INLAND FISHERIES COMMISSION

NEWSLETTER

Volume XII Number 1 *February 1983*

NEW SPAWNING GROUND - LIAWENEE

A new spawning ground has been excavated on the north side of Liawenee Canal. Construction of the spawning canal was funded by the Hydro-Electric Commission to compensate for a spawning area which will be lost when the water level of Great Lake rises. It is expected that intake structures will be commenced for the new channel in March 1983. During the winter, flow trials will be carried out and deposition of gravel will take place in the summer of 1983/84.

ELECTROFISHING SURVEYS

Late in December 1982, Commission staff electrofished Guide River on the north-west coast, Jones River, Ironstone Creek and Montos Creek near Ellendale. A report on the electrofishing is being prepared.

MAYDENA ANGLING COMPETITION

Again this year weather conditions deterred many anglers from competing in the annual Maydena Licenced Anglers Club fishing competition at Lakes Pedder and Gordon. There were 253 entries with the major prize being $1 000. Although 180 fish were actually weighed in, it is believed that over 200 fish were taken.

The prize winners are listed:

Heaviest Fish	*4.9 kg brown trout* *John Garwood - New Norfolk*
Second Heaviest Fish	*4.12 kg brown trout* *Stephen Blackwell - Springfield*

Third Heaviest Fish	*3.88 kg brown trout* *Peter Bone - Maydena*
Fourth Heaviest Fish	*3.64 kg brown trout* *Noel Wilson - Strathgordon*
Fifth Heaviest Fish	*3.52 kg brown trout* *Mark Garwood - New Norfolk*
Sixth Heaviest Fish	*3.40 kg brown trout* *Stephen Blackwell - Springfield*
Seventh Heaviest Fish	*3.32 kg brown trout* *P. Ridgeway - Montagu Bay*
Eighth Heaviest Fish	*3.20 kg brown trout* *R. Robinson - North-west coast*
Ninth Heaviest Fish	*3.1 kg brown trout* *Nigel Heaven - Strathgordon*
Biggest Fish Caught by a Junior	*3.52 kg brown trout* *Mark Garwood - New Norfolk*
Biggest Fish Caught by a Visitor	*.96 kg brown trout* *Graham Ralp - Western Australia*

Stillwater Passage, McPartlan Pass area provided the best fishing with most of the bigger fish coming from amongst the sticks in these areas. The major portion of fish weighed in were taken on the fish-cake in the evenings.

FISH SALVAGED AT LIAWENEE FOR PENSTOCK LAGOON

In January, field staff collected 920 fingerlings from Liawenee Canal and transferred them to Penstock Lagoon. 85 percent of the fingerlings were brown trout and the remainder were rainbow trout. Most of the fingerlings were about 50 mm long but others were 80 mm long.

WATER EXTRACTION - LAKE CRESCENT

Water flow out of Lake Crescent ceased on 10 December 1982. Subsequently, drastic action was taken by the Clyde Water Trust to increase the flow out of Lake Crescent. However, no extraction from Lake Sorell is currently possible unless the spill at the Lake Sorell outlet is lowered.

In December and January the Clyde Water Trust carried out construction operations at Interlaken as follows:

1. *Deepened and straightened the Clyde River.*

2. *Deepened the canal between Lake Crescent and Lake Sorell.*

3. Deepened the outlet from Lake Crescent to the Clyde River.

4. Put in a canal by Hazelwoods Lagoon to drain the lagoon and prevent water from the Clyde River entering the lagoon.

INSPECTION OF CONSTRUCTION AT LAKE CRESCENT

An inspection of the new outlet works at Lake Crescent was made on 11 February 1983. It was found that there was still 0.8 m depth of water above the minimum level of the old outlet. It is not known whether this amount of water could have been drawn through the old canal however, as it may have silted up considerably.

The new outlet structure is on the southern side of the old outlet and has two separate gates. The sill height of this structure is about 0.8 m below the old minimum level. Therefore, there is presently about 1.5 m of water available through this outlet (see Fig. 1).

An outlet channel has been constructed to convey water from the lake to the gates. This runs north along the old shoreline to Tea-Tree Point where it protrudes out into the lake about 20 m (see Fig. 2). This channel is about 7 m wide and from the areas tested appears to have an average depth of about 1.5 m which corresponds to the sill height of the new outlet structure. This channel appears to have quite a solid rock base, at least near its mouth and further excavation would probably be difficult.

