



INLAND FISHERIES COMMISSION

NEWSLETTER

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RIPPLE CREEK DIVERSION

The Lagoon of Islands dam was constructed in 1964 as a joint project by the Hydro-Electric Commission and the Inland Fisheries Commission. The impoundment was proposed to supply an alternative source of water for riparian requirements and to have a guaranteed minimum water level to meet the requirements of a trout fishery. There has been some concern at the high loss evaporation and the inability of the storage to maintain a sufficiently high water level in drought years. Accordingly, the Southern Tasmanian Licensed Anglers Association has proposed a scheme to increase the inflow of water to the Lagoon. In essence the proposal envisaged the construction of a low weir in Ripple Creek, diverting the flow to Jacks Creek north of Lagoon of Islands. Another low weir in Jacks Creek would permit flow to be directed to the Lagoon of Islands. The proposal is being investigated further by the Hydro-Electric Commission and the Inland Fisheries Commission. The proposal is outlined diagrammatically on the map attached to the end of the newsletter.

ANGLERS CATCHES AT LAGOON OF ISLANDS

During two weekends in February 1983, an angler fishing at Lagoon of Islands landed 52 fish, the largest being a rainbow trout of 6 kg. Larger fish have broken anglers' tackle.

HAZELWOODS LAGOON

A proposal to make small permanent impoundments at Hazelwoods Lagoon by erecting a small dam of about 4 m high is under consideration by the Commission and other instrumentalities. Maximum depth would be similar to the present maximum depth of Lake Sorell. Water weeds should not pose a great problem in this area because of the high turbidity of the water. One biological problem is that the Lagoon may provide a staging point for upstream movement of red fin as this species is common in the Clyde River but has not as yet reached Lake Crescent and Lake Sorell. The storage would have obvious advantages in rehabilitating the habitat for wild fowl in the area.

AQUACULTURE WORKSHOP

Commission biologist R Sloane and hatchery manager Ian Cameron attended a workshop at Narrandera, NSW on 21-25 February. At the workshop aquacultural enterprises such as trout production for ova and meat sales, salmon culture, fish out ponds, eel farming and crustacean culture were discussed. The two officers benefited by the attendance at the workshop and came away with the feeling that aquaculture in Australia is one of the high risk low return forms of primary production. Many mainland trout farms are on the verge of collapse due to over supply of fish and low water levels. Fish farming needs a high level of capital and technical expertise. Most aquaculture products are luxury items and there is little chance of increasing domestic markets. The officers took the opportunity to inspect a number of fish farms and Government facilities in NSW and Victoria for trout raising.

PROPOSED INTERNATIONAL SLALOM COURSE - WOODWARD CANAL BRADYS LAKE

Further discussions on this topic have been held between a member of Parliament and the Commission as well as with a representative from the S.T.L.A.A. The case for angling is that there are 118 shacks located at Bradys Lake with a value of about \$700,000. The construction of a diversion would lessen the success of nursery areas in the southern channels and concreting work could lessen the value of the whitewater as a spawning ground. Bradys Lake has no spawning ground other than Woodward Canal. Manipulation of water level in Bronte Lagoon would have an adverse affect on the fishery in that storage. The Commission's view is that there may be other sites which could be equally satisfactory to canoeists but if the Bradys Lake site is the only one then efforts should be made to restrict damage to the minimum and to ensure that nursery areas are preserved and that the snowflake cadis habitat is not destroyed.

SALVAGE

Inland Fisheries Commission officers were assisted by Tarraleah anglers to salvage fish below Laughing Jack on 10 March. In addition two salvage operations have been undertaken in Liawenee Canal and the young fish transferred to Penstock Lagoon. A salvage operation was carried out at Woodward Canal Bradys Lake.

ACCESS TO WOODS LAKE

An advising from the Solicitor-General's Department states that it is most unlikely that anglers have accrued any rights to access over the road to Woods Lake dam. Any rights which they may enjoy appear to have been merely a "licence" enjoyed with the permission of the owners of the land.

FLY FISHING ARTICLE

The attached article by Ron MacKenzie in *The Fly Fisher*, December-January 1982/83 "A Trust with a Difference" should be of interest to anglers throughout Australia. It is reproduced in the Newsletter as a matter of public interest.


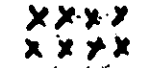



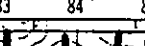
ELECTROFISHING SURVEY OF TASMANIAN RIVERS

A report by R Sloane on the above topic is attached to this newsletter.

