# INLAND FISHERIES COMMISSION

#### NEWSLETTER

Volume 2 No. 4

## TROUT LIBERATIONS

The Commission has issued to angling associations copies of Reprint No. 5 - Trout liberations in Tasmanian waters, 1st July 1972 to 7th July 1973. This publication sets out details of all trout liberated in the past year. Since the issue of this publication to the angling associations there has been a further run of brown trout up Hydro Creek at Arthurs Lake and from this run of fish 1500 additional brown trout were transferred to Lake Dulverton.

In addition, five hundred rainbow trout, about 9 inches long, were recently liberated in Dee Lagoon from the excess exhibition stock held at the Salmon Ponds at Plenty.

Following a request from an Association, the Commission undertook a demonstration transference of 200 tagged adult brown trout from Great Lake to Lake Barrington, a storage of the Mersey-Forth system. The results were clearly disappointing to anglers as the fish caught were in poor condition and some had moved out of the lake.

In the Autumn of 1974 it is planned to release two loads of adult brown trout from the Central Highlands in the Derwent River as a demonstration or experimental liberation. It is proposed to tag the fish and liberate them in the Hamilton area. It is some years since a liberation of adult brown trout was made in the Derwent River. Anglers are requested to return tags and details of any fish caught so that the result of the liberation may be considered at the end of the fishing season.

# ACCIDENT TO ASSOCIATE COMMISSIONER M. JOHNSTONE

Mr. M. M. Johnstone, Associate Commissioner from Latrobe injured his leg while on holiday at Mackay, Queensland, on 5th August, 1973. Mr. Johnstone was flown to Mersey Hospital at Latrobe where he received attention before being discharged on 11th August.

# ROAD TO CAMPING AREA NEAR SHOOBRIDGE'S ISLAND, GREAT LAKE

The Commission has agreed to provide \$300 toward supplying culverts on a road from Tod's Corner to Shoobridge Island at Great Lake. They Hydro-Electric Commission and the Lands Department have been involved in the project to provide a camping area and launching site at Shoobridge Island.

#### FISHERIES LANE AT CRESSY

Due to inclement weather it has been necessary to close Fisheries Lane at Cressy until further repairs can be made, when the weather improves.

## BRIDGE OVER HYDRO CREEK, ARTHURS LAKE

Following consultations, the Hydro Electric Commission has agreed to install pipes in Hydro Creek to replace the bridge which was washed away in the April floods. Large pipes will give access to anglers to the Cowpaddock area of Arthurs Lake.

## FISH FARM LICENCE

The Minister for Agriculture, the Hon. Lloyd Costello, recently issued a second commercial fish farm licence to Mr. A. Barwick, Huonville, who proposes to raise rainbow trout.

## TROUT EGGS AT CORRA LINN

The Commission is grateful to the senior members of the Northern Tasmanian Fisheries Association who are assisting in caring for the eggs at Corra Linn.

A roster of volunteers has ensured that eggs hav been carefully handled and it is expected that the first fry would be ready for liberation about mid September.

EXTRACTS BASED ON THE COMMISSIONER'S ADDRESS TO THE SOUTHERN TASMANIAN LICENSED ANGLERS ASSOCIATION ANNUAL BRANCH MEETING HELD ON 11TH AUGUST 1973

#### HATCHERIES AND STOCKING

..In the annual report of the Southern Tasmanian Licensed Anglers Association it is pleasing to note reference to the late Mr. D. F. Hobbs. Mr. Hobbs spent a life-time in fisheries management and it is perhaps pertinent to quote a few points from his writings.

In his 1948 paper "Trout Fisheries in New Zealand - their development and management", on Page 2 he wrote about hatcheries. He said "in the intial acclimatisation phase of fisheries work, hatcheries serve the useful purpose in permitting the proper reception of eggs from abroad." The whole purpose of his paper is to show that hatchery cultivation and stocking many waters with fish was unsoundly based.

On Page 80 he states that "the hatchery system in New Zealand is over 70 years old which means that most anglers were born to it, i.e. the hatcheries and stocking waters from hatcheries, and have accepted it and regard it as essential to the well being of their fisheries. He went on to say that "recent European history shows that fiction oft times repeated comes in a very short while to be regarded as fact.

However, as regards effect, the fiction regarding fish hatching has enjoyed the advantages of a start before its present adherents were born and a freedom from any suspicion of propaganda purpose. To a considerable extent it is true that the fictions, readily accepted when we encounter them in our impressionable youth, are accepted least critically by us and are later passed on to others with the conviction that attaches to sincerity." What grandfather said about hatcheries is gospel. On this basis several generations must pass before anglers in Tasmania realise the limited role of hatcheries in the management of trout populations.

An interesting anecdote from Mr. Hobb's concern the power of the media. The Press in New Zealand reported that a particular stream was stocked, when in fact, due to an oversight, it was not stocked. The local farmer commented on the greater number of fish present since the stocking!