The present level of Lake Crescent is down about 0.8 m on its full level with an apparent recent drop from December levels of about 0.2 to 0.3 m. Water was being discharged from the new gates but the gates themselves appeared to be temporary wooden structures.

Depth at the centre of Lake Crescent could not be taken because of high winds but using the map of Petersen and Missen it would appear that Lake Crescent could be lowered to a maximum depth of about 1 m. At that stage over half if its remaining area would be less than 0.3 m deep.

As mentioned, water was being discharged from Lake Crescent via the new gates. This outlet was below the level of the Clyde River therefore there is no apparent barrier to fish movement either way.

The Clyde River has been channelised from the outlet to about 80 m upstream from the Interlaken Road bridge. It has also been deepened and appeared to have about 1 m depth of water in it although this is difficult to estimate. Further channelling had been done in the Hazelwoods Lagoon area, probably to prevent water loss by evaporation in the marsh and to get water through more quickly.

At the Lake Sorell outlet there was only 0.2 m of water above the sill and the gates were closed. There was a large migration/ congregation of Paratya australiensis in the canal below this outlet at the time.

The end result of lowering Lake Crescent even to the minimum height of the old outlet could only be disastrous for aquatic life in

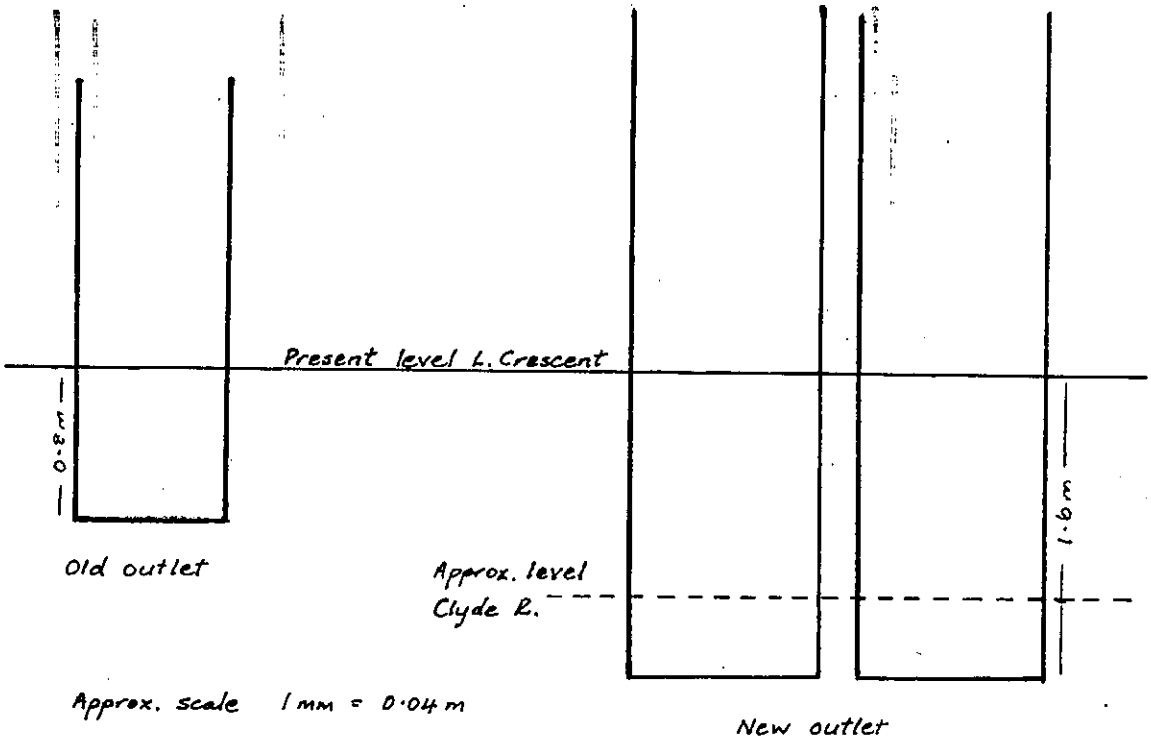


Fig.1 Lake Crescent outlet structures.