PROSECUTIONS

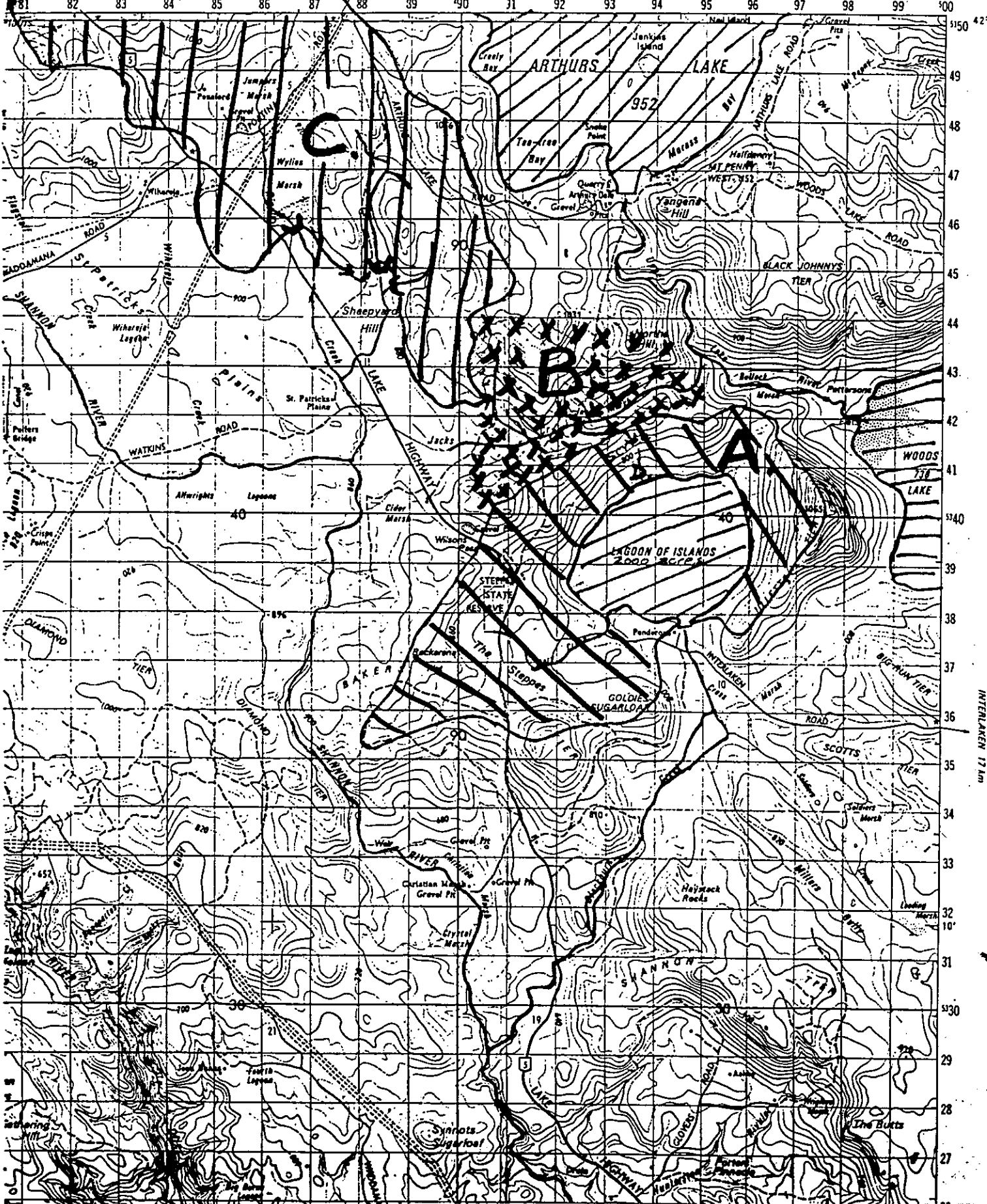
Attached is a list of recent court cases. Further cases are pending for hearing.

