

On the Rise



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Risdon Brook Dam opens for disabled anglers



Risdon Brook dam with disabled angling area under construction

Australia's first facility catering specifically for disabled anglers opened near Hobart at the start of the 1996-97 angling season.

The Commission and the Minister for Inland Fisheries had long been of the opin-

ion that Risdon Brook Dam could be used for angling with no detrimental effect on water quality. This can now be put to the test as the Hobart Regional Water Board recently agreed to allow access for disabled persons to fish this water.

Some works were necessary to facilitate wheelchair access. A parking area was built, linked by a flat path to several access points along the shoreline. The Inland Fisheries Commission provided funding for the works with in-kind support from the Water Board. McKay Timber kindly donated hardwood sleepers to provide security barriers for wheelchairs. The Commission is already aware that this access is not perfect and further improvements are planned.

The lake contained rainbow trout from a previous stocking some four years ago. This was supplemented in July 1996 by a further 1 000 rainbow trout in the 100-300g range.

Access to this water is limited to disabled anglers only. The qualification for this is that the person must hold a Transport Access Scheme permit issued under the Traffic Act 1925. This permit is available from the Registrar of Motor Vehicles.

The Commission is pleased to support this project and believes that more facilities will soon be developed elsewhere in the State. Already Comalco has indicated support for development of access facilities at Lauriston Dam in the north, whilst Latrobe Landcare are keen to develop the Myrtle Hole area on the Mersey River in a similar way. Disabled access is also part of the Four Springs development. In the south, the Kingborough Anglers Association intend to develop facilities at Coffee Creek Dam.

These are all worthwhile projects that will certainly assist those in the community who are presently unable to easily access public waters for fishing.

IN BRIEF

Lake Leake shack gets a facelift

The Commission's shack at Lake Leake was certainly in need of repair when Associate Commissioner, Bob Ward, rounded up his gang and set to it, ably assisted by Noel Maroney.

The Lake Leake shack reconstruction. Bob Ward (supervisor) on left and Frank Johnson doing the work.



A thorough renovation resulted with perhaps good news for poachers – it is now so comfortable that inspectors will not want to go outside.

Frank Johnston and Barry Sherriff as usual were only too willing to help whilst other contributions were made by David Goss and Terry Charlton. These voluntary efforts are certainly appreciated by the Commission.

Bronte Tie-In

A huge success is the best way to describe the fly tying expo at Bronte Park Highland village on the weekend of 12-13 October. More than 500 people attended and 21 exhibitors were present.

The latest in tying tactics and equipment was demonstrated by the experts whilst related subjects such as angler art, taxidermy and fishing publications were represented.

Organiser Paul Heather informs me that the Tie-In will be on again next year and

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PETER BUTLER

Redfin Perch

ANDREW SANGER

The Ironstone Hut: Lake Nameless

Peter Butler, Burnie

The Ironstone Hut at Lake Nameless was officially re-opened on 9 March 1996. The original hut, built on the same site in 1917-18, had fallen into disrepair and due to its poor condition, the Mountain Huts Preservation Society decided to rebuild it to maintain the heritage link with the past for the descendants of the original builders and the many users – past, present and future, of the Chudleigh Lakes region and the hut.

The Society spent several years battling Government bureaucracy on many fronts over issues such as:

- whether to rebuild the ruin or not;
- build a new hut but elsewhere and leave the ruin to further decay;
- if rebuilding, what materials should be used.

These were just a few of the issues. The main delay eventually was that the Department of Parks, Wildlife and Heritage insisted that there was great significance and links with Sidney Higgs' original stonework and that any attempt to rebuild would destroy the importance of the ruins and suggested, as a compromise, a new hut be built next to the ruin. This compromise was rejected by the Society and their reply to PW&H stated their original desire to rebuild the hut was better than leaving the decaying ruins to eventually disappear and thereby lose all links with the past.

The matter was finally referred to the World Heritage Area Consultative Committee who recommended that the hut be rebuilt, conserving as much original stonework as possible.

Work began on rebuilding in January 1993 after three years of hard fought argument on both sides.

The remaining walls and chimney were demolished and the foundations were sought by digging trenches, but none were found. This meant a new building could not be erected using the original stonework as such, so trenches were dug and solid foundations formed to support the new walls.

The materials necessary for rebuilding were purchased and assembled and then flown in by helicopter to the hut site. By the end of the summer of 1993-94 working parties, consisting of members of the local

community and of the Society, had rebuilt the walls to about one metre high. By the end of the next summer the hut was almost finished, with the final completion by the end of 1995, having taken 2 500 hours of voluntary labour.

Opening day was twice postponed due to unseasonal heavy rains and high water levels creating impassable river conditions for walkers and horses. The weather conditions of 9 March were outstanding. On a cloudless, mild, still day, 270 people converged on the new hut to celebrate a special event. People came from near and far within the State with some from Canberra as well. Many came from the Deloraine/Mole Creek region. A two hour walk from Lake Mackenzie did not daunt many. The elderly and infirm flew in by chartered helicopter in a time of about five minutes, including 89 year old Ena Harvey and Tom Haberle whose trip in the helicopter will be an unforgettable event in their return to this magnificent locality and hut. Guest speakers paid tribute to the original and current builders and of the events and fund raising in relation to the construction decades ago and now. The official opening was performed by Mrs Rema Jago of Launceston. Mrs Jago is the granddaughter of Sidney Higgs.

The hut has been thoughtfully rebuilt in a similar way to the original with a verandah

Present - reopening 9 March 1996 (Photo: Peter Butler)



Past - during construction 1916-17 (Photo: Peter Butler)



Past-it - 1992 (Photo: courtesy Advocate)

facing north, two small windows, bunks and a table. Around the walls are some narrow shelves.