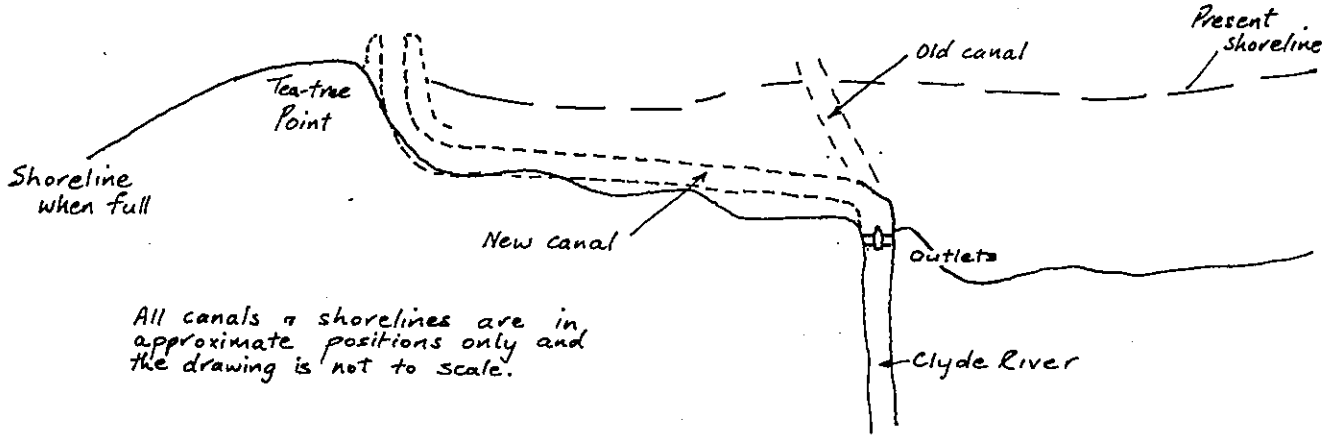


Fig.2 Approximate plan of new constructions at Lake Crescent.

that lake. The present margin of the lake shows the effect of a rapid fall in water level on such a turbid lake. Weed growth cannot survive down to more than about a metre in such a turbid lake. Any lowering of the lake can only result in greater disturbance of the bottom by wind action. This in turn would lessen the chances of survival of fish as well as many of the invertebrates on which they feed.

However turbidity may not get a chance to cause fish losses as higher temperatures associated with the lower water levels would probably already create problems for the fish life.

The necessity to close the gate between Lake Sorell and Lake Crescent must also have an effect on the biological balance of the two lakes. It is preventing the movement of fish (e.g. trout and galaxias) as well as invertebrates (e.g. the shrimp Paratya) from one lake to the other.

LAKE CRESCENT MEETING

The Commission convened a meeting between anglers and the Clyde Water Trust on 13 December 1982 with a view to outlining the thoughts of various parties on the useage of water in Lake Sorell and Lake Crescent.

A highlight of the meeting was the fact that a number of beneficiaries share a resource and that one interest has the power to take the resource exclusively for its own needs.

A further meeting between representatives from various Departments and interests is planned to consider Lake Sorell and Lake Crescent.

WESTERN LAKES SURVEY

The many lakes in the Central Plateau are of great interest to trout anglers. Not so well known are the distribution of native fish in these lakes. A field excursion in December 1982 to examine some of the lakes was carried out by Mr W. Fulton, accompanied by a party from the University of Tasmania. Anglers should be interested in the account of the trip.

During the week commencing 6 December 1982, various parts of the Western lakes system were visited by Inland Fisheries Commission biologists with several objectives in mind. The first was to check for hatches of snow-flake caddis in the upper part of the James River. Of further interest was the type and distribution of native fish in the area. Whilst the trout fishing resources were also to be examined.

The first stop was the James River. The weather had been warm and still in the morning but by the time the river was reached the wind was rising and the temperature was dropping. Snow-flake caddis were numerous on the bushes along the stream but only a few were flying. Trout were taking them but the main rise probably occurred earlier in the day. However, there were still quite a few trout in the river up

to about 2 kg in size.

From Pillans Lake the James River was followed to the top end of a series of lagoons and from there, west to a large unnamed lake (which may be called Howes Lake) where some galaxiid collections were made. No trout were seen in this lake although it is not unlikely that they are present. The shore of this lake was followed around the southern end to Lake Lepera and then north past several small lagoons to Pillans Lake to return to the James River outlet. Another galaxiid collection was made in a lagoon in the Lake Lepera system. Trout were observed in Lake Lepera and Pillans Lake.

