

You should have something to measure your catch with you when fishing. If in doubt, we recommend that you put the fish back.

The correct way of measuring trout is fork length. This means in a straight line from the tip of the snout to the end of the centre of the tail fin. This is different to bream and other estuarine/marine fish that are measured from the tip of the snout to the tip of the tail. The photo with this story shows the correct way to measure fork length.

Be very careful with how you handle fish before release. We often hear “I kept the fish because it was gut hooked and it wasn’t going to survive”. Our regulations clearly state that you cannot be in possession of any undersized trout at our waters. Undersized fish **MUST** be released, even if they do not survive. We cannot be any clearer about this - you must not possess them.

If the hook is a long way down the fish’s throat, the best way is to simply cut the line and leave the hook. Fish in this instance will generally survive if handled gently and released. Never touch the gills of a fish that you intend to release as it greatly decreases their chances of survival.

We manage our fisheries in line with objectives in the [Tasmanian Inland Recreational Fishery Management Plan 2018 – 2028](#). We tailor our management to the individual needs of each fishery. Bag and size limits manage the total harvest and protect the breeding stock. Please follow the regulations and do your part in protecting our fishery for everyone to enjoy well into the future.

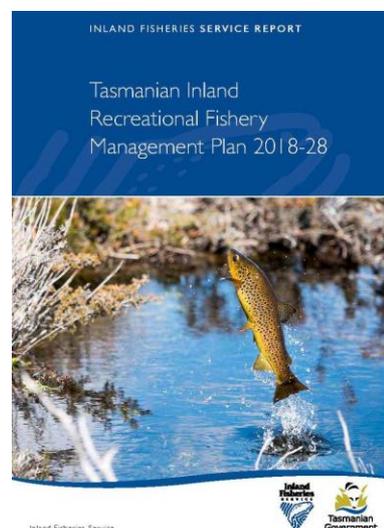
Tasmanian Inland Recreational Fishery Management Plan 2018-28

In June, Sarah Courtney, Minister for Primary Industries and Water, launched the [Tasmanian Inland Recreational Fishery Management Plan 2018-28](#).

The Plan will guide the management of the recreational trout fishery in Tasmania for the next 10 years. It aims to provide a sustainable, vibrant and healthy fishery.

After extensive public consultation, the Plan provides better opportunities for anglers, assesses fishery performance and conserves fish stocks as a recreational resource for future generations.

The plan outlines measures to increase participation locally and from tourism markets. It balances the needs for individual fishery management while standardising regulations.



It supports the actions to grow and develop recreational fishing in Tasmania. These include a freeze on trout fishing licences, improved access for anglers and better facilities that encourage female participation and angling tourism.

The Plan ensures all anglers will have an enjoyable fishing experience into the future.

Largest ever fine for poaching giant freshwater crayfish

On Monday 20 August 2018, the Burnie Magistrates Court convicted a northwest man of offences relating to giant freshwater crayfish. Magistrate McKee heard Mr Bakes illegally hunted, caught and ate the highly protected and threatened species from November 2013 to November 2017. This is most serious case about giant freshwater crayfish ever dealt with by the Inland Fisheries Service.



A giant freshwater crayfish

Paul Charles Bakes was convicted of;

- six counts of take protected fish;
- nine counts of possess freshwater crayfish; and
- one count of take trout without a licence.

He was fined a sum of \$8 550 and \$66.36 in court costs.

Information from the public resulted in a joint operation between IFS Fisheries Officers and Marine Police at Stanley. Mr Bakes admitted the offences and was charged.

Mr Todd Walsh is a local expert with 15 years' experience in giant freshwater crayfish. Mr Walsh said it was pleasing to see the courts taking the issue of poaching the species seriously.

"I know of the hard work continually done by the Inland Fisheries Service in protecting our native species, so it was pleasing to see the Magistrate give a large enough fine to not only stop the defendant from putting the species at risk, but also serve as a big warning to anyone else that might think about doing the same thing".

Our Section Manager, Chris Wisniewski said, "Before the banning of fishing for giant fresh water crayfish in Tasmania in January 1998, records show a wide scale decline in the population. Especially in the number of large, reproductive adults. This decline was directly linked to those fishing targeting larger specimens."

Anyone with information relating to the illegal taking of protected species can call the IFS on 0438 338 530, or Crime Stoppers on 1800 333 000.

Signs and Brochures

The Anglers Access Program team, led by Neil Morrow, has replaced over 200 signs around the state, all in time for the start of the 2018-19 trout season.

The release of the Tasmanian Inland Recreational Fishery Management Plan 2018-28 brought quite a lot of regulation changes. These include changes to bag limits, size limits, angling methods for Huntsman Lake, the all-year boundaries for the River Derwent and the River Leven.



Neil Morrow updating the Anglers Access program sign at Lake Augusta

We have updated our Angler Access Program brochures, the Tasmanian Inland Fishing Code 2018-19 and the InFish App. Make sure you have latest information and update the InFish app for the 2018-19 season.

Applications open to the Fisheries Habitat Improvement Fund

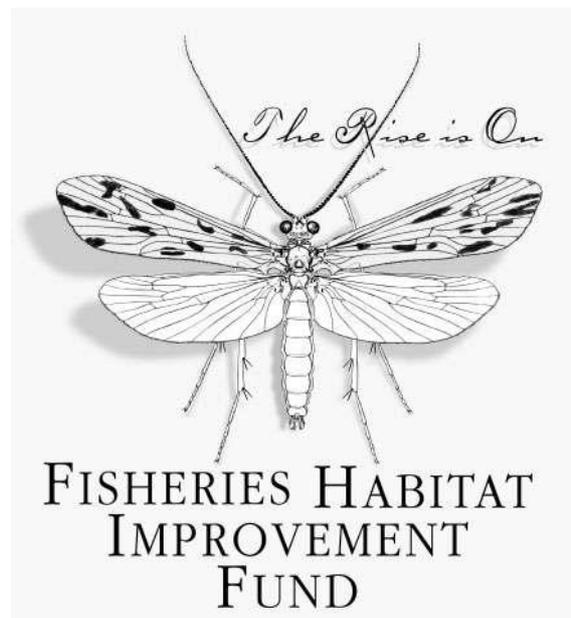
The Fisheries Habitat Improvement Fund is calling for submissions for grant funding. Projects need to:

- Improve fresh water habitat.
- Prevent deterioration of freshwater habitat.
- Demonstrate tangible environmental benefit.

Funding is available to groups, organisations or individuals for projects up to a total of \$60 000.

Applications close 1 February 2019 with funding available from 1 July 2019.

Project funding guidelines and applications are available from the Secretary/Treasurer Tony Wright phone 0419 116 541 or email anthony.wright@ifs.tas.gov.au



The Tumbledown Creek bridge is closed

Tumbledown Creek Bridge next to Arthurs Lake is closed. The bridge allows access to Little Lake and Gunns Lake. Deteriorating structural condition is the cause of the closure.

This timber bridge was originally built nearly 15 years ago to provide access to transmission lines. Hydro Tasmania (HT) left the bridge in place to allow recreational users access to Little Lake and Gunns Lake

TasNetworks and HT are developing a bridge replacement plan that should be finalised by the end of November. Construction is planned for summer/autumn 2019.

IFS is keeping in close contact with TasNetworks and HT on the bridge replacement proposal and will keep anglers informed of progress.

HT advised that it is unlikely the adjacent ford will be crossable until the lake level reduces in the mid-summer months. HT estimate high clearance vehicles can pass through the ford when the Arthurs Lake water level is more than 1.8m below full supply level. However, it is up to individuals to assess whether conditions are appropriate to allow safe fording.