Also placed in the walls are some projecting stones on which a candle can be placed. Flat stones pave the floor and a large curved stone from the old fireplace, forms the top of the fireplace opening in which a small pot-belly stove is installed.

Coke for the stove is flown in due to the lack of nearby wood. This supports current policies and trends of using fuel stoves in remote areas to preserve the vegetation and reduce the risk of fire. There is a small stoned well provided and situated near the chimney.

The hut is ideally situated on a small flat grassy area on the northern slopes of Forty Lakes Peak, with a superb view over Lake Nameless. Its stone walls and colour-bond roof will provide shelter for many generations to come.

IN BRIEF

...continued from front page

planning is already underway. There is a distinct possibility that there may be more room available at Bronte next year.

On the Saturday evening about 120 people attended a testimonial dinner in honour of Noel Jetson who has recently retired as a trout guide. Noel and wife, Lois, ran the Jetfly business from Cressy. Noel was the first of Tasmania's trout guides and the tributes that came in from all over the world showed why he was so highly regarded in this business.

The Commission offers its best wishes to Noel and Lois in their retirement and also congratulates the organisers of the tie-in for an excellent weekend.

Lauriston Dam tagged fish caught

On 14 August three rainbow and two brown trout were tagged by Commission staff and released in Lauriston Dam. Five local companies all agreed to sponsor an individual fish as follows:

Comalco Aluminium	\$100
Northern Engineering	\$100
ART Painters and Signwriters.....	\$100
Broxburn Contracts	\$100
East Tamar Maintenance	\$250

There were high hopes of a quick catch but it has taken until October for the first return.

Local angler, Graeme Nettlefold of George Town, caught the East Tamar Maintenance fish and will receive his reward of \$250 worth of fishing gear.

So, they do get caught and the sponsors have kindly agreed to extend the prize offer for the remainder of the season.

Electric outboards on Curries Dam

It's interesting how the media often jump the gun without checking their facts and that is, it is still illegal to fish from a boat on Curries River Dam powered by any motor, electric or otherwise.

The Inland Fisheries Commission originally put this regulation in place at the request, and in support of the Rivers and Water Supply Commission as it was a necessary condition of gaining access for anglers to this water. Whilst RWSC may have relaxed its requirements, the IFC also has to change its regulations which is not a quick process.

In the meantime, any person intending to use an electric outboard motor on Curries River Dam should obtain an exemption permit (at no charge) from the IFC.

What bureaucratic garbage you may say. Perhaps it is, but if all that was required to change a regulation was a statement in the papers, we would be in a lovely mess.

OTHER THAN TROUT

A regular article on animals of interest to the angler

What are whitebait?

by Wayne Fulton, Commissioner of Inland Fisheries

Whitebait is a collective name for small transparent fishes. It is used in many parts of the world to describe small schooling fish which may be either adult or juvenile.

In Tasmania there are at least six fish species commonly present in whitebait migrations. Some of these are adult fish at the time of migration whilst others are juveniles. Just to make things more difficult there are also several different life histories involved.

The species commonly found in whitebait runs are:

Tasmanian whitebait	<i>Lovettia sealii</i>	adult
Jollytail	<i>Galaxias maculatus</i>	juvenile
Spotted galaxias	<i>Galaxias truttaceus</i>	juvenile
Climbing galaxias	<i>Galaxias brevipinnis</i>	juvenile
Tasmanian mudfish	<i>Galaxias cleaveri</i>	juvenile
Tasmanian smelt	<i>Retropinna tasmanica</i>	adults & juv.

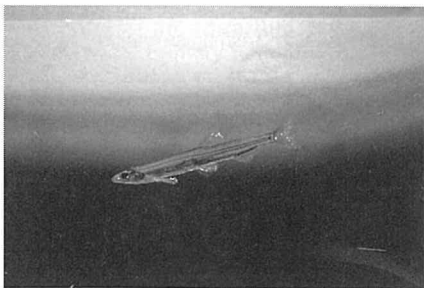
The different life histories are described further below.

Lovettia sealii: Tasmanian whitebait

Tasmanian whitebait spend most of their life in the lower estuaries or the sea and migrate into the upper estuaries in early spring to spawn. Eggs are attached to submerged logs or rocks. The young hatch and drift to sea to mature and return to the estuaries to spawn the following year. Thus it has an annual life cycle and the adults do not survive spawning.

Galaxias truttaceus: spotted galaxias
Galaxias brevipinnis: climbing galaxias

The spotted galaxias and the climbing galaxias both breed in autumn. They do not undertake any extensive migrations to do so but spawn in the general area of their adult

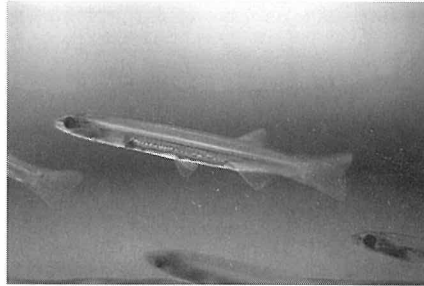


Tasmanian whitebait

habitat which is the lower freshwater reaches of streams for the spotted galaxias and the upper reaches for the climbing galaxias.

On hatching the larval galaxias are washed to sea. They return to the estuaries in spring at about 5-6 months of age. They then move upstream to take up their adult habitat. Spawning does not take place until they are two to three years of age.