Back at the James River the caddis were no longer present in the overhanging bushes. The temperature had dropped further and light-trapping for about 1½ hours after dark was unsuccessful.

Because of the adverse weather conditions on the Tuesday, no further collections could be made on that day. On the Wednesday Mr Fulton joined a small party of biologists from the University of Tasmania who had camped at Talleh Lakes. They had seen a good rise of trout in Silver Lake the night before.

This party then walked up the valley past Lake Fanny, around the northern end of Mt Jerusalem and over Jaffa Vale to Dixons Hut. The distance was about 10 km and because of the heavy rain, was fairly slow going.

On the Thursday native fish collections were made in the Lake Ball area. Some fishing was done in Lake Ball which is quite large with plenty of fishable shore for both fly and spinning. Two of its creeks that were seen would provide good spawning areas. Trout were present in Lake Ball but not caught.

On Friday the return trip was made via Lake Tyre and down the chain of lakes to Lake Fanny. Galaxiids were collected in Lake Tyre but the lake does not appear to have any trout in it.

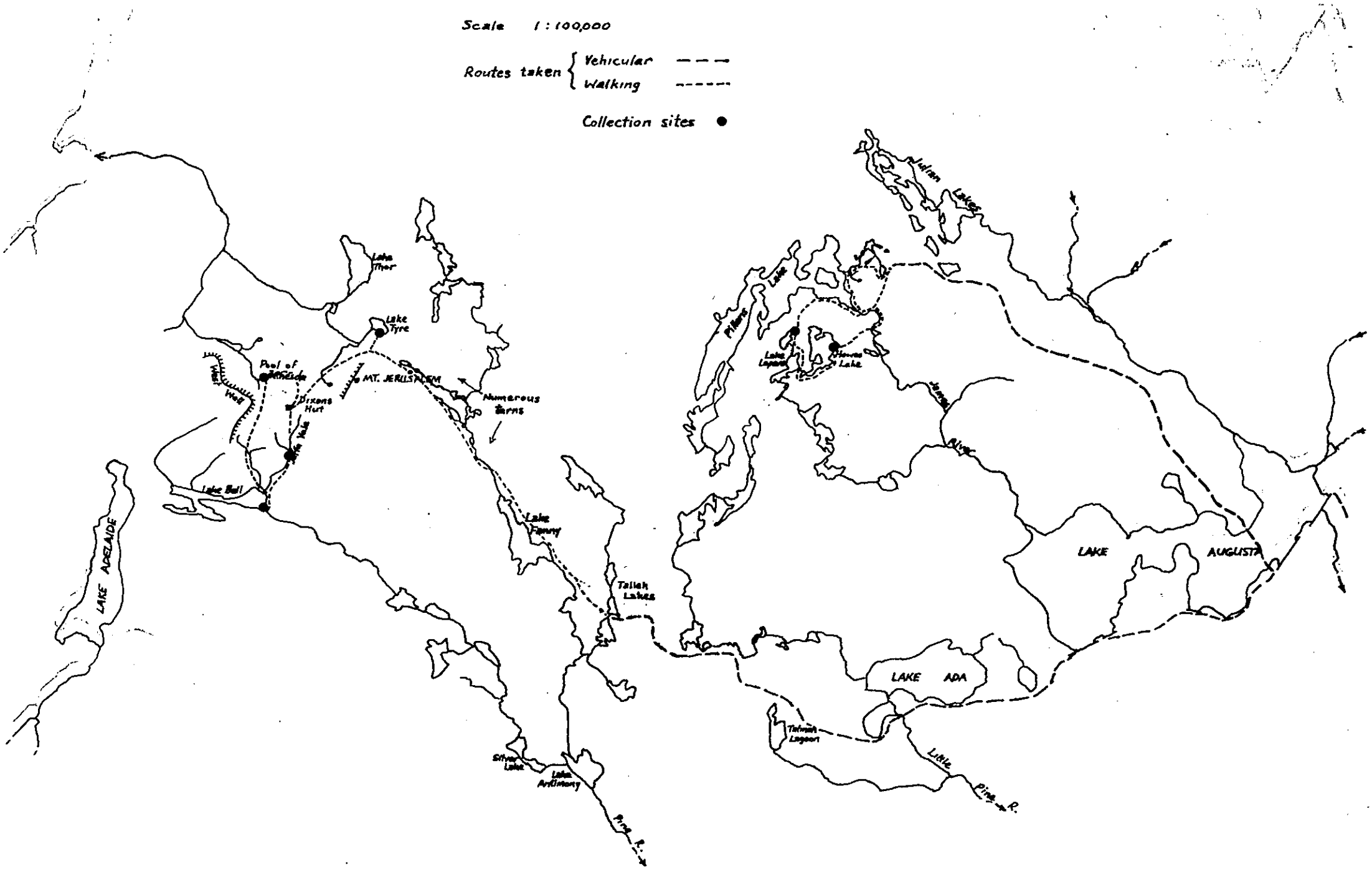
There are a large number of small lakes and tarns in about a 5 km chain from near Mt Jerusalem to Lake Fanny all of which contain trout up to at least 2 kg. The walking was much better on the way back but the trout were not cooperative.