You can find up to date information on the lake levels on the Hydro Tasmania website.

Anglers Access

River Access

IFS has started assessing sites for extensions of the Anglers Access Program in the North, North West and River Derwent.

As part of the Tyenna River willow control program a replanting day was held at Lanoma Estate on 6 June. Native trees were planted to stabilize banks before willow removal.

IFS and the Derwent Catchment Project are planning further field days on the Tyenna River as part of the willow control program. A revegetation day will be held in October and willow control days over the summer months. We will notify anglers of event dates. Volunteers are encouraged to participate.

Recreational Boating Fund (RBF)

RBF applications for Lake Rowallan and Tungatinah Lagoon were successful.

Hydro Tasmania, IFS and MAST will undertake an assessment of Darwin Dam (Lake Burbury) for potential future upgrade.

Navigation Light maintenance was completed in July with all batteries replaced and faulty lights either repaired or replaced. All 31 lights are now in working order. A light will be installed at Lake Rowallan. MAST and IFS jointly funded the maintenance project.

Native Fish Conservation

Clarence galaxias

We undertook monitoring of the Clarence galaxias at Lake Knight (Wentworth Hills), Clarence Lagoon, Tibbs Plains Marsh and Dyes Marsh. We used electrofishing at all sites.

Low numbers were surveyed at Clarence Lagoon and Lake Knight, however, three distinct cohorts were present.

At Tibbs Plains Marsh, despite recent rainfall, water levels were very low; consequently, the preferred method of capture using fyke nets was not feasible. We surveyed the marsh by electrofishing but observed no Clarence galaxias.

At Dyes Marsh, several small river trout had pushed upstream and entered the marsh, but again we observed no Clarence galaxias.

Fishery performance assessments

Pet Reservoir (July 2018)

During 23-25 July 2018, we undertook a trapping survey within the Pet Reservoir. The purpose of the survey was to gain information on:

- catch per unit effort,
- the length structure of the brown trout population,
- the condition of fish, and
- an estimate of the brown trout population size.

Before to the survey, to help estimate the population, 600 adult brown trout, from the Liawenee Canal spawning trap, were adipose fin clipped and transferred to Pet Reservoir. These fish weighed an average of 850 grams.

During the survey, 46 box traps were set over two nights with 29 brown trout and three rainbow trout captured. This equals 0.63 brown trout per trap. It suggests low numbers brown trout. Catch effort for rainbow trout was negligible with just three fish captured at 0.07 fish per trap. We examined the brown trout for the presence of an adipose fin clip. We captured three clipped fish. Three native blackfish (*Gadopsis marmoratus*) were also captured.

Grouping	Measurement	Average	Minimum	Maximum
All brown trout (n=29 includes 4 immature fish)	Length (mm)	418	290	490
	Weight (g)	758	220	1 700
	Cond Factor (k)	1.00	0.72	1.44
Female (n=17)	Length (mm)	428	387	470
	Weight (g)	768	570	1 010
	Cond Factor (k)	0.97	0.72	1.14
Male (n=8)	Length (mm)	450	407	490
	Weight (g)	966	620	1 700
	Cond Factor (k)	1.03	0.90	1.44

Table 1: Descriptive statistics for brown trout for combined sample (with immature fish included), female and male fish.

The catch of 29 brown trout consisted of 17 females, 8 males and 4 immature fish. Males weighed an average of 996 grams with an average length of 450 mm. This compared to females at 768 grams and 428 mm (see table 1). The average condition factor of 1.0 k is, by comparison to most lake fisheries, slightly lower than typical, although the majority of brown trout sampled were in post spawning condition.

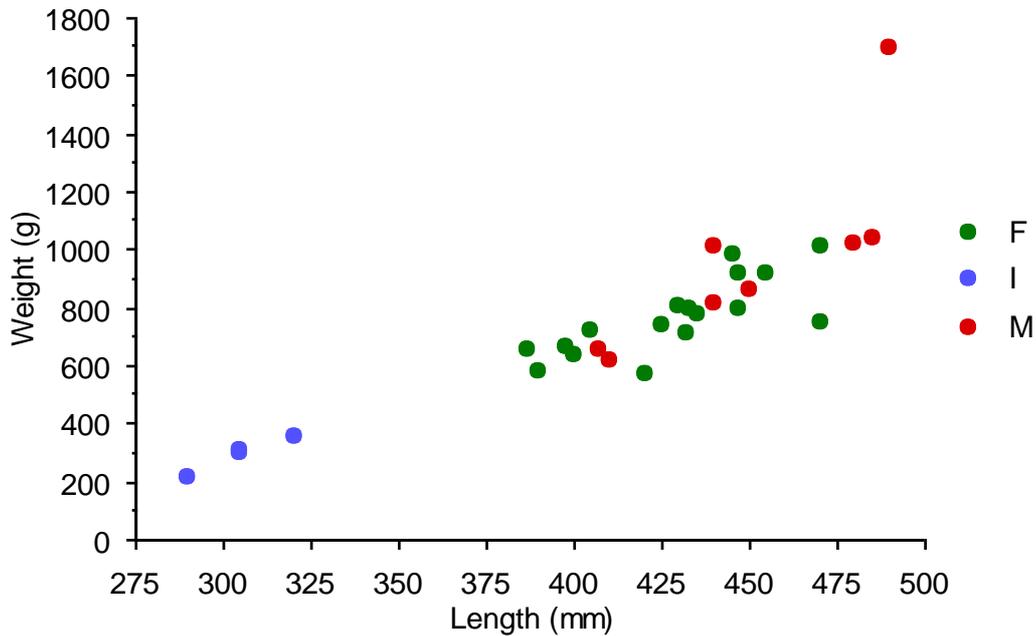


Figure 1: Length/weight comparison for brown trout separated by sex (F=female, M=male, I=immature).

A comparison of length against weight (see figure 1) indicates that the growth of fish is typical of lower productive lake fishery. A larger sample size is needed to make an objective assessment.

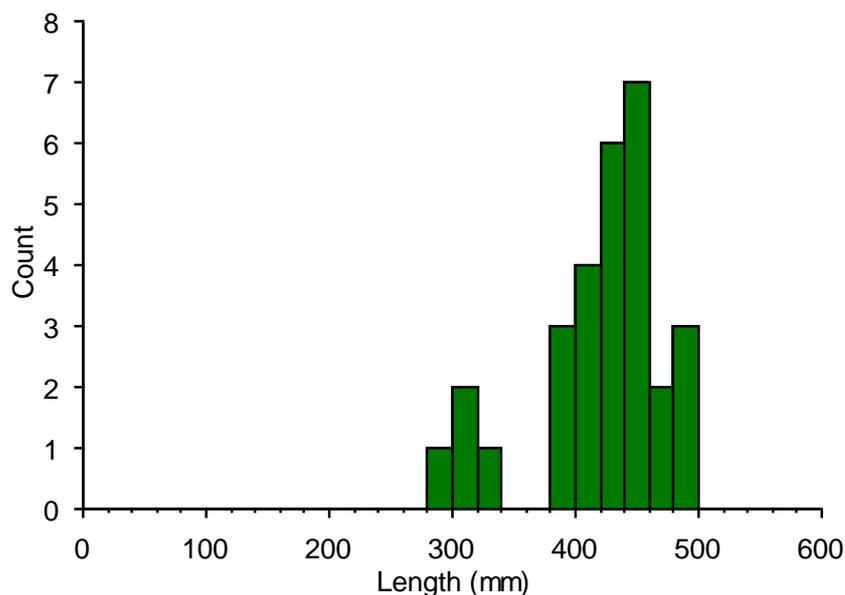


Figure 2: Length frequency plot for all brown trout captured.