The juvenile spotted galaxias is the largest of the juvenile stage whitebait whilst the climbing galaxias, as its name implies,



Spotted galaxias (whitebait stage)

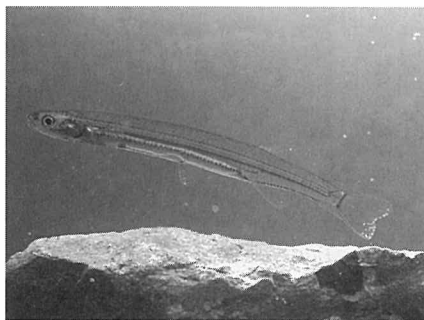
has outstanding climbing ability at this stage due to its large flat pectoral and pelvic fins.

Galaxias maculatus: jollytail

Jollytails live as adults in the lower reaches of streams. They migrate down to estuaries to spawn in autumn. Eggs are deposited amongst vegetation at the limit of the peak tides. They are left in this position and hatch on a following tidal peak 2 or 4 weeks later.

Again, the young are washed to sea on hatching to return 5-6 months later as small transparent whitebait in spring or early summer.

This is the most common of the galaxiid whitebait and some can be found migrating in most months of the year.



Jollytail (whitebait stage)

Galaxias cleaveri: Tasmanian mudfish

The Tasmanian mudfish has not been extensively studied. It is an unusual species capable of surviving for long periods of time in the absence of free water.

It apparently spawns in winter with the larvae also moving to sea to return some 2-3 months later. It is the smallest of the galaxiid whitebait.

The adults live in swampy areas close to, or around the estuaries.

Retropinna tasmanica: Tasmanian smelt

The Tasmanian smelt can be easily identified by its characteristic cucumber odour. In whitebait runs its shiny silver belly is also a distinguishing feature. Another species that has a cucumber odour is the Australian grayling which grows much larger but does



Tasmanian mudfish out of water

occasionally occur in small numbers as a juvenile in whitebait runs.

Both juvenile and adult Tasmanian smelt may be found in whitebait runs. It is likely that the larger ones are mature fish moving in to spawn. This also indicates that there is a marine stage in the life cycle.

Some adult fish, some juvenile fish and sometimes a bit of both. On occasions they may be in mixed schools but more often than not one species will dominate. That sounds like a very complex issue from a management point of view, but there are one or two things in our favour. For example, whilst there is some overlap, different species have different times for their peak migration, they have different water temperature preferences and they move to different parts of the stream.

The commercial whitebait fishery that was a feature of Tasmanian streams in the 40's and 50's is unlikely to be seen again. However, none of the species are endangered and there are sufficient quantities to support a controlled recreational fishery based on the more common species. The whitebait are also important in attracting sea-run trout into the estuaries. The real threat to both these important recreational pursuits are the poachers and those members of the public who support them by illegally buying whitebait from them.



Tasmanian smelt

Carp on the North West Coast

– 1975 revisited

Inland Fisheries Commission inspector Noel Maroney revisits the 1975 carp eradication program.

As has been indicated in past articles, the present infestation of European carp (*Cyprinus carpio*) in lakes Crescent and Sorell is not the first time this fish has turned up in Tasmania to cause much consternation for Inland Fisheries Commission administrators. In January 1975 the then Commission inspector on the north west coast, Brian Vanderfeen, was advised that carp had been released into farm dams in the Stowport area by a farmer who intended to harvest the fish twice a year as protein for pig food.

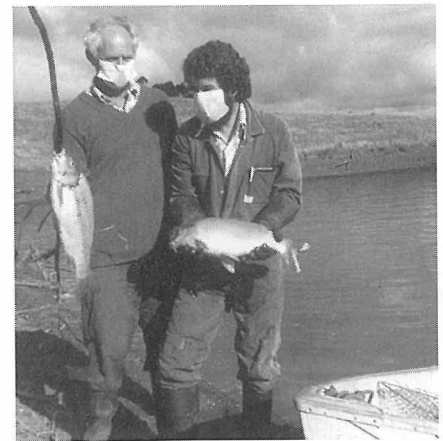
A short time after the carp were put into the clear water of the dams, some of which were used for domestic water supplies as well as for stock use, they began to turn a muddy brown colour and were no longer suitable for human consumption. The farmer began to change his mind and decided to rid the dams of the fish. He tried draining to a low level and blasting them out using gelignite without success.

The then Commissioner of Inland Fisheries, Dan Lynch, was fully aware of the problems associated with European carp on the mainland. He moved swiftly to enact specific legislation to deal with the problem and instructed the small number of field officers to locate all dams that contained carp.

Some initial suspicion by farmers in the district that they might be prosecuted for illegally introducing a prohibited fish into their dams soon gave way to full cooperation after being assured by the Commission, via the print media and television, that the priority was to locate infested dams and to eradicate the carp as soon as possible.

About 20 dams, some large and some small, were soon identified in the Natone, Stowport and Yolla areas. All had typical dirty brown water.

The small group of fisheries officers led by the then Senior Inspector, Merv Duncan, began the task of eradication of carp from the dams using rotenone. Dams were first isolated from domestic and farm animal use. They were measured and the depth of the dam was recorded. The amount of rotenone needed for



Carp from the 1975 eradication (photo: Noel Maroney)

a quick clean kill of the carp was calculated. This was the task of the present Commissioner, Wayne Fulton, who was then Scientific Officer.

A small aluminium boat with outboard motor was used to gravity feed the rotenone from the stern into the water of the dams. It was then mixed throughout the dam by the boat being driven wildly about by Viv Spencer (junior). The rotenone blocks a chemical reaction in fish that prevents them from using oxygen. A short time after the chemical is mixed throughout the dam the carp begin to belly up to the surface and are soon dead, along with other oxygen dependent fish. Eels are able to move out of the water and quickly do so.

About three dams a day, on average, were treated by use of boat and motor. Other small tributary streams and soaks near the dams were treated by hand using knapsack sprayers. All treated dams were neutralised with potassium permanganate after dead fish were removed. They were left for at least three days before use of the water.