A map of the area showing the various routes in included. The localities of native fish collections made during the week are shown on this map whilst the identification of species present is given in Table 1.

TABLE 1: Identification of native fish collected during the Western Lakes survey

Date	Locality	Species
6.10.82	Unnamed (Howes) Lake	*Galaxias brevipinnis*
6.10.82	Tarn north of Lake Lepera	*G. truttaceus*
9.10.82	Creek into Lake Ball (Jaffa Vale)	*G. brevipinnis*
9.10.82	Lake Ball	*G. brevipinnis*
9.10.82	Pool of Bethesda	no fish
10.10.82	Lake Tyre	*G. brevipinnis* and *G. truttaceus*

Map 1 : Western Lakes area showing routes taken and collection sites.



CADDIS

Dr Arturs Neboiss of the National Museum of Victoria came to Tasmania at the invitation of the Inland Fisheries Commission to collect caddis. A report of the trip is included in the Newsletter for the interest of anglers.

Dr Neboiss is a spacialist in the identification of caddis flies. He was invited to Tasmania in mid-November to assist with investigations into the taxonomy and distribution of the 'Shannon Moth', Asmicridea sp. with a view to reproducing the Shannon Rise phenomena.

With Inland Fisheries Commission biologist Wayne Fulton, collections were first made in the Shannon River at the Wihareja Bridge on Monday 15 November. A species of Asmicridea as well as another related species were found at this site.

The following day collections were made in the Ouse River just above the Marlborough Highway bridge and in the Derwent River at the Lake St Clair outlet. Asmicridea larvae were found at both sites. At Lake St Clair they were present both above and below the radial gates. Adult Asmicridea were also found at both sites. These were found roosting on rocks and bushes near the water.

Woodwards Canal (the canal leading from Bronte Lagoon to Bradys Lake) was examined for adults without success and the Shannon River was revisited also to check for the presence of adults. None were present there either.

Later the party visited James River just above where it enters Lake Augusta. The river has a considerable volume of water in this area, nevertheless, some larvae were collected from large rocks deep in the stream. On suitable rocks there were a large number of Asmicridea webs at this site. No adults were observed. It was snowing quite heavily however, and this could have deterred any of them if they had already hatched.