One of Mr. Hobbs' first tasks when he came to Tasmania as Commissioner of Inland Fisheries was to dismantle most of the hatching troughs at Plenty as he felt that we had little need for them. In his paper on Page 93 Mr. Hobbs states that, "a numbe of erroneous assumptions, one of which is pertinent to us today is that by a wide dispersal of hatchery products, stocks are maintained or at least significantly increased in most waters and that in almos all waters releases on the present scale are necessary and beneficial."

Page 94 of his paper contains the observation that "small but useful trout fisheries are sometimes maintained by regular releases of trout transferred either directly from waters or directly through hatcheries." The Commission policy implements this use of hatcheries to stock a number of waters, such as Lake Dulverton, Lake Big Waterhouse and West Coast Lakes all of which do not have facilities for natural spawning.

In the meetings of the Inland Fisheries Commiss since 1960 the hardy annual request to stock the Derwent River has been considered again and again. The reasons supporting these applications and sizes of the requested fish varied, but in essence, all are based on the false assumption that stocking will provide morand bigger fish for the angler.

Very well documented investigations carried out in America, New Zealand and other overseas countries showed the complete futility of many stocking programmes and because of these findings regular stocking of streams with brown trout has been discontinued. Overseas, this policy has been in operation since the late 1940's and stocking is a non-issue there.

In a recent article of the Annual Report of the Southern Tasmanian Licensed Anglers Association for 1972-73, it was clearly pointed out that in America stocking of rivers with trout of any species, in most cases, is an old and settled issue. Only where there are insufficient trout present, following a disaster, are waters stocked.

Dr. A. G. Nicholls of the C.S.I.R.O. Division of Fisheries, made a comprehensive study of the trout fishery in Tasmania, including the Derwent River and found for the Derwent River trout fishery, that stocking the river with hatchery raised brown trout did not increase anglers' catches of fish or contribute to the trout population. The Commission's policy of stocking is soundly based on these thorough investigations.

Dr. Nicholls published the results of his investigations on the Derwent River in the Australian Journal of Marine and Freshwater Research in 1961.

From his investigations of the Plenty River and further observations carried out by fisheries officers, it is clear that the spawning run of brown trout in the Winters between 1951 and 1973 have fluctuated between 200 and 1000 fish. A .2 inch rainfall starts the run and a fall of over 2 inches in a week floods the trap, causing spawners to travel upstreamwithout being counted. Dr. Nicholls showed that there were about  $2\frac{3}{4}$  million eggs deposited in the Plenty River and about 37 million eggs in the Derwent system.

The more recent suggestions to stock the Derwent River have included using wild adult brown trout which would be caught and transferred from Great Lake, using yearlings and fry or various fombinations of these types of fish.

In the past, all of these methods of stocking have been tried without any noticeable change in the Derwent fishery. Adult fish from Great Lake, when transferred to the Derwent River did not put on condition and remained only a short time in the river before moving out to sea. In contrast, the adult fish transferred to such waters as Lake Crescent or Carter's Lagoon showed rapid increases in growth and condition.

Following the white man's settlement of the Derwent Valley there have been changes in the catchment brought about by land use and each change has had its impact on the river itself. In the last twenty years the construction of dams across the Derwent River could well have interfered with the migration of sea-run brown trout and that of other species of fish. The increasing use of monofilament nets at sea and in estuaries takes its toll of sea-run brown trout. How often people say that they have netted a 5 or 7 lb sea-run trout in the lower Derwent or on the East or West Coast. The Commission is not geared to take effective action in this matter.

Further, the development of industry and urban growth in the valley with the resulting increased load of waste products which came from industry and city life have all had their effect on the Derwent River and the aquatic environment. The Department of the Environment quoted in the June issue of the Australian Fisheries Newsletter, gave a bleak account of the quality of the water in the Derwent River, which has to carry discharges of effluents containing high quantities of organic materials, chemicals and trace metals. No effective measures have been taken to control these effluents. The report stated that the treatment for the control of sewage in the River Derwent was inadequate.

As trout are most susceptible to nearly all forms of water pollution any scheme to improve water quality merits the full support of anglers.

To summarise the remarks on the Derwent River and its fishery, the Commission believes that its stocking policy is soundly based on published results of a scientific investigation.

#### ASSOCIATE COMMISSIONERS

The Associate Commissioners have done an effect job throughout the year. In some ways their task is a thankless of They give freely of their time to fisheries business. Perhaps eve more so than the dedicated branch delegates, Associate Commissioners listen to views and propositions from anglers inside and out of branches. All Associate Commissioners have a long experience in angling association business and all have had many years of practica angling experience (about 150 yards). They are objective and openminded in dealing with the contentious issues which arise in the spo of angling. Careful thought should be given before discarding successful experience from the administration of angling.

## COOPERATION FROM ANGLERS

The Commissioner also thanked the anglers in the south who have approached him as private individuals with helpful suggestions and offers of assistance in the past year. The Commissioner stated that one of the most rewarding aspects of the jol of looking after inland fisheries is to find the way in which individuals come forward with genuine offers of assistance — for example, creel census, working bees, helpful discussions of a constructive nature.

(D. D. Lynch), COMMISSIONER

16th August, 1973