All dead fish were removed from the dams, counted and put into excavated pits on site. They were then covered with a layer of lime and soil. About 10 000 carp of varying sizes from 50g to 3kg were eventually killed at a cost of around \$10 000.

To ensure a complete kill of carp, dams were treated again about six months later but no carp were found alive.

The task now at hand to eradicate carp from lakes Crescent and Sorell is a formidable one, and a vastly different mixing bowl. With similar dedication to the task and determination to succeed, we may once again rid this problem fish from Tasmanian waters.

CARP MENACE GROWS DAILY

Focus is on N.W. waters

The water temperature in farm dams in the Stowport area near Burnie is currently around 18 degrees.

During the next two to three weeks it will probably rise to 23 degrees.

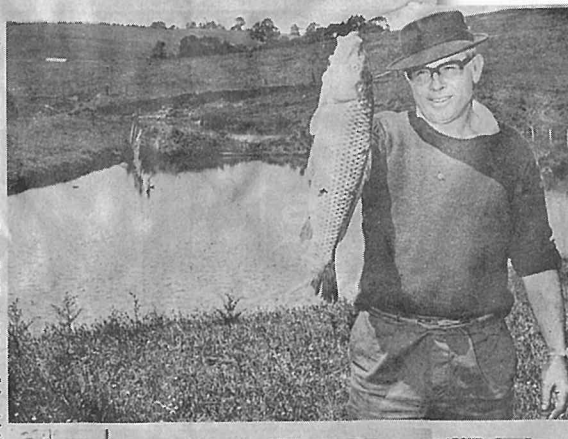
And that could be the crisis period for the prevention or advance of ecological disaster in Tasmania's inland waters — its rivers, lakes and dams.

Between water temperatures of 18 deg. and 23 deg. thousands of illegally introduced European carp now infesting at least 20 farm dams in the Stowport area will spawn out millions of eggs.

And if only a few of these eggs or the tiny carp that will hatch from them in two to six days

grow to about 25 kg (about 50 lb) in weight, live for 20 years or more and proliferate alarmingly without natural predators could completely upset the ecology, or balance of life, in our waterways.

The carp feed by constantly ingesting and rejecting mud. They con-



The carp problem as reported by The Advocate in 1975...

Carp update 96

Water level management has taken up most of the staff time over winter. Several different screens have been trialled in the Lake Crescent outlet. The spillway and the Crescent outlets have now been fitted with 5mm square stainless steel mesh screens to screen out juvenile and adult carp. Kevin Lange and Phil Adams from Salmon Ponds have assisted with construction and installation.

Lake Crescent was deliberately filled to create spill conditions, and as a result of good flows released from Lake Crescent, both lakes Sorell and Crescent dropped by about 15cm. The Lake Sorell gates are open, but stop log weirs have been

installed to limit the level to which Sorell can drop. These weirs are currently installed up to about 20cm below FSL.

The Commission is trying to drop Lake Crescent by about 0.5m by mid November. This will take the water down to about the edge of the marshes. Rain in the Sorell and Crescent catchments is limiting our ability to reach this target.

Electrofishing surveys of known carp habitat resumed during September but no carp were captured.

A work program for the coming year has commenced. Significant elements of the program include:

- maintenance of the outlet structures and screens to ensure water supplies and the development of a water management plan for the lakes;
- seasonal sampling of carp, trout, eels and

galaxiids in Lake Crescent for studies of relative abundance, condition, habitat use, dietary overlap, predation etc;

- monthly sampling of carp for reproductive studies;
- two intensive surveys of the Clyde River and Lake Meadowbank;
- plankton and water quality measurements to assess habitat integrity.

A proposal to radio track carp in Lake Crescent is being costed and assessed. If this goes ahead additional information on habitat use, movements and behaviour of carp will be gained.

John Diggie and Andrew Sanger attended a carp control workshop in Albury in October. This workshop brought together scientific experts from around Australia to review and assess all possible methodologies for carp control.

Brushy Lagoon – the future

The Inland Fisheries Commission has decided in principle to drain Brushy Lagoon, eradicate the redfin perch if possible, and start again with this once popular fishery. Having taken this decision it is now a matter of doing the appropriate planning.

There are many questions that need to be answered:

- can the lake be drained?
- what is the best time to do it?
- is it feasible to remove the perch?
- how will that be done and is it safe?
- what will happen to the fish in the lagoon?
- will the perch re-establish anyway?
- will the fishery be as good again?

Some of these questions can be answered now. Some, such as the future of the fishery, cannot be answered with certainty at this time.

The first step will be to obtain expert engineering advice to address the following issues.

1. Undertake a preliminary feasibility study and cost assessment of dewatering the lagoon. The feasibility study should include options for breaching the dam and later reinstatement or any other appropriate method or combination of methods.
2. Undertake a preliminary assessment of the impact of dewatering the lagoon on downstream structures and water users.
3. Undertake an assessment of means available to provide for future dewatering of the dam.
4. Undertake an assessment of means available to prevent future migration of redfin perch back to the lagoon from downstream.

Consulting engineers, Pitt & Sherry, have been engaged and their report is expected to address such issues as the options for dewatering and how long it would take? When should this be done, what time constraints apply, and how much will it cost?

At the same time, the Commission will



Brushy Lagoon – once a very good fishery

need to plan an eradication strategy. It is proposed to use rotenone to treat the residual water in the lagoon once the level has been lowered as far as possible. The Commission will be required to assess all environmental issues associated with this action.

A Development Proposal and Environmental Management Plan (DP&EMP) will be required by Environment Tasmania. This will be submitted once the engineering feasibility has been assessed.

As indicated, the Commission has made an in-principle decision to rehabilitate the fishery. There is still a lot of planning and preliminary work to be done to prepare for such an operation. If all goes well, the draining would be done this summer. However, if the present wet period continues it may not be possible to do it at all this summer.