A plot of fish length (see figure 2) clearly shows two groups of brown trout. The first of these, 280-340 mm, are representative of three-year-old fish. The second group, 380-500 mm, possibly contains a range of fish from a combination of adult brown transfers (2015 and 2017), natural recruitment pre 2015 and a stocking of 10 000 fry in 2013. It is not possible to differentiate any of these sources. It is evident that natural recruitment is low.

Angler Catch Information

In addition to the in-lake survey, we analyzed angler catch information. The results show the daily catch rate for brown and rainbow trout was low. The long-term average for brown trout was 0.41 fish per day and rainbow trout, 0.15 per day (see figure 3).

The notable increase in catch rate for rainbow trout during 2005-2007 was driven by a stocking of 7 000 yearling and fingerling fish. The spike in catch rate for rainbow trout during 2011-12 was driven by highly inflated catch returns from two individual anglers and therefore not likely to be indicative of the total angling population.

There was a notable increase in the harvest of brown trout for the 2014-15 season driven by an increase in fishing effort, but not catch rate (see figures 4 & 5). This is a likely response to the stocking of adult brown trout for the first time at this fishery.

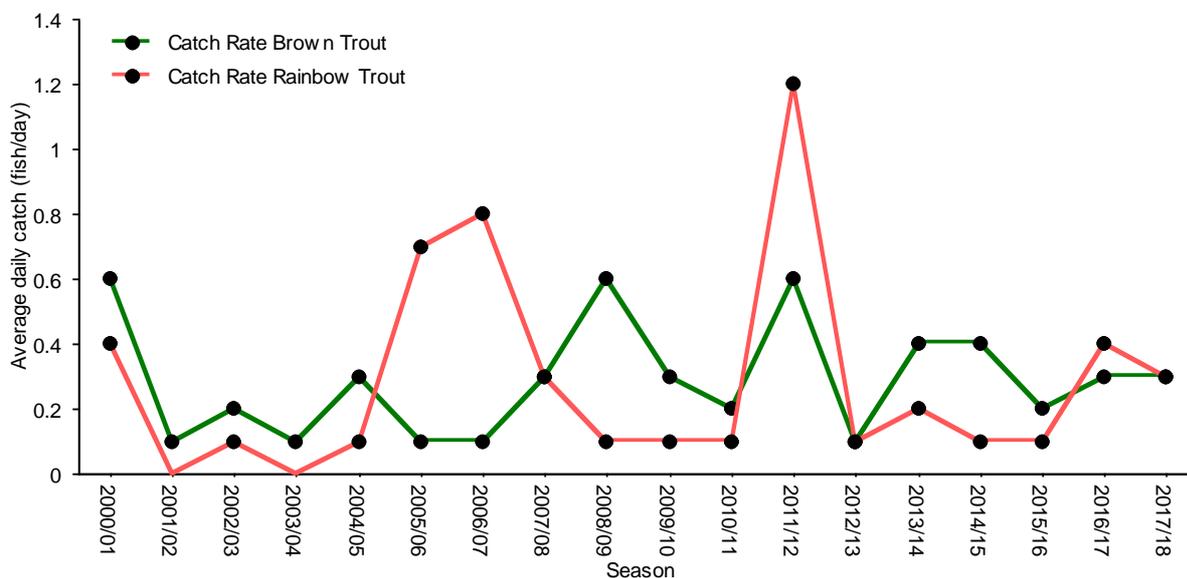


Figure 3: Average daily catch for brown and rainbow trout 2000-18.

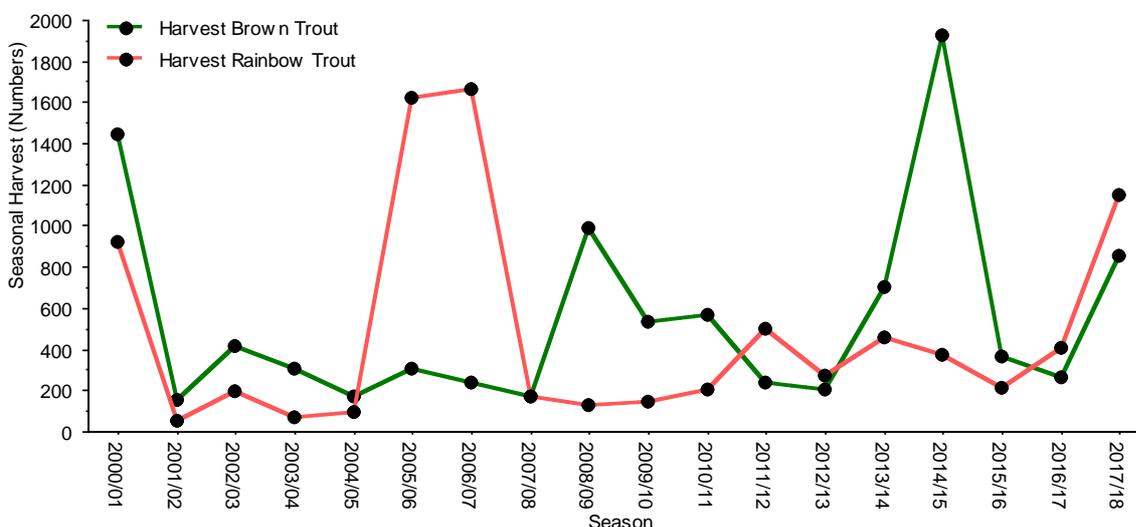


Figure 4: Estimated annual harvest for brown and rainbow trout 2000-18.

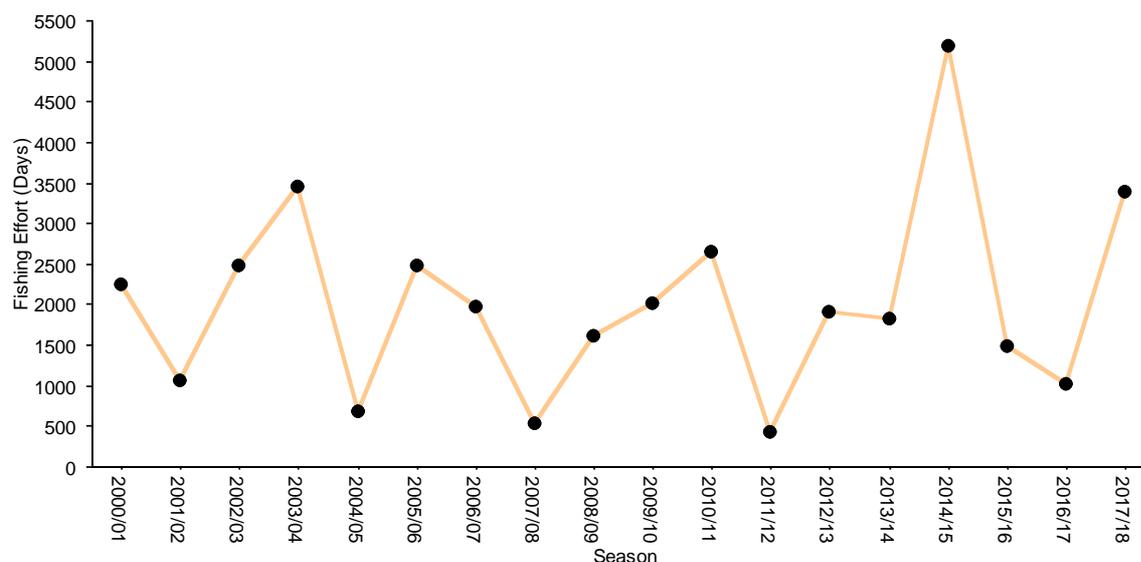


Figure 5: Estimated fishing effort 2000-18.