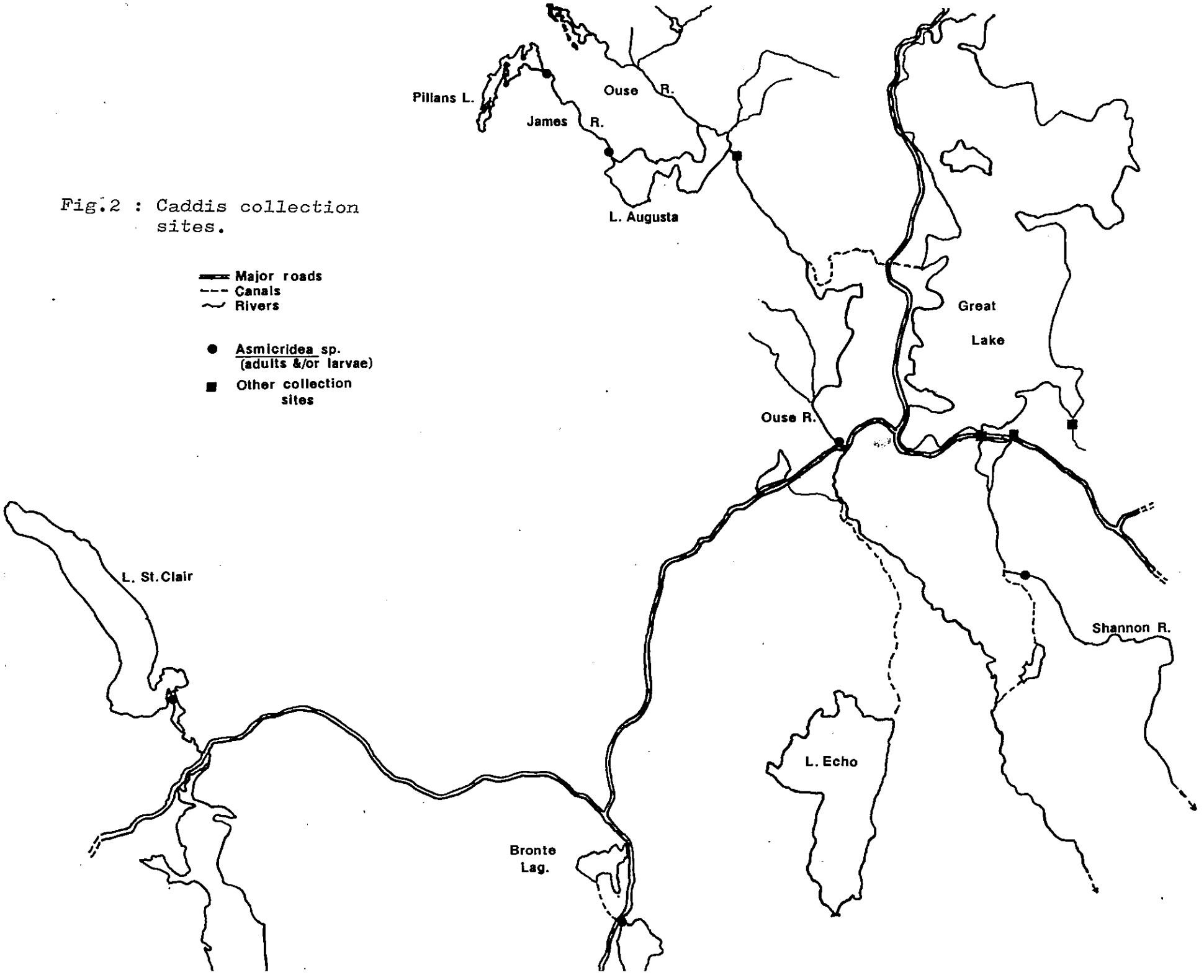
As mentioned, adults were found at the Ouse and Derwent rivers but not at the Shannon and James rivers. Pupae were collected at all sites. The earlier hatch does not appear to be directly related to temperature as at the time of sampling the Shannon River was much warmer than the other sites.

Prior to the visit of Dr Neboiss, Asmicridea larvae had been collected in Woodwards Canal whilst subsequent to his visit adults have been collected from the James River just below Pillans Lake.

Asmicridea is therfore found to be quite widespread in areas with suitable volume of water (see map). The numbers obviously increased with the amount of water. Dr Neboiss considered that there would be little difficulty in establishing the caddis in an artificial channel at Miena provided an adequate volume of water could be provided, particularly in summer.

On his return to Melbourne Dr Neboiss examined the caddis collected concluding that the adult specimens he had from all sites appeared to correspond to the known material collected from the site of the original Shannon Rise.

Fig.2 : Caddis collection sites.



KERMODES BAY

Complaints that the gate on the road leading from Dago Point to Kermodes Bay has been locked to bar access to anglers to a picnic area is being investigated. The Commission has taken the matter up with the Lands Department.

TULLAH HOUSE

The Minister for Inland Fisheries, Mr N.M. Robson, is pleased to announce that the tender has been accepted for the construction of a field base at Tullah.

WATER USEAGE IN DROUGHT

In the dry summer there have been competing uses for water in a number of areas. In addition, many very small streams have ceased to flow and Commission officers have investigated a number of reports of dead fish.

EEL STUDIES IN TASMANIA

Eel studies in Tasmania have been completed and scientific papers prepared. In addition, two articles on the Tasmanian eel fishery have been published in Australian Fisheries. The articles were written by a Commission biologist, Robert Sloane.