*D D LYNCH
COMMISSIONER*

-  A. Lagoon of Islands - present watershed
-  B. Jacks Creek - present watershed to Woods Lake.
-  C. Proposed additional watershed
-  D. I.F.C. construct breeding channels from Lagoon of Islands
-  Existing Streams
-  Weirs

REFER TO THIS MAP AS: SHEET 8213 EDITION 3 1980

Proposed stream diversions - feed Lagoon of Islands and Woods Lake



INTERLAKEN 17 km

FROM RON MACKENZIEA TRUST WITH A DIFFERENCE

To about half the population, "trust" became a dirty word with the publication of the McCabe-Lafranchi report. Accountants and solicitors were probably about equally divided. But one body of people had hated the word for at least twentyfive years - those fishermen who fished waters subject to the activities of River Improvement Trusts.

I'm not going to reiterate the causes of fishermen's anger and frustration - emotions shared by many other groups. The Discussion Paper of the Public Bodies Review Committee (Future Structures for Water Management: River Improvement and Drainage Trusts, pp13-20) summarises criticisms and causes: the paper is mandatory reading for anyone who wishes to have any real understanding of the state of play in this matter in this State at about this time.

Perhaps there haven't been many more bitter critics of the effects of river improvement work on fishing and river aesthetics in the north-east than I. Many may have used worse language, or been more effective, but few would have meant what they said more sincerely. (I may have differed from some of my friends in placing more blame on cultivation to the rivers' edges than they.)

I retract none of those criticisms.

But this is 1982 (or, depending on editorial policy, 1983). And we have the Ovens and King River Trust (the first, surely, to do so) following the guidelines laid down some years ago by the State Rivers and Water Supply Commission, following them at least as far as they concern things I understand, such as input by concerned groups, frontage fencing, re-vegetation, aesthetic effects, etc. (I stress that I'm talking of common understanding, not expertise.)

Unfortunately one can't expect publication in our type of magazine of the ten pages of notice, received in ample time, which comprised an invitation to me to attend the 1982-3 Consultative Tour of the Ovens and King River Trust. But the purpose of the tour was defined -

"to inform interested groups and agencies of the river management problems encountered by the Trust and the management techniques adopted and proposed; and

to encourage an interdisciplinary input to the Trust's management programme."

An itinerary covering eleven sites and setting out fourteen problems was supplied, together with a map, a brief job description for each site, and an estimate of costs, the sum totalling the loan works moneys available for 1982-3. Additionally, sheets were supplied setting out the Trust's comments on each site's problems and its remedial proposals: space was left for representative's own comments to be made for consideration by the Trust.

The tour took place. When it was over, I wrote to Mr. J. Tilleard, of I. N. Drummond and Associates, consulting engineers to the Trust, a letter from which I quote:-

(following a preamble) "In fact, reviewing the day, I find very little to criticise, given an assumption or two. Those assumptions are (i) that diminution and degradation of the natural beauty and fishing potential of several north-eastern streams was inevitable when farming to the rivers' edges and destruction of bank cover became commonplace; and (ii) that failure to recognise the cash value of lost tourism as part of the cost of remedies, has been equally inevitable. (Fishermen are a huge body of high-spending tourists: my wife and I, for a not extravagant example, have regularly spent very considerable sums in New South Wales, Tasmania, South Australia, West Australia or New Zealand seeking the fishing and "unspoiled" quality that cannot now be a substantial part of these rivers). That the assumptions I regard as essential may be unpalatable to some people is admitted: I don't think you will find them so."

"The first point I'd like to make is that the purpose of the tour was admirable, and was admirably fulfilled. (Lacking a copy of the S.R. & W.S.C.'s guidelines at the moment, I take the liberty of enclosing and referring to those prepared by fishermen (!). Two copies, in case you are interested. These (2.2) refer to Victorian Piscatorial Council comments on the desirability of input from concerned groups. So far, yours is the first Trust of which I've heard to establish what I sincerely hope will be a precedent. The Trust is to be commended on this, and its President, Members and Staff who attended today earned the thanks of the visitors. The "fishermen's" guidelines may be of interest, even if only as a guide to the thinking of a group of people.)"

"It is perhaps permissible for me to comment that there seems to be a pleasing emphasis on fencing and planting, and, in relation to planting, a gratifying willingness to try a variety of possibilities. Pleasing and gratifying because the absolute necessity for fencing was emphasised by the Gibb brothers twentyfive years ago, and by others ever since, while planting (not only of red gums!) has been urged many more times than it has been carried out."

(The letter also referred briefly to problems with willows, time-lag in restoration of biota after stream-bed disruption and adverse effects of widening and shallowing.)