Brown Trout Spawning Runs 1996

LAKE SORELL (MOUNTAIN CREEK, 1 JUNE 1996)

200 fish sampled

Combined sexes	
Average length (mm)	439
Range of length (mm)	285 - 643
Average weight (g)	897
Range of weight (g)	300 - 2510

PENSTOCK LAGOON (NO 2 CANAL, 7 JUNE 1996)

79 fish sampled

Combined sexes	
Average length (mm)	515
Range of length (mm)	288 - 588
Average weight (g)	1647
Range of weight (g)	200 - 2250

LAGOON OF ISLANDS (RIPPLE CANAL, 9 JUNE 1996)

20 fish sampled

Combined sexes	
Average length (mm)	612
Range of length (mm)	320 - 720
Average weight (g)	2998
Range of weight (g)	450 - 4450

GREAT LAKE (LIAWENEE CANAL, 30 APRIL 1996)

200 fish sampled

Combined sexes	
Average length (mm)	439
Range of length (mm)	349 - 522
Average weight (g)	905
Range of weight (g)	500 - 1440

ARTHURS LAKE (HYDRO CREEK, 25 JUNE 1996)

200 fish sampled

Combined sexes	
Average length (mm)	426
Range of length (mm)	330 - 530
Average weight (g)	1006
Range of weight (g)	400 - 1750

'Bushwalker' goes free

A pet rainbow trout has recently secured freedom after spending six months in an aquarium at the East Ulverstone Primary School.

The rainbow trout, christened "Bushwalker" by the pupils from the East Ulverstone's Grade 1 class, was originally supplied to the school in April 1996 and kept under permit issued by the Inland Fisheries Commission.

Students in Grade 1 were studying fish and their habitats as part of a science program. With the assistance of local fisheries inspector, John Dowling, the Commission provided six rainbow trout fingerlings which the children were able to observe in a classroom aquarium.

Unfortunately only one fingerling survived but it soon experienced a rapid growth, probably due to the supplementary diet of vegemite sandwiches, muesli bars and other treats from lunch boxes.

With the onset of warmer weather and concerns about "Bushwalker" surviving higher water temperatures, it was decided to liberate him into the display ponds at the North Motton Rearing Unit.

An excursion for students was organised to include an inspection of the North Motton site and to witness the release of "Bushwalker". Mr George Rogers of the Ulverstone Branch of the North Western Fisheries Association hosted the visit to the facility. He provided students with a very informative talk on trout, the rearing process, and fish stockings of local waters.

An enjoyable morning was had by all with students leaving the rearing unit with a greater understanding of the trout, and happy in knowing that "Bushwalker" had found a safe home.



Pictured: George Rogers, John Dowling and some of the students from East Ulverstone Primary School

Redfin perch

By Andrew Sanger, Senior Scientific Officer
Inland Fisheries Commission

Redfin perch (*Perca fluviatilis*) is a member of the family Percidae, the true perches of the northern hemisphere. It was introduced into Tasmania from England in the 1860's at about the same time as the brown trout. Since then it has become fairly widespread throughout the midlands and the Derwent Valley. Over the last 30 years it has spread to some of our popular trout fisheries and into areas of high conservation significance. The Commission is concerned about the effects of this spread.

But what are the characteristics of redfin perch in Tasmania, and is our concern justified?

In its natural environment the redfin perch is considered one of the coarse angling species, along with carp, tench and several species which have not been introduced to Tasmania. There is considerable interest in these coarse angling species throughout Europe, and highly specialised bait fishing equipment and methods have been developed to target them. Coarse fishing contests are very popular. One of the features of these contests is that the day's catch is normally kept alive in a keeper net before being released after the competition. It would be surprising if Tasmanian anglers would be in favour of catch and release for carp, tench and perch, but nevertheless that is what happens in these contests overseas.

In Tasmania the trout fishery has evolved in an atmosphere of equal access for all persons irrespective of wealth or status in a natural environment of very high quality. These features no doubt contributed to the natural advantages of the Tasmanian trout fishery over its European ancestors, and led to the one-eyed fanaticism of Tasmanian freshwater anglers for trout fishing. Instead of trout fishing being the preserve of the privileged and wealthy, high quality lake and stream fishing for one of the worlds premiere sport fishing species was widely available to all in Tasmania. No doubt this unlimited access to trout fishing meant that there was little interest in the coarse fish species such as redfin perch – a situation which persists to this day.

The redfin perch is in fact a fine sporting and eating fish when of a reasonable size (over 500g). They are highly prized on the mainland, and once formed the basis of a significant recreational fishery in the warmer inland waters of Victoria, New South Wales and South Australia. Both lure fishing (spinning and trolling) and bait fishing were effective methods for perch, as well as jigging with heavy lead lures (jaggers) and soft bodied rubber jigs. The schooling behaviour of perch made jigging a particularly effective method, as once a school of reasonably sized fish was located, large catches of highly prized fish could be made

quickly. Wet fly fishing is also a very effective method of catching perch.

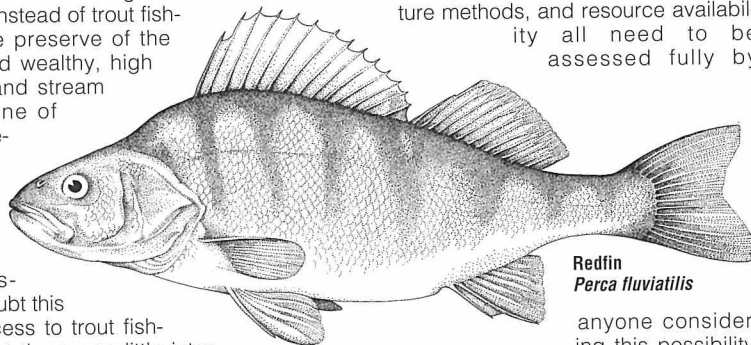
More recently many of these redfin waters have been taken over by carp, whilst disease has also affected many of the redfin populations. Native fish enhancement projects have also led to a rejuvenation of the fisheries for some important recreational and commercial native fish species such as golden perch and Murray cod in a few locations where redfin perch were once dominant. As a result, the redfin fishery has declined in many areas on the mainland.