Discussion

The results of the 2018 survey indicate the Pet Reservoir has a relatively small brown trout population. The capture – mark – recapture population survey was not precise, due to the low number of fin clipped fish released, but primarily the low number of total captures. Nonetheless, the low catch effort of 0.07 brown trout per trap indicates a low population size.

There were just five rainbow trout captured for the whole survey, indicating very low abundance.

The growth of fish is typical of lower productive lake fisheries within Tasmanian, although a larger sample size is needed to make an objective assessment.

Analysis of length frequencies showed two length cohorts. It is difficult to determine the origins of these fish but they are likely to be a mix of adult transfers, fry stocking and/or natural recruitment.

It is evident that natural recruitment from the Pet River is low and unable to sustain a large population of brown trout in the reservoir. The reasons for this are unclear, but the reservoir does appear to have a sizable blackfish population, which may be influencing annual recruitment.

There does not appear to be any demonstrated link between angler catch rates and stocking events, except for one large stocking of yearling rainbow trout in 2005-06. The long-term catch rates for both brown and rainbow trout are low. The transfer of adult brown trout in the period 2014-17 does not appear to have contributed to any meaningful improvement in catch rates. It may be necessary to increase the number of adult brown trout transferred to meet acceptable catch rates, however this would need to be balanced against the resulting increase in fishing effort.

Little Pine Lagoon (April 2018)

During 17-19 April 2018, we conducted an in-lake survey at Little Pine Lagoon to assess:

- the CPUE for brown trout,
- the population structure, and
- the condition of fish.

Over two nights, we set 104 box traps and captured 482 brown trout, with all areas of the lagoon surveyed. We weighed and measured 362 brown trout for fork length, with the remaining 120 brown trout counted only. The CPUE for brown trout was 4.64 fish per trap, indicative of a high abundance of fish.

Of the 482 brown trout captured, 50 per cent were female, 36 per cent male, and the remainder immature fish. Table 7 shows the summary statistics for these fish. The average weight for all fish, including immature fish, was 917 grams. The average weight for fish over 300 mm was 1 044 grams, with 85 per cent of the fish measured being greater than 300 mm length (see Figure 8).

Grouping	Measurement	Mean	Std Error	Minimum	Maximum
All brown trout (n=362)	Length (mm)	417	4.48	40	570
	Weight (g)	917	20.25	10	1 870
	Cond Factor (k)	1.14	0.01	0.61	2.03
Male (n=132)	Length (mm)	476	2.87	320	570
	Weight (g)	1 189	18.13	400	1 870
	Cond Factor (k)	1.10	0.01	0.61	1.34
Female (n=181)	Length (mm)	424	3.78	247	510
	Weight (g)	899	20.10	170	1 510
	Cond Factor (k)	1.14	0.01	0.69	1.59
Immature (n=49)	Length (mm)	230	9.56	40	338
	Weight (g)	197	14.77	10	460
	Cond Factor (k)	1.25	0.04	0.95	2.03

Table 7. Length, weight and condition factor for brown trout, separated by sex or immature fish

The growth of fish was good, with all fish displaying a healthy weight for a given length. Just over ten per cent of fish grew to over 500 mm (see Figure 8), with no signs of larger fish being in poor condition.

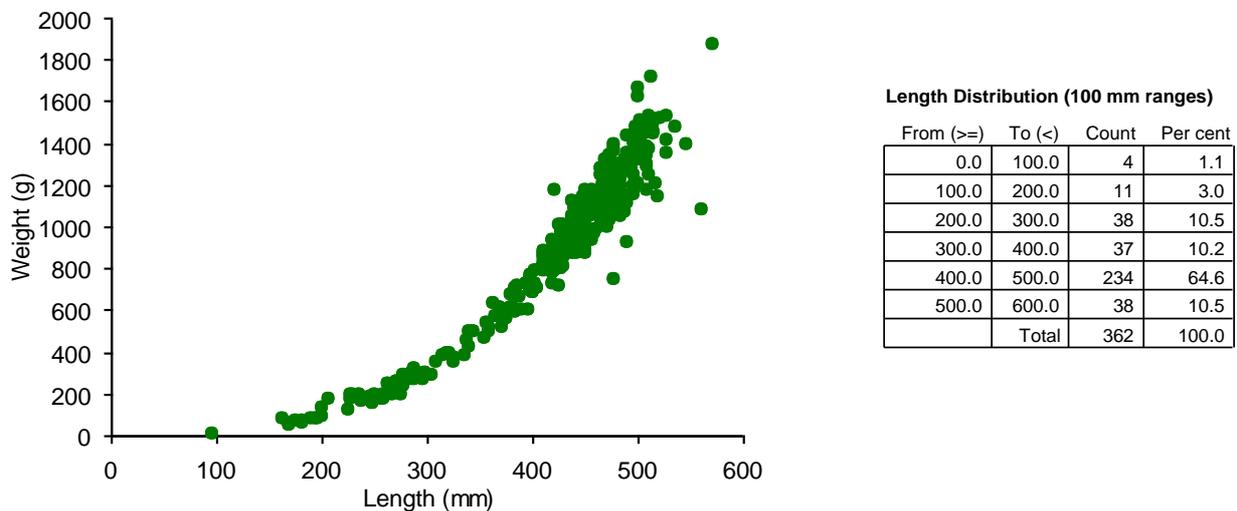


Figure 8. Length/weight regression for brown trout captured 2018

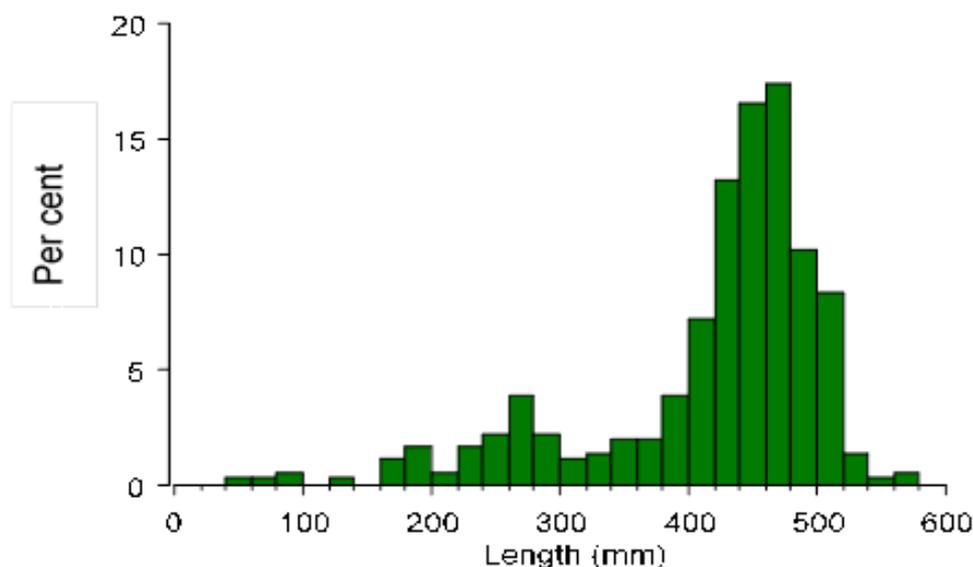


Figure 9. Length frequency for brown trout 2018

Discussion

There was good evidence the recruitment of brown trout has been consistent across several years with all length classes present (see Figure 9). However, recruitment resulting from 2016 spawning was not well represented, despite favourable conditions during winter/spring.