You may not think one tour by one Trust is something to rejoice and be glad about. I am not going to kill any fatted calves. But bearing in mind that causes for jubilation concerning river works have been seen about as often as manna from Heaven, may I urge that it is unimportant whether you give one or two cheers. What is important is that we try to help this Trust, and even more important, that we try to ensure that all other Trusts do no less. If we don't, I think we will deserve what we get.

RON MACKENZIE.

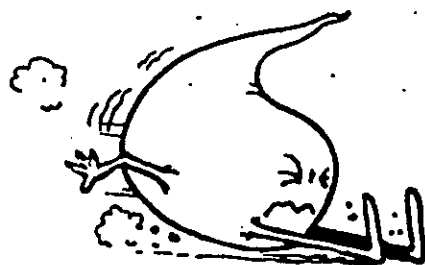
Don't race to a halt

When it looks as though you'll have to stop, ease your foot off the accelerator.

There's no prize for being first to the stop-lights.

Roll up nice and easy and you'll cut your fuel bills, and keep your brakes and tyres longer.

And don't forget, stop-starting driving wears the driver out faster too.



*ELECTROFISHING SURVEY OF TASMANIAN RIVERS**1982/83**by**Robert Sloane**Inland Fisheries Commission*

Three streams in southern Tasmania near Ellendale were electrofished in order to assess the state of the trout populations; these streams were surveyed as a result of claims that they were devoid of trout and required stocking. Jones River was electrofished at two sites, above and below waterfalls near Ellendale and the two tributary streams, Montos (Sassafras) Creek and Ironstone Creek, were also electrofished.

In northern Tasmania, the Guide River was electrofished immediately above the recently completed Guide River Dam in order to determine the potential recruitment and the spawning and nursery suitability of this stream.

Falls Creek was electrofished to evaluate changes in the trout population since the 1978 and 1979 electrofishing surveys and to relate any changes to recent brown trout fry stocking; 20 000 fry were liberated during August 1981 and a further 20 000 were released in 1982. Electrofishing was conducted at two sites adjacent to areas which were sampled in the two previous surveys (March 1978

and February 1979).

The Lake River and Rubicon River were electrofished as control streams (not having been stocked with brown trout fry), in order to assess natural changes in the trout population since the previous electrofishing surveys. Both these streams showed poor trout numbers, similar to those recorded in Falls Creek, during the earlier trials.

RESULTS

The catch results of the survey are set out in Table 1 together with details of the rivers sampled, the length of each section fished and the number of electrofishing runs conducted. A Tas Map 1: 100 000 grid reference is included to give the exact location of all sites fished.

In Fig. 1 the numbers of trout in each length group are shown and the age composition of the catch is incorporated by differential shading for each age group; age 0+ refers to trout in their first year of life (advanced fry); age 1+ refers to trout in their second year of life (yearlings) etc.

The average lengths of trout in different age groups at the time of capture are illustrated in Fig. 2.

DISCUSSION

Southern Tasmania

As trout were found to be abundant in the Jones River and its tributaries, only short sections of stream were electrofished and only a single electrofishing run was conducted (Table 1). Adjusting the catch data gives numbers of between 50 brown trout (lower site Jones River) and 127 brown trout (Ironstone Creek) in 100 m of stream. These figures are based on a single electrofishing run which has been found to represent about 70% of the total trout population.

At Ironstone Creek only a single pool (approximately 15 m long, 2 m wide with maximum depth 1 m) was sampled and 19 brown trout were taken; 9 of these fish were larger than the legal minimum size limit of 22 cm. Clearly, the Jones River and its tributaries carry a dense population of brown trout and stocking may harm rather than improve the fishery in this area. A slow growth rate is evident in Ironstone Creek and Montos Creek where trout generally have not attained the legal minimum size by late December in their third year of life (Fig. 2).

Northern Tasmania - Guide River

97 rainbow trout and 67 brown trout were recorded in two electrofishing runs over an 80 m section of the Guide River above the dam. The numbers taken in successive runs indicate a

total population of 235 trout per 100 m of stream. All the rainbow trout taken were advanced fry (age 0+) as were 78% of the brown trout.

The presence of rainbow trout fry suggests that illegal stocking of this stream may have occurred, therefore it is not possible to accurately assess the natural recruitment. The loose gravel bed and adequate summer flow indicate that this section of the Guide River should provide an excellent spawning and nursery ground in the future.