The advertisement for redfin ends here as unfortunately they lose all appeal as a sporting fish when they are of small size, as is so often the case in Tasmania. Where there is insufficient mortality to keep a population down to low densities, the perch tend to use up available resources rapidly and grow slowly. As a result they begin to mature at a very small size and young age in these high density populations. The majority of these populations becomes stunted – ie the individuals are small and mature, and put all of their available energy into reproduction rather than growth. These fish offer no great challenge to an angler, and are usually too small to be worth eating. Apart from offering some easy fun for children and novice anglers, they have little recreational value in Tasmania, and there is little angling effort specifically directed at perch.

In their natural environments large predators such as pike probably kept populations of perch in check somewhat, thereby reducing the incidence of stunting. In Tasmania the only significant predators are trout, which are apparently not highly effective at controlling perch numbers. In fact there is some evidence that the opposite may occur, with perch predation on trout controlling recruitment and/or survival of stocked fish.

There is some interest in the potential of commercial harvest of redfin perch in Tasmania. They are certainly a fine eating fish, and may bring a reasonable return in some markets, notably the live fish market. There is a great deal of work required before this potential is turned into a reality.

Marketing, handling and transport, capture methods, and resource availability all need to be assessed fully by



anyone considering this possibility.

The IFC is unlikely to allow unrestricted access to redfin perch for commercial purposes because of concerns about conflicts with other recreational and commercial fisheries, and the risks to the environment. At this stage there is no direct commercial use of redfin in Tasmania.

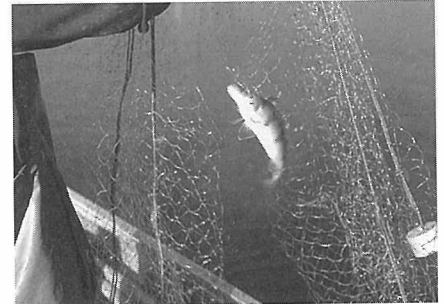
One of the problems with the expansion of the range of redfin perch is the negative effects the species has had on native fish and trout. Redfin perch are a highly predatory fish, and they quite commonly eat other fish – including other redfin. As a result there are a number of conservation issues and recreational fishery management issues influenced by them. Generally these concerns relate to one or more of the following attributes of the perch in Tasmania:

- low recreational value in Tasmania;
- propensity to overpopulate and stunt;
- propensity to eat other fish (piscivorous nature).

Some case histories of the actual and potential effects of the spread of perch in Tasmania can be used to illustrate these concerns.

Brushy Lagoon

This fishery was created in the 1980's when the Forestry Commission (now Forestry Tasmania) dammed the headwaters of Brushy Rivulet. The resultant shallow lagoon has abundant weed growth and aquatic life. In the first few



Redfin from Brushy Lagoon netting, December 1994

years of the fishery it was very popular with anglers because of the good catch rate of well conditioned trout, both rainbow and brown. In the early 1990's the catch rate at the lagoon began to decline. At about the same time large numbers of perch were noted in the lagoon. Anglers have been very keen for the Commission to provide reasons for the declining catch rate and to restore the fishery to its prime. The Commission has conducted several surveys and investigations of the problem. One of these focussed on the potential effects of redfin predation on recently stocked trout fry. This study confirmed that redfin were eating recently stocked trout fry, and may have been reducing the effectiveness of the stocking program at Brushy Lagoon. As a result the Commission has attempted to stock with larger fish when available, and is looking at the possibility of draining and/or poisoning Brushy Lagoon to eradicate redfin perch from this water.

Redfin perch may have been present in the headwaters of Brushy Rivulet prior to the dam being built, and have simply built up in numbers over time in the ideal conditions created in the lagoon. Alternatively, they may have been introduced to the lagoon after its construction. The Commission has no data to help decide either way.

Lagoon of Islands

The redfin perch at Lagoon of Islands were definitely introduced well after construction of the dam and creation of the fishery there. The fishery was in very good shape throughout the late 1960's and early 1970's, with very large rainbow trout dominating the catch. The lagoon had limited natural spawning habitat and unreliable flows, so recruitment was probably limited. It is also a very productive environment which allowed rapid growth of the relatively small number of trout there.

Redfin perch were introduced to the lagoon in about 1974 and rapidly built up a large population. However, they did not affect the fishery to any great extent, as catch rates and size of fish remained acceptable throughout the 1970's and for most of the 1980's.

Following the water quality and fishery

decline of the late 1980's, the trout populations have now recovered in condition to once again rate in the top two or three waters in the State for trophy trout. However, despite stocking of fry and provision of adequate spawning habitat, catch rates have not yet recovered to pre-crash conditions. There is a possibility that redfin predation on trout fry in the spawning channel at Ripple Creek is affecting recruitment to the lagoon. Large numbers of very small redfin are found in the spawning channel during the brown trout and rainbow trout spawning runs.

It is probably not possible to control perch in Lagoon of Islands, and so we may have to accept the effect of perch. However, because the lagoon is managed as a trophy trout fishery, the effect is more acceptable than at a water which is managed for a high catch rate.