There were still reasonable numbers of fish surveyed in the 220-320 mm size range. The overall condition of brown trout was good, with 92 per cent in the fair to excellent range.

There was no evidence of excessive harvest, with significant latent fishing effort apparent over the last six years.

In summary, Little Pine Lagoon has a high abundance of brown trout across a wide range of sizes. The vast majority of fish are in good condition and the growth of fish, relative to most other waters, is good. The annual harvest relative to fish abundance is sustainable and present fishery management actions are supporting the fishery.

South Riana Dam (July 2018)

During 23-25 July 2018, the Service undertook a trapping survey within South Riana Dam. The purpose of the survey was to gain information on:

- catch per unit effort,
- the length structure of the brown trout population,
- the condition of fish, and
- the brown trout population size.

Before the survey, to help estimate the population, 400 adult brown trout, sourced from the Liawenee Canal spawning trap were adipose fin clipped and transferred to South Riana Dam. These fish weighed an average of 850 grams.

During the survey, 54 box traps were set over two nights with 115 brown trout captured. This equals 2.13 brown trout per trap. This indicates moderate to low abundance of brown trout. We examined the brown trout for the presence of an adipose fin clip with just two clipped fish captured. One individual freshwater crayfish (*Astacopsis gouldi*) was also captured.

Grouping	Measurement	Average	Minimum	Maximum
All brown trout (n=115)	Length (mm)	446	330	673
	Weight (g)	1 006	400	2 450
	Cond Factor (k)	1.10	0.61	1.72
Female (n=77)	Length (mm)	420	330	603
	Weight (g)	847	400	1 630
	Cond Factor (k)	1.12	0.61	1.72
Male (n=38)	Length (mm)	499	360	673
	Weight (g)	1 328	670	2 450
	Cond Factor (k)	1.07	0.74	1.58

Table 1: Descriptive statistics for brown trout for combined sample, female and male fish.

The catch of 115 brown trout consisted of 77 females and 38 males, with no immature fish recored. There was a significant difference in the average weight and length of male to female fish. Males weighed an average of 1 328 grams with an average length of 499 mm. Females, 847 grams and 420 mm. This difference was largely driven by the high percentage (34%) of male fish greater than 500 mm (see figure 1). In comprison, only 4 percent of females were greater than 500 mm. The average condtion factor for both males and female fish was not significantly different, although fish over 500 mm generally showed signs of poor conditon.

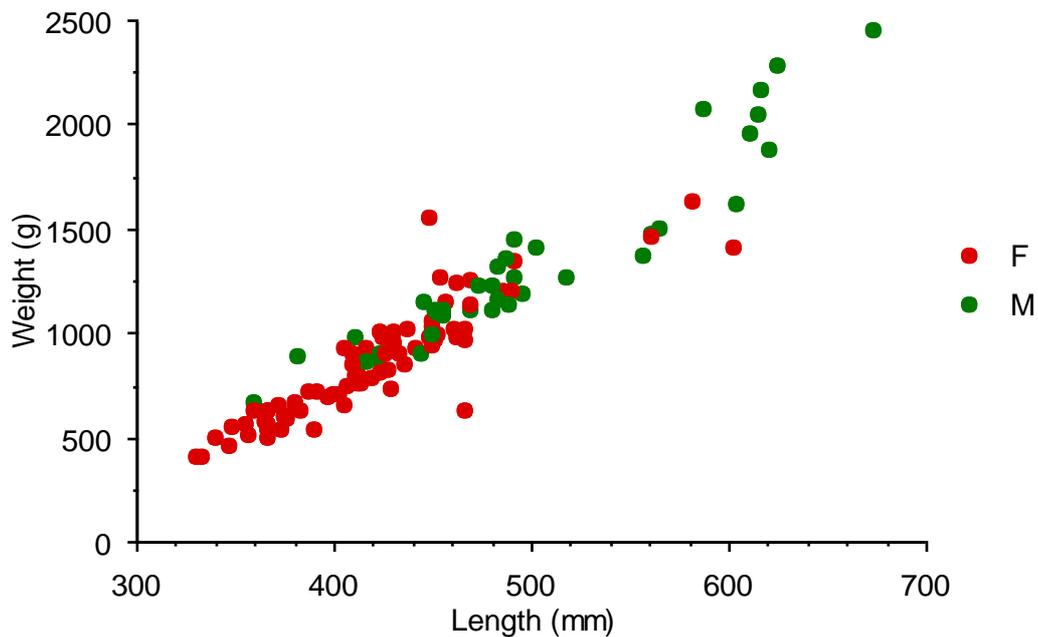


Figure 1: Length/weight comparison for brown trout separated by sex (F=female & M=male).

A comparison of length against weight (see figure 1) indicates the fishery has plateaued, with typical lake-fish growth rates apparent. The group of fish greater than 500 mm are the remnants of the original population from the inundated farms dams. These fish are now reaching old age with several fish over 600 mm in length. Fish under 500 mm generally displayed consistent growth with the rate of growth marginally slower than similar lake fisheries.

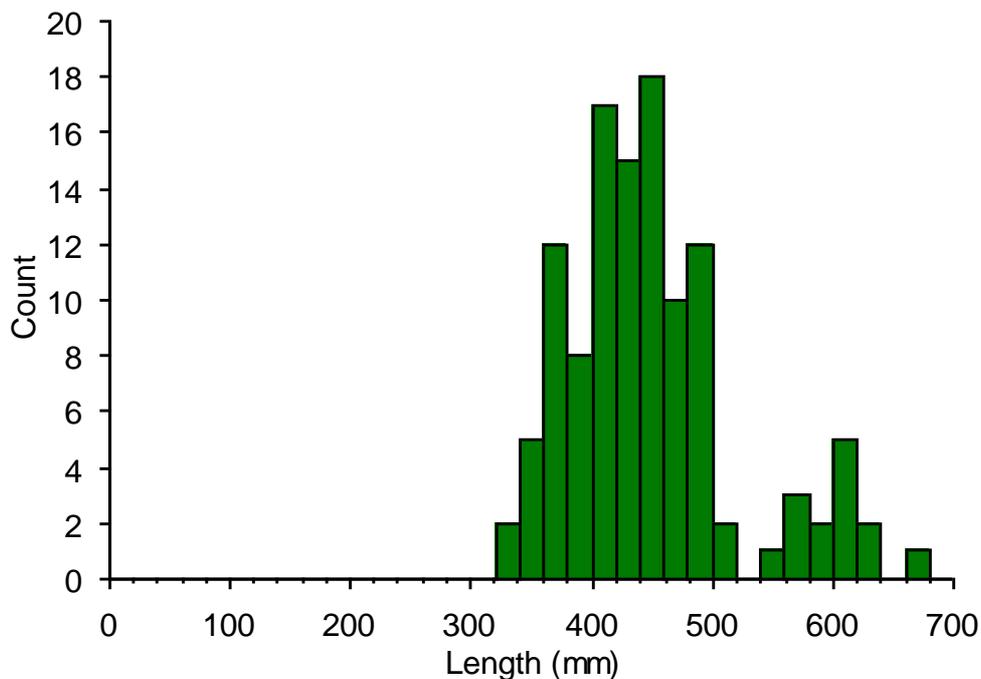


Figure 2: Length frequency plot for all brown trout captured.