Falls Creek experimental stocking

The two run catch totals for Falls Creek (Table 1) indicate a marked change from the catch results obtained from adjacent stream sections in previous surveys (see Table 2 for direct comparisons based on the estimated total trout population in 100 m of stream), with combined fry and yearling numbers representing 57% and 69% of the total catch at Wilmot and Barrington Road respectively. These year classes correspond with the 1981 and 1982 fry liberations.

However, the figures for the unstocked Rubicon River and Lake River (Table 2) show a similar dramatic improvement since the previous surveys with a fry and yearling representation of the same order as found in Falls Creek. It is interesting to note that the two run catch totals for the blackfish population in 100 m

of the Lake River have not changed significantly in the same period, with 26 recorded in February 1979 and 31 in January 1983, for adjacent sections of stream.

CONCLUSION

It seems that although the brown trout fry liberations may have contributed to a revival of the trout population in Falls Creek, there has apparently been a widespread natural revival in a number of streams resulting from the four generations spawned since the 1979 electrofishing survey. Electrofishing in southern streams indicates that trout populations here may also have increased in the last four years. Presumably successful spawning and a high survival of offspring has resulted in a marked improvement in trout populations throughout the state.

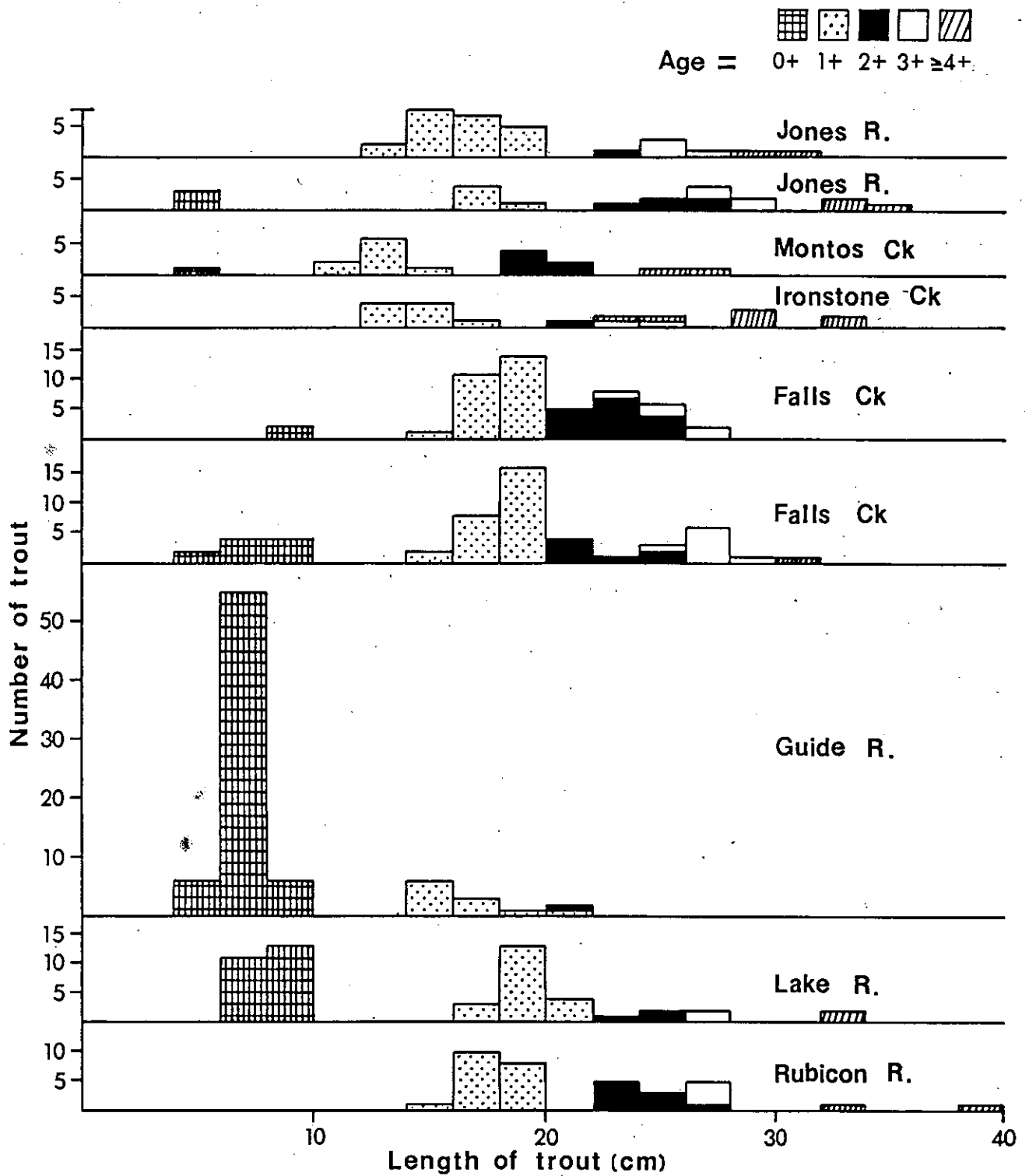


Fig. 1. Length and age distribution of brown trout

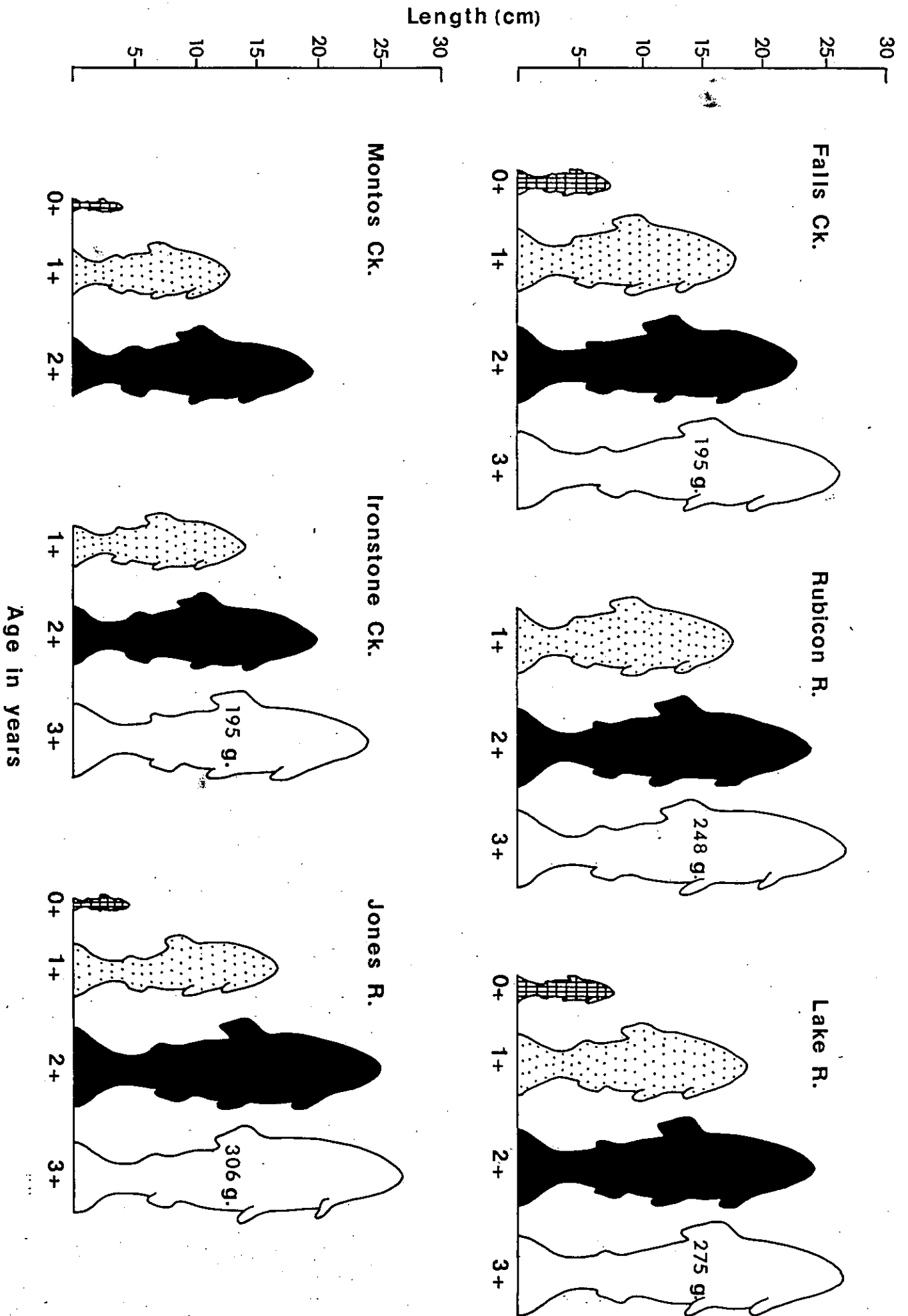


Fig. 2. Growth of brown trout; mean length / age

TABLE 1
DETAILS OF CATCH

Date	River	Location	Tasmap Grid Reference	Runs	Distance (m)	Rainbow Trout	Brown Trout	Blackfish	Eel
20/12	Jones River	Ellendale	DN 759.825	1	50		30		
20/12	Jones River	Jones River Road	DN 789.862	1	40		20		
20/12	Montos Creek	Ellendale Road	DN 758.835	1	30		18		
20/12	Ironstone Creek	Road Bridge	DN 739.829	1	15		19		
5/1	Falls Creek	Wilmot	DQ 305.185	2	110		49		
5/1	Falls Creek	Lake Barrington Road	DQ 317.182	2	120		52		
6/1	Guide River	Above Guide Dam	CQ 960.335	2	80	97	67		
18/1	Lake River	'Parknock'	EP 065.687	2	80		51		25
19/1	Rubicon River	Elizabeth Town	DQ 633.098	2	50		34		20

SPECIES LIST

Rainbow trout Salmo gairdneri, Brown trout Salmo trutta, Blackfish Gadopsis marmoratus, Eel Anguilla australis

TABLE 2

<i>Location</i>	<i>Estimated number of trout in 100 metres of stream</i>		<i>Proportion of fry and yearlings in catch</i>
	<i>Previous</i>	<i>January 1983</i>	<i>January 1983</i>
<i>Falls Creek, Wilmot</i>	<i>2 (March 1978)</i>	<i>46</i>	<i>57.2%</i>
<i>Falls Creek, Barrington Road</i>	<i>6 (February 1979)</i>	<i>48</i>	<i>69.2%</i>
<i>Lake River, 'Parknook'</i>	<i>7 (February 1979)</i>	<i>81</i>	<i>86.3%</i>
<i>Rubicon River, Elizabeth Town</i>	<i>5 (February 1979)</i>	<i>69</i>	<i>55.9%</i>