Swan galaxias in Brodribb Creek

The Swan galaxias (*Galaxias fontanus*) is one of Tasmania's endangered galaxiids. It was only known to occur in the Swan River above Hardings Falls and in several small tributaries of the Macquarie River near Lake Leake. One of these tributaries was Brodribb Creek. This species is very vulnerable to predation by both brown trout and redfin perch. In Brodribb Creek a small natural population was completely eliminated by redfin perch in about 1992. The perch had apparently escaped from a private dam in the headwaters of the creek.

This example demonstrates that concern over the spread of perch into areas of high conservation value is warranted.

Lakes Gordon and Pedder

Redfin were first observed in Lake Gordon in about 1978. Since then they have built up a very large population, and are now by far the most numerous fish in this large lake. There is an abundance of trout spawning habitat at Lake Gordon, and so even though there is a large redfin population, it is unlikely that trout recruitment is being affected to any great extent by redfin predation.

In Lake Gordon itself the presence of redfin is seen as a nuisance, but not something which the Commission would want to manage. However, the possibility of perch migrating from Lake Gordon to Lake Pedder via McPartlans Canal is of concern to the Commission. This concern is primarily because redfin have been shown to be very effective predators of native fish, in particular galaxiids.

Very few galaxiid species can coexist with perch – the possible exception is the climbing galaxias (*Galaxias brevipinnis*) which is known to coexist with perch in Lake Gordon and Lake Echo. The Pedder galaxias (*Galaxias pedderensis*) is almost extinct in Lake Pedder, and while efforts are continuing to locate additional populations of this species and establish secure refuge populations, the presence of an additional predator is being actively discouraged. Negotiations with the HEC are continuing on this issue.

From the point of view of the trout population in Lake Pedder it is difficult of predict the likely outcome of colonisation by redfin. There are already reports of redfin having been caught in Lake Pedder by anglers. IFC sampling of various sites has not turned up any yet. However, if some are already in the lake or if colonisation occurs in the future, then over time a large population of stunted redfin perch will probably develop.

Great Lake

Just before Christmas last year the Commission was informed that a redfin perch had been caught by a young angler fishing the dam beside the Compleat Angler Lodge at Great Lake. IFC staff confirmed the presence of perch in the lake and immediately instigated safeguards to ensure no perch subsequently escaped into Great Lake. In February 1996 the dam was poisoned and all redfin perch were eradicated. A large number of perch were killed, and several size classes were present in the population. This indicates that the perch had been breeding in the dam.

At this stage we are not sure if any perch had escaped from the dam into Great Lake prior to us learning of their presence. Some electrofishing surveys have been undertaken, however, in a lake the size of Great Lake it is like looking for the proverbial needle in a haystack. Great Lake has two species of native fish which are of particular concern, the Shannon paragalaxias (*Paragalaxias*



Redfin eradication, Great Lake

dissimilis) and the Great Lake paragalaxias (*Paragalaxias electroides*). These two species are confined to Great Lake (their stronghold), Shannon Lagoon and Penstock Lagoon. If redfin perch build up in significant numbers in Great Lake then these species could become threatened.

Two other native fish are found in Great Lake – *Galaxias truttaceus* and *Galaxias brevipinnis*. Perch may pose a threat to these populations, however they are widespread and abundant elsewhere, and

so from a conservation viewpoint this is of less concern.

Other areas of concern

Redfin perch are already in Lake Echo and have been there for some time. It is theoretically possible for perch to move upstream from Lake Echo and reach Little Pine Lagoon. A relatively small barrier on Monpeelyata canal is preventing this movement at present. Perch would probably be a great nuisance in Little Pine Lagoon, particularly to wet fly anglers. They may also move from there and colonise the Little Pine River system in the Western Lakes and cause damage to the natural ecosystems and trout fisheries located there. The HEC is aware of our concerns in this area, and the IFC will be trying to eliminate the chance of redfin migrating to Little Pine Lagoon.

The examples above have focussed on the effects of redfin on trout fisheries and native fish. There are a number of threatened aquatic invertebrates which inhabit areas at risk of invasion by redfin perch. In particular, the Lake Pedder and Great Lake areas are known to contain several of these species. It is very difficult to predict the effect of perch on these invertebrates. However, we are very concerned that they are monitored and preserved if possible.

What can anglers do to help

Firstly, the use of live redfin perch as bait should never be considered appropriate. The risks of accidentally transferring perch to a new location are just not worth it.

Secondly, don't encourage or condone the transfer of perch for any other reason such as stocking a small farm dam. The unanticipated consequences of these stockings have the potential to be very serious as two of the examples given above demonstrate.

Thirdly, be aware that fish can be moved about on fishing gear, in boats etc, as eggs or small juveniles, and end up being accidentally released at a different site. The presence of redfin in Lagoon of Islands and Lake Leake is probably due to this type of problem, as these lakes are not open to bait fishing.

Lastly, if you become aware of perch being introduced to a new area, let the Commission know. In some circumstances we may be able to do something about it early and lessen the threat to our trout fisheries and native fauna.

Mervyn Frederick Duncan • 1927-1996

Merv Duncan passed away in Launceston on 4 July 1996. Born at Campbell Town, Merv grew up in the Avoca area. He joined the Inland Fisheries Commission in 1963 after several years with Tasmania Police. He held the position of Senior Inspector with the Commission when he retired in 1981.

Merv had a very sound understanding of the Fisheries Act and Regulations and was also a very experienced bushman. This gave him the upper hand on many notorious poachers.

He is remembered very affectionately by the longer serving Commission members who worked with him. Our condolences are passed on to his family which includes eight children.



Prosecutions

Whilst a full list of prosecutions is published each six months, some significant cases have been finalised recently and these are detailed below.

Commercial Fisheries

The Commission has the responsibility to protect the interests of commercial licence holders and several offences relating to the illegal taking of eels have recently been detected.