A plot of length frequencies (see figure 2) shows a number of fish 340–420 mm that likely represent the fry stocked during 2015 now forming a single cohort of 3-year-old fish. Fish

between 420–500 mm may be from a population of river fish before flooding, and/or a stocking from November 2016 of 200 gram fish. There is no evidence of the 2017 fingerling stocking that should have shown up as fish of approximately 220⁺ mm. Smaller fish (less than 180 mm) are typically not captured in box traps and are absent in the length frequency data.

There is no evidence of any 1⁺ or 2⁺ year old fish from natural recruitment.

Discussion

The results of the 2018 survey indicate South Riana Dam has small to moderate brown trout population. The capture – mark – recapture population survey was not precise due to the low number of fin clipped fish released and the low number of total captures. Nonetheless, the low catch effort of 2.13 fish per trap indicates a low to moderate population size.

Given the results of this fishery assessment, it is apparent that South Riana Dam has already passed through the initial period of higher productivity normally associated with a newly formed water. The decline in the condition of fish over 500 mm is an indicator that larger/older fish are unable to sustain their weight. The growth of fish under 500 mm was within the lower bounds for a typical Tasmanian lake fishery. The reasons for slightly slower growth is likely linked to the significant drawdowns in lake level for seasonal irrigation. This has limited the establishment and growth of both submerged and emergent macrophytes.

There was no conclusive evidence of natural recruitment contributing to the trout population. If natural recruitment is occurring, it is at a very low level and below the number of recruits needed to sustain the fishery.

Future Fishery Performance Assessments 2018-19

In accordance with the *Tasmanian Inland Recreational Fishery Management Plan 2018-28*, two fishery assessments have been identified for 2018-19, Woods Lake and Bronte Lagoon.

We also plan to undertake a follow up survey of Shannon Lagoon following the release of 500-tagged fish in June 2017.

Anglers surveys

Angler surveys

We conduct the annual Angler Postal Survey (APS) to get measurable information on recreational fishery each year. We mail a written questionnaire at the end of the season to a sample of licence holders.

There is a summary of the top ten rivers and top ten lakes and lagoons below. A full report of the Angler Postal Survey (APS) results for the 2017-18 will be published on the IFS website during September 2018.

Ranking of fisheries based on results of the 2017-18 APS

Ranking	Water	Catch Rate (fish per angler per day)	Angler Numbers
1	yingina/Great Lake	1.34	7 112
2	Woods Lake	2.77	5 485
3	Arthurs Lake	0.84	5 039
4	Penstock Lagoon	2.35	3 149
5	Bronte Lagoon	1.39	2 860
6	Little Pine Lagoon	1.52	2 414
7	Four Springs Lake	1.29	2 283
8	Bradys Lake	0.96	1 653
9	Craigbourne Dam	0.89	1 496
10	Tooms Lake	1.63	1 469
11	Lake Echo	2.73	1 364
12	Lake Leake	1.11	1 259
13	Lake Burbury	2.32	1 181
14	Brushy Lagoon	1.00	1 128
15	Meadowbank Lake	1.51	1 076

Ranking	River	Catch Rate (fish per angler per day)	Angler Numbers
1	River Derwent	0.5	2 467
2	South Esk River	1.23	2 257
3	Mersey River	2.38	2 257
4	Meander River	1.49	1 915
5	Tyenna River	2.09	1 679
6	River Leven	0.77	1 338
7	Brumbys Creek	0.72	1 207
8	Macquarie River	0.96	1 023
9	North Esk River	1.75	1 023
10	Huon River	0.48	971

* Catch rate = all fish species combined as fish per angler per day

The 2018 brown trout spawning run

Monitoring

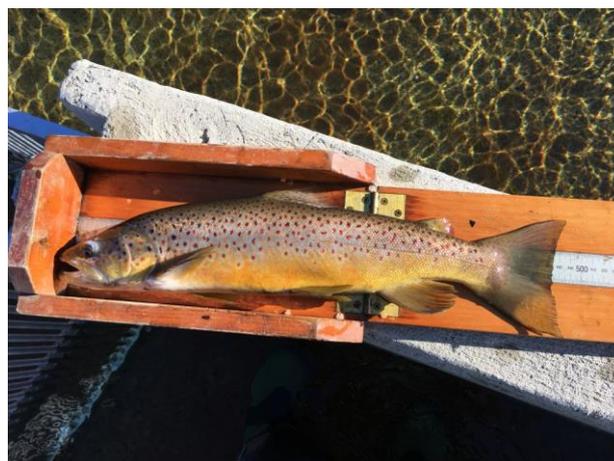
During the spawning run, we sampled the fish from the traps at yingina/Great Lake, Arthurs Lake and River Derwent above Lake King William. We do this to get the average weight and length of the brown trout.

Spawning run	Number measured	Weight range (g)	Average weight (g)	Length range (mm)	Average length (mm)
Liawenee Canal – 19 April	209	210 - 1 490	842	260 - 512	417
Sandbanks Creek – 11 July	148	160 - 1 300	790	248 - 486	406
Tumbledown Creek – 13 June	299	140 - 1 300	724	230 - 508	408
Scotch Bobs Creek – 13 June	200	100 - 1 460	691	229 - 528	396
Hydro Creek – 27 June	210	120 - 1 210	684	247 - 487	396
River Derwent – 12 June	276	140 - 830	463	218 - 420	344

The average length and weight of the fish at yingina/Great Lake decreased for 2018 compared with 2017. The average weight of brown trout at Liawenee Canal fell by 157 grams and at Sandbanks Creek, the weight fell by 86 grams.

At Arthurs Lake, the number of fish in the traps over 400 mm in length increased from 43% in 2017 to 62% in 2018. We continued to release all fish over 400 mm above the traps to spawn.

The River Derwent trap above Lake King William showed an increase of in average weight by 87 grams and an increase in average length of 35 mm.



Arthurs Lake brown trout from Tumbledown Creek

Adult brown trout transfers

The brown trout spawning migration is complete across all the traps in the Central Highlands and so is the annual transfer of wild adult brown trout.

Sometimes natural recruitment cannot sustain a wild population. We assist these fisheries with stocking using wild fish whenever possible.

Total number of wild adult brown trout stocked from all traps during the 2018 spawning run was 25 808.

Waters stocked with wild adult brown trout include:

Blackman's Lagoon	600
Bradys Lake	7 774
Craigbourne Dam	1 100
Curries River Reservoir	600
Four Springs Lake	4 039
Lake Binney	2 248
Lake Crescent	2 000
Lake Dulverton	115
Lake Leake	1 100
Penstock Lagoon	3 150
Lake Leake	1 100
Pet Reservoir	600
South Riana Dam	400
Tooms Lake	1 000



Releasing River Derwent (Lake King William) fish in to Bradys Lake.

Seasonal spawning migration numbers

Brown trout

From the Liawenee Canal (yingina/Great Lake) fish trap we transferred over 13 000 wild adult brown trout. From Sandbanks Creek, (also yingina/Great Lake), 1 554.

From the River Derwent (Lake King William) we transferred just over 9 000. Most of these we stocked in to the Bradys Chain of lakes.

From the three fish traps on Arthurs Lake we trapped 8 606 wild adult brown trout but transferred only 1 416 fish. All fish over 400 mm were released above the trap to continue on their spawning migration.

Rainbow trout

Rainbow trout stockings started on the 26 June 2018 with 12 785 stocked into the public fisheries.