<u>COURT DATE</u>	<u>OFFENDER AND ADDRESS</u>	<u>NATURE OF OFFENCE</u>	<u>FINE</u>	<u>COSTS</u>	<u>PENALTY</u>
23.2.83	Geoffrey Raymond SHARMAN Victor Street Latrobe	Take whitebait when not licenced Unmarked scoop net	20.00	15.10	
28.2.83	Marcus George WEEKS Jowetts Hill Spreyton	Take whitebait when not licenced Unmarked scoop net	20.00	15.10	
28.2.83	William Thomas McCARTHY 19 Raglan Street Somerset	Using more than 1 rod and line	40.00	15.10	
28.2.83	Graham Rex BLAKE 37 Brooks Street Smithton	Take whitebait when not licenced	35.00	15.10	
15.3.83	Peter Nicholas HULL Freshwater Point Road Legana	Fishing without a licence	30.00	15.10	
15.3.83	Paul Gregory LEECH 29 Rowan Avenue Newstead	Fishing without a licence Falsely representing to be licenced	50.00	15.10	
15.3.83	Peter John MIES 8 Craiglands Court West Launceston	Take fish in closed waters Possession assembled rod & line closed water	20.00	15.10	
15.3.83	Ian John MURRAY 3/1A Brisbane Street Launceston	Using more than 1 rod and line	30.00	15.10	
15.3.83	Raymond Kenneth SHEPHERD 65 Franklin Street Westbury	Using more than 1 rod and line	30.00	15.10	
21.2.83	Hayden Laurie OATES C/- School House Wesley Vale	Using more than 1 rod and line	40.00	15.10	
14.3.83	Anthony Lindsay John TRIFFETT Glen Dower, Gretna	Fishing without a licence	50.00	15.10	
14.3.83	Brett Andrew OATES 12 Avoca Street Lindisfarne	Wilfully disturbing fish Take fish other than on rod and line Take fish in closed waters False name & address	70.00 50.00 -	15.10	40.00