Andrew Charles Horton of Brighton appeared before Magistrate Mr P Wright in the Hobart Court of Petty Sessions on 23 July 1996. Horton pleaded guilty to 14 charges relating to the illegal use of eel nets in inland waters contrary to the provisions of the Fisheries Act 1959.

The Magistrate handed down his decision on 6 August and imposed fines totalling \$3 000 for the offences.

The charges related to the capture of eels on several occasions, particularly from Lake Gordon. The Inland Fisheries Commission closed Lake Gordon to commercial fishing because of high mercury content in eels from this water. Horton did not hold a commercial licence to take eels from any waters.

Steven Sungbo Kim of Launceston was apprehended for taking eels with a trap

when unlicensed, and possession of eels taken contrary to the Inland Fisheries Regulations at the North Esk River on 12 April 1996.

The case was heard in the Launceston Court of Petty Sessions on 14 August 1996 before Magistrate P H Wilson. Kim was found guilty on both charges and fined a total of \$835.

Whitebait

Whilst whitebait is a delicacy that is legally available to the public via a recreational season, there are still those who persist in abusing this concession by fishing illegally. Some also get nasty about it when caught.

Simon Paul Smith of Devonport was apprehended by Commission inspectors and an officer from Tasmania Police taking whitebait from the Mersey River on 10 October 1995.

The case was heard at the Devonport Court of Petty Sessions before Magistrate T Hill on 27 September 1996.

Smith was found guilty on three charges and fined a total of \$1 334.

Matthew James Coventry of Latrobe was apprehended in possession of whitebait on 17 October 1995 and charged with abusive language, threatening an officer, obstruction, and possession of whitebait.

The case was heard in the Devonport Court of Petty Sessions by Magistrate T Hill on 17 May 1996. Coventry was con-

victed and fined \$200 for possession of whitebait and given two weeks imprisonment for obstruction, threatening and abusive language.

Lake Crescent Closure

This water had to be closed to try and prevent the movement of carp. Consequently, it is not appropriate to remove fish from the closed water indiscriminately.

Darren Ross Brown of Main Road, Claremont was apprehended on 25 December 1995 taking native fish from the IFC fish trap at the mouth of the Clyde River.

Brown was charged with taking fish by means other than a rod and line and removing fish from a trap without lawful authority. He appeared before Magistrate I Matterson on 3 September 1996 in the Hobart Court of Petty Sessions and was found guilty on both charges.

Brown was fined \$200 for taking fish by means other than a rod and line. He was also fined \$500 for taking fish from a trap and a special penalty of \$4 for each of the 250 native fish taken was imposed. This amounted to a further \$1 000. In total the fine, including costs, was \$1 735.

Spawning Brown Trout

Once again some heavy fines have been imposed on persons taking spawning trout. It does appear that this type of offence is on the decline, probably due to the substantial penalties being imposed by local courts.

Desmond John Aylett and **Neville Alexander** both of Devonport were apprehended and charged with taking 28 spawning brown trout from Brandum Creek, Great Lake on 11 May 1996.

The defendants were each charged with taking fish by means other than a rod and line (landing net); taking fish from closed waters; taking fish with the aid of a light; and wilfully disturbing spawning fish.

The case was heard in the Devonport Court of Petty Sessions on 10 August 1996 before Magistrate T Hill.

Both men were found guilty and fined \$200 each plus special penalties totalling \$1 400 each for the 28 brown trout.

Fishing publications

Tasmania is presently the publication base for two excellent fishing magazines, *Fly Life* and *Fishing and Boating News*. These publications are complementary in my opinion and both are highly recommended to anglers. They are produced by dedicated anglers with extensive fishing knowledge and experience.

Fishing and Boating News

Produced every two months by Mike Stevens in Launceston



Issue 6 now available at \$2-50

This is a newspaper style magazine that concentrates on local everyday fishing issues.

The idea is to be up to date and topical and cover all types of fishing and its associated equipment. There is an emphasis on informative articles rather than fishing stories. If you want to know what is happening in fishing in Tasmania, *Fishing and Boating News* will tell you.

Subscriptions are available from:
17 Oxford Street, East Launceston 7250
Phone/Fax (03) 6331 1278.

Fly Life

Produced quarterly by Rob Sloane from Richmond



Issue 5 now available at \$8-95

A very high quality magazine for the devotee of both salt and freshwater fly fishing.

It includes articles from both Australia and New Zealand and is supported by magnificent photography and superb production.

The feature articles are generally accounts of that special trip but also included are specialist articles on gear and tactics and regular features with a real coup being the column by David Scholes.

The latest issue (5) is without doubt the finest fishing magazine I have seen, even the ads are a work of art.

Subscription enquiries to:
Fly Life Publishing
St Johns Circle, Richmond 7025
Phone (03) 6260 2409 Fax (03) 6260 2751

Reviewed by Wayne Fulton
Inland Fisheries Commission

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Lake Sorell trout project update

Monthly sampling of the brown trout population in Lake Sorell has continued. We now have 13 months of length, weight and sex data. The scale samples have not yet been examined to age the fish.

Condition factor has improved slightly since spawning in comparison with last year. However, the fish are generally still in only fair condition. Fewer very poor fish have been seen in recent samples in comparison with last season.

Future plans for the Sorell study include:

- estimating fry abundance and the timing of migration to the lake;
- habitat use in Sorell by juvenile and adult trout including an assessment of daily and seasonal variation;
- validating age estimates by analysis of scales and otoliths.

A proposal to radio track trout in Sorell to gain a better understanding of short term movements is being costed and examined.

Extensive works will be necessary to stabilise spawning areas at Mountain Creek this summer. A plan has been developed for this work.