BRADYS LAKE INTERNATIONAL SLALOM CANOE COURSE

Certain works were carried out to improve the slalom canoe course at the Whitewater entering Bradys lake in December. The work was carried out at a time when rainbow trout eggs and alevins would still be in the gravel - no doubt many potential recruits would have been lost. The work may also have damaged pupating snow-flake caddis in this section of the canal.

The continued trend to divert water flow down the main course and away from subsidiary channels on the southern side will harm the existing trout spawning grounds in these smaller channels.

CREEL CENSUS

On three weekends in November a creel census of anglers catches were taken at Great Lake in order to examine the quantity and quality of the fish in the angler's bags. The details are set out on the following page.

A total of 73 anglers were checked in the area from Canal

Bay to Swan Bay. Their total catch consisted of 50 rainbow trout and 25 brown trout.

Rainbow trout	average length	398 mm
	average cleaned weight	725 g
Brown trout	average length	472 mm
	average cleaned weight	877 g

BRUNY ISLAND

The Commission has received a request to stock Big Lagoon on Bruny Island. The lagoon has a surface area of about 70 acres with a depth of about 15 feet. It is proposed to discuss the matter further with residents of Bruny Island and the National Parks and Wildlife Service before a final decision is made on the stocking of this lagoon.

PROSECUTIONS

Listed below are recent court cases. Further cases are pending for hearing.

COURT DATE	OFFENDER AND ADDRESS	NATURE OF OFFENCE	FINE	COSTS	PENALTY
20.12.82	Robert Lindsay VAGG 25 Quayle Street Sandy Bay	Control & observation of another persons rod & line	50-00	15-10	
20.12.82	Lindsay David VAGG 25 Quayle Street Sandy Bay	Unattended set rod	50-00	15-10	
20.12.82	Dennis John DAVIE 24 Montgomery Avenue Seven Mile Beach	Unattended set rod	50-00	15-10	
20.12.82	Wayne Geoffery COLE 83 River Avenue Heybridge	Possession of whitebait	70-00	15-10	
20.12.82	Garth Maxwell MUNDAY 75 Sterling Street Burnie	Possession of whitebait Possession of scoop net	100-00 30-00	15-10	
20.12.82	Robert Leigh WISE 20 Lockett Street Wynyard	Take whitebait with scoop net Possession of scoop net Obstructing an officer	40-00 25-00 50-00	15-10	
5.1.83	Trevor John SUMMERS 34 Pearl Street Burnie	Take whitebait Unmarked scoop net	60-00 20-00	15-10	

COURT DATE	OFFENDER AND ADDRESS	NATURE OF OFFENCE	FINE	COSTS	PENALTY
5.1.83	Trevor John SUMMERS 34 Pearl Street Burnie	Possession of whitebait	50-00	15-10	
7.1.83	Reginald Charles GREY 6 Grant Street Smithton	Take whitebait Unmarked scoop net	40-00 Adjourned Sine Die	15-10	
10.1.83	Brian BOWERMAN 44 Thompson Court Bridgewater	Using more than 1 rod & line	40-00	15-10	
24.1.83	Garth Maxwell MUNDAY 75 Sterling Street Burnie	Take whitebait Unmarked scoop net	100-00 50-00	15-10	
25.1.83	Earnest SNASHALL 16 Lumeah Avenue Lenah Valley	Disturbing fish Take fish other than rod & line Take fish prohibited water	Adjourned Sine Die 25-00 Recorded	23-10	30-00
25.1.83	Michael John BROUGH Mill House Road Longley	Disturbing fish Take fish other than rod & line Take fish prohibited water	Adjourned Sine Die 25-00 Recorded	23-10	30-00
7.2.83	Ashley Dean JEFFREY 26 Main Street Ulverstone	Take whitebait	Dismissed		
7.2.83	Hans Jorg LENZ 14 Frost Street Snug	Using more than 1 rod & line	20-00	15-10	
10.2.83	Peter Francis WISE 7 Jenner Street Wynyard	Take whitebait with scoop net Unmarked scoop net Refuse to give name & address to officer	50-00 20-00 50-00	51-10	
15.2.83	Peter Allan BAKER 14 Thompson Lane Newnham	Using more than 1 rod & line	40-00	15-10	

D.D. Lynch,
COMMISSIONER