Blackmans Lagoon	250		
Briseis Lake	500	Lake Kara	318
Brushy Lagoon	317	Lake Leake	2 100
Craigbourne Dam	1 000	Penstock Lagoon	1000
Curries River Reservoir	200	Pet Reservoir	500
Dee Lagoon	1 000	Pioneer Lake	500
Four Springs Lake	2 100	Taylors Dam	200
Frombergs Dam.	200	Tooms Lake	1 500

Carp Management Program

Throughout the winter period, maintenance was done at Lake Sorell ready for the peak carp spawning season (October to February). This involved checking and repairing the 14 kilometres of barrier netting used to stop carp from getting into their wetland spawning sites. Gillnet was also repaired in anticipation of warming waters and rain events. A shipment of 60 new trammel nets were ordered from the UK, which will be due to arrive in September.

Fishing effort was maintained on a small scale, and was dependant on weather conditions. The two remaining transmitter fish remained spread across the lake, sitting in the same locations for weeks at a time. Gill nets were set in a range of spots, targeting both tracker fish as well as rocky reef structures in deep water (2m +). Two carp were caught, one in a non-targeted gill net set over a rocky reef, and another which was caught while targeting a transmitter fish.

In mid-July, Jonah Yick, IFS Leader of the Tasmanian Carp Management Program attended a workshop in Canberra. The workshop was part of a larger project under the National Carp Control Plan (NCCP).

At the workshop there were specialists from all over the country including:

- researchers of small and large fish,
- plant scientists,
- waterbird scientists,
- amphibian (frogs and toads) researchers, and
- bug scientists.



The National Carp Control Plan workshop, Canberra

The workshop discussed how different levels of carp reduction from mainland waterways might affect the surrounding ecosystem. It also talked about water quality, system modelling, risk analysis, and economics.

Hopefully, the outcome of the workshop will assist the NCCP to:

- plan an integrated approach to controlling carp in Australia's waterways,
- understand and manage the risks involved with the removal of carp,
- quantify the benefit/cost analysis of the project, and
- inform stakeholder engagement.

For more information about the National Carp Control Plan, see <http://www.carp.gov.au/>

Legislation

The introduction of the *Tasmanian Inland Recreational Fishery Management Plan 2018-28* in June required amendments to the *Inland Fisheries (Recreational Fishing) Regulations 2009* and the *Inland Fisheries (Seasons and Waters) Order 1996*.

NOTE: under the *Inland Fisheries Act 1995* “salmon” includes brown trout, brook trout, rainbow trout and Atlantic salmon.

The following amendments were made for the 2018-19 angling season:

- changes to the interpretation section of the regulations to support the application of daily bag limits, define waters reserved for juvenile anglers and update species nomenclature;
- amended wording so minimum size limits are specifically applied to inland and excepted waters;
- a 220 mm minimum size limit for “salmon” for all rivers and wild and over populated fisheries;
- a 400 mm minimum size limit for “salmon” taken from Bruisers Lagoon, Camerons Lagoon, Lake Crescent and Penstock Lagoon, and omit the 420 mm size limit for Penstock Lagoon;
- a 300 mm minimum size limit for “salmon” for lakes generally;
- removal of the specific size limit reference for brown trout for yingina/Great Lake;
- a daily bag limit of two “salmon” that are greater than 500 mm in length for specific waters as listed under the new Schedule 6 of the regulations;
- a daily bag limit of one “salmon” that is greater than 500 mm in length for Bruisers Lagoon, Camerons Lagoon, Lake Crescent, Penstock Lagoon and any Junior Angling Development fishery;
- a separate daily bag limit of 12 fish for either “salmon” or blackfish;
- a specific daily bag limit of two “salmon” while fishing in a junior angling development fishery;
- a specific daily bag limit of five “salmon” for any river;
- a daily bag limit of two brook trout or five Atlantic salmon for all inland waters;
- new bag limit regulations to be applied the same as current bag limits, i.e. to allow anglers to continue to fish once the daily bag limit has been reached, provided all subsequent fish are returned;
- amended fishing methods to allow anglers to use bait while fishing at Huntsman Lake;
- a new schedule inserted (Schedule 2) that prescribes waters reserved for juvenile angling and redefines the age of a juvenile angler as a person under 18 years of age;
- an update to Schedule 4 – Infringement Notice Offences, to include current amendments;

- an update to Schedule 5 – Bag Limits, to include new waters and changes to new bag limits;
- a new schedule inserted (Schedule 6 – Daily Bag Limits) and waters listed that apply under regulation 17(1) i.e. allowing only two “salmon” over 500 mm length;
- minor administrative matters amended relating to: correcting nomenclature, removing obsolete references and updating matters primarily relating to the issuing of infringement notices and updating the numbering of specific regulations; and
- moved the seasonal boundary on the River Leven to Whisky Creek and the River Derwent to New Norfolk Bridge, to provide for an extension of all year round waters on these rivers.

Amendments were made to the *Inland Fisheries (Commercial Net and Fees) Regulations 2009*:

- renamed as the *Inland Fisheries (General) Regulations 2009*; and
- added a Schedule 2 – Infringement Notice Offences and Penalties, allowing an infringement notice to be issued for prescribed offences under the *Inland Fisheries Act 1995*.

Legislation Review 2019

The *Inland Fisheries (Recreational Fishing) Regulations 2009* and the *Inland Fisheries (General) Regulations 2009* (formerly the *Commercial Nets and Fees Regulations 2009*) are due for review and remake by December 2019.

Regulations are reviewed every 10 years. This ensures that legislation made is effective, efficient and necessary and that, in cases where it imposes a cost or burden on the Tasmanian community, it is justified as being in the public interest. It also ensures outdated or inappropriate subordinate legislation is not kept indefinitely.

The IFS will soon begin reviewing these two regulations. For the recreational fishery, this should be a straightforward process, as we have recently reviewed our regulations for the trout fishery under the *Tasmanian Inland Recreational Fishery Management Plan 2018-28*.

For the commercial freshwater fishery and associated industries, it is envisaged that some significant changes may be required to meet the contemporary management of activities.

Interested stakeholders will be able to offer comment on this legislation when a Regulatory Impact Statement is released for public comment mid-2019.

The IFS is also reviewing the Seaward Limits Order that defines the boundaries between Inland and State (marine) waters. We hope to complete this by the start of the 2019-20 angling season.

Compliance

Following up intelligence leads was critical to the success of joint operations during the year. With Tasmania Police, we carried out operations to enforce whitebait regulations on waters in the North West, successfully laying charges for fisheries and non-fisheries offences. The cooperation benefited all enforcement agencies involved, and the operations led to the conviction of nine defendants for 34 whitebait and related offences, with fines of \$26 394. Seven further defendants are pending appearance in the Magistrates Court on 33 charges.

Analysis of data showed the waters in the State with the largest number of recorded fisheries offences were River Derwent, Woods Lake, yingina/Great Lake, Craighourne Dam, St Patricks River, Arthurs Lake, Lake Duncan, Penstock Lagoon and Dee Lagoon. All had five or more infringement notices issued in 2017-18.

Statistics from 1/7/17 to 30/6/18

- 4 455 angling and 241 whitebait licences inspected.
- 28 nets seized.
- 46.9 kilograms of whitebait seized.
- Six search warrants executed and two searches by consent of residential premises.
- Five vehicles and one vessel searched.
- 602 vessels inspected under Marine and Safety legislation.
- Nine defendants convicted of 34 offences in the Magistrates Court with seven further defendants listed for appearance on 33 charges.
- Infringement and Conditional Cautions issued for 179 offences.
- \$15 443 in court fines and \$26 394 in infringement notice fines.
- Eleven notices of disqualification are current, preventing offenders from holding a recreational whitebait licence.

Prosecution Offences June to August 2018

- Paul Liam J J NICHOLS of Mella was convicted on 6/6/18 in the Smithton Magistrates Court of 1 count of Take whitebait without a whitebait licence, 1 count of Possess whitebait without a whitebait licence, 1 count of Fail to comply with a Ministerial order under the Inland Fisheries Act 1995 relating to the taking of whitebait, 2 counts of Use net other than landing net or seine net at inland waters and 2 counts of Possess net other than landing net or seine net at inland waters. The defendant was fined \$3,000 and court costs of \$82.15.
- Peter Morris SALTER of Montagu was convicted on 20/8/18 in the Burnie Magistrates Court of 3 counts of inducing another person to commit an offence under the Inland Fisheries Act 1995. The charges relate to his part in transporting Brodie Lee POPOWSKI to the Montague River so he could illegally fish for whitebait. The

Defendant was fined \$700 and court costs of \$83.74. These offences will appear in the 2018/19 'Prosecution Offences' table, on the next occasion.

- Paul Charles BAKES OF Hampshire was convicted on 20/8/18 in the Burnie Magistrates Court of 6 counts of take protected fish, 9 counts of possess freshwater crayfish and 1 count of take trout without a licence. Information from the public resulted in a joint operation between IFS Fisheries Officers and Marine Police at Stanley. Mr Bakes admitted the offences and was charged. The complaint outlined the Defendant illegally hunted, caught and ate the highly protected and threatened species from November 2013 to November 2017. The Defendant was fined \$8550 and court costs of \$66.36. These offences will appear in the 2018/19 'Prosecution Offences' table, on the next occasion.

Club events, meetings and dinners

June 2018

- Southern Tasmanian Licenced Anglers Association annual general meeting and dinner
- Longford Anglers annual dinner

July 2018

- New Norfolk Licenced Anglers Association annual dinner
- North Western Fisheries Association annual general meeting
- Tasmanian Fly Tyers annual dinner

August 2018

- Devonport Anglers Association – Presentation Day and Junior Angling Day
- Talk Wild Trout
- Corra Linn Fly Fishers Club Presentation
- Australian Stram Management Conference Hobart

Stockings between 1 June and 31 August 2018

Water	Date	Species	Stock	Number	Origin	Type	Weight (g)
Blackmans Lagoon	22-Jun-18	brown trout	Wild	300	Liawenee Canal	diploid	850
Blackmans Lagoon	22-Jun-18	brown trout	Wild	50	River Derwent, Lake King William	diploid	465
Blackmans Lagoon	22-Jun-18	brown trout	Wild	250	Tumbledown Creek	diploid	718
Blackmans Lagoon	20-Jul-18	rainbow trout	Domestic	250	Huon Aquaculture Company, Millybrook	diploid	385
Bradys Lake	5-Jun-18	brown trout	Wild	586	River Derwent, Lake King William	diploid	465
Bradys Lake	15-Jun-18	brown trout	Wild	2 013	River Derwent, Lake King William	diploid	465
Bradys Lake	19-Jun-18	brown trout	Wild	561	River Derwent, Lake King William	diploid	465
Bradys Lake	29-Jun-18	brown trout	Wild	471	River Derwent, Lake King William	diploid	465
Bradys Lake	7-Jul-18	brown trout	Wild	210	River Derwent, Lake King William	diploid	465
Bradys Lake	9-Jul-18	brown trout	Wild	230	River Derwent, Lake King William	diploid	465
Bradys Lake	10-Jul-18	brown trout	Wild	149	River Derwent, Lake King William	diploid	465
Bradys Lake	11-Jul-18	brown trout	Wild	79	River Derwent, Lake King William	diploid	465
Briseis Lake	17-Jul-18	rainbow trout	Domestic	500	Huon Aquaculture Company, Millybrook	diploid	385
Brushy Lagoon	26-Jun-18	rainbow trout	Domestic	317	Huon Aquaculture Company, Springfield	diploid	1 500
Brushy Lagoon	13-Jul-18	brown trout	Wild	257	Liawenee Canal	diploid	850
Clarence Lagoon	15-Aug-18	brook trout	Domestic	1 000	Mountain Stream Fishery	diploid	80
Craigbourne Dam	12-Jul-18	rainbow trout	Domestic	1 000	Huon Aquaculture Company, Millybrook	triploid	400
Curries River Reservoir	20-Jul-18	rainbow trout	Domestic	200	Huon Aquaculture Company, Millybrook	diploid	385
Curries River Reservoir	22-Jun-18	brown trout	Wild	450	River Derwent, Lake King William	diploid	465

Inland Fisheries Service

Report to anglers

June to Aug 2018

Water	Date	Species	Stock	Number	Origin	Type	Weight (g)
Curries River Reservoir	22-Jun-18	brown trout	Wild	150	Tumbledown Creek	diploid	718
Dee Lagoon	13-Jul-18	rainbow trout	Domestic	1 000	Huon Aquaculture Company, Millybrook	triploid	400
Four Springs Lake	1-Jun-18	brown trout	Wild	239	Sandbanks Creek	diploid	900
Four Springs Lake	6-Jun-18	brown trout	Wild	235	Liawenee Canal	diploid	850
Four Springs Lake	15-Jun-18	brown trout	Wild	115	Sandbanks Creek	diploid	900
Four Springs Lake	9-Jul-18	rainbow trout	Domestic	2 100	Huon Aquaculture Company, Millybrook	triploid	385
Frombergs Dam	16-Jul-18	rainbow trout	Domestic	200	Huon Aquaculture Company, Millybrook	diploid	385
Lake Binney	2-Jul-18	brown trout	Wild	244	River Derwent, Lake King William	diploid	465
Lake Binney	4-Jul-18	brown trout	Wild	232	River Derwent, Lake King William	diploid	465
Lake Binney	6-Jul-18	brown trout	Wild	336	River Derwent, Lake King William	diploid	465
Lake Dulverton	15-Jun-18	brown trout	Wild	115	Sandbanks Creek	diploid	900
Lake Dulverton	12-Jul-18	brown trout	Wild	90	Liawenee Canal	diploid	850
Lake Kara	26-Jun-18	rainbow trout	Domestic	318	Huon Aquaculture Company, Springfield	diploid	1500
Lake Leake	1-Jun-18	brown trout	Wild	1 100	Liawenee Canal	diploid	850
Lake Leake	10-Jul-18	rainbow trout	Domestic	2 100	Huon Aquaculture Company, Millybrook	triploid	400
Penstock Lagoon	5-Jun-18	brown trout	Wild	132	Sandbanks Creek	diploid	900
Penstock Lagoon	6-Jun-18	brown trout	Wild	150	Liawenee Canal	diploid	850
Penstock Lagoon	11-Jul-18	rainbow trout	Domestic	2 100	Huon Aquaculture Company, Millybrook	triploid	400
Penstock Lagoon	11-Jul-18	brown trout	Wild	148	Sandbanks Creek	diploid	800
Pet Reservoir	14-Jun-18	brown trout	Wild	600	Liawenee Canal	diploid	850
Pet Reservoir	17-Jul-18	rainbow trout	Domestic	500	Huon Aquaculture Company, Millybrook	diploid	385

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Report to anglers

June to Aug 2018

Water	Date	Species	Stock	Number	Origin	Type	Weight (g)
Pioneer Lake	16-Jul-18	rainbow trout	Domestic	500	Huon Aquaculture Company, Millybrook	diploid	385
South Riana Dam	14-Jun-18	brown trout	Wild	400	Liawenee Canal	diploid	850
Taylor's Dam	16-Jul-18	rainbow trout	Domestic	200	Huon Aquaculture Company, Millybrook	diploid	385
Tooms Lake	12-Jul-18	rainbow trout	Domestic	1 500	Huon Aquaculture Company, Millybrook	triploid	400

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