

INLAND FISHERIES COMMISSION
NEWSLETTER

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SEAWARD LIMITS OF RIVERS

The 1963 amendments to the Fisheries Act clearly transferred the jurisdiction of title sections of rivers to the Inland Fisheries Commission. Some confusion appears to have arisen because some rivers have the seaward limits defined in the Act or by Regulation. Unless the limits are so defined, the Commission takes the view that the seaward limits of a river is its mouth. There have been a number of magistrates' decisions which supports this contention. Consequently netting in rivers is prohibited excepting for three rivers, the Mersey, Leven and Inglis, where professional fishermen traditionally engaged in netting are allowed to continue to use seine nets. Graball netting and spearing is not permitted in inland waters.

WHO OWNS RIVER BEDS AND BANKS

Anglers may be unaware of the ownership of land under and beside a river. To clarify the matter, the Registrar-General's Department has provided the following advice:

"Where a non-tidal river flows through land the bed of the river belongs to the owner of the land unless there is evidence to the contrary. Where it flows between the lands of two owners each owner is prima facie owner of the bed of the river up to the middle of the river under the ad medium filum rule. This rule applies unless there is evidence that displaces it. The bed of a tidal river up to the point where it ceases to be a tidal river belongs to the Crown unless the Crown has granted it. A reservation may have been retained by the Crown upon the grant of an area of land or the Crown may have subsequently acquired a reservation. In such cases an owner's land is bounded by the reservation and he has now ownership in any part of the bed of the river."

ACCESS TO WOODS LAKE AND PUMP STATION AT ARTHURS LAKE

The Hydro-Electric Commission owns land at the Flintstone Drive area, but there are no plans at this time to develop facilities as suggested by the Freshwater Anglers' Council of Tasmania. The matter will be drawn to the Chief Land Management Officer's attention for consideration in future planning and if the Freshwater Anglers' Council of Tasmania is interested in development of Crown land, it may care to prepare a formal detailed proposal including costing.

COMMERCIAL FISH OUT POND

Mr. R. Doedens made another application to establish a fish out pond at his fish farm premises at National Park. Details of the proposal are:

Situation:	The aeration pond, at the entrance of the farm would be under constant supervision by the kiosk and/or farm staff.
Charges:	a) Admission - Adults \$2.00 Children \$0.80 b) Hire of Rod - \$0.50 c) Cleaning of fish - \$2.00
Method of Fishing:	Artificial flies on a fixed line, attached to a rod (provided by the farm).
Period:	Trial period of 12 months, to allow a proper assessment of commercial viability and desirable regulation.

He claims that the adoption of the above guidelines (particularly the limited method of fishing) will prevent the indiscriminate proliferation of fish out ponds in this State.

The Commission declined to approve the establishment of a fish out pond at the fish farm. The farm was licensed for the purpose of raising trout flesh and ova for sale.

ARTHURS LAKE

Two anglers caught their bag at Arthurs Lake towards the end of the season. It was noted that the fish taken at that time were much larger than those taken earlier in the season.

GREAT LAKE

Good conditioned fish at Great Lake were frequently taken at the end of the season.

LAGOON OF ISLANDS

300 adult brown trout, about 1 kg average weight, were liberated in Lagoon of Islands. The Commission proposes to seek the view of the Angling Associations on the future management of Lagoon of Islands as it has received conflicting representations on the future management of this fishery. The explosion in the perch population downgraded angler success because small perch take the lure before trout.

The Commission has improved the spawning ground for rainbow trout in Mary Creek with pleasing results in the size of the run. Owing to the rainfall pattern, it is unlikely that there would be sufficient flow in Mary Creek to provide for the needs of a brown trout. Therefore it would be necessary to introduce stock from elsewhere to maintain stocks of this species. Small fish would have difficulty in becoming established in the presence of so many perch.

LAKE KARA

Anglers will be disappointed to learn that on the 7 May the shelter shed at Lake Kara was seriously damaged by a fire lit by vandals. The Commission is seeking the views of the North West Fisheries Association and the North West Fly Fishers Association on the restoration of the shed, as it was an amenity much valued by elderly anglers.

SEA-RUN TROUT DERWENT RIVER

Anglers are requested to report promptly the taking of sea-run brown trout by illegal means in the Derwent River. From time to time reports of illegal netting for sea-run trout at Rosny Point and Taroona have reached the Commission too late for effective action to be taken.

GOLDFISH

State Ministers for Fisheries have made further representation to the Commonwealth Government on the need for a ban on the importation of goldfish. The entry of a disease, now known as ulcer disease (*Aeromonas salmonicida*), with goldfish from Japan in 1974 highlights the result of not implementing the ban on importing goldfish proposed in 1972.

The important consideration now is to prevent the entry of further exotic diseases into Australia. If the proposed ban on the importation of gold fish had been implemented, then one exotic disease would not be in Australia today.

The black side of goldfish

By Tony Clancy

There is nothing like a good scare to get someone's interest, whether it is a military threat or a blowfly menace.

Goldfish, however, seem to lack appeal. But they, and any other imported fish, present two potential problems—colonisation of our natural waterways and introduction of fish diseases.

In theory the answer to this is simple. Prevent disease introduction by stringent quarantine and keep the little blighters in the aquariums where they belong.

An anonymous Riverland poet expresses sentiments on the environmental aspects in the previously unpublished work "The Callop and the pretty Fish".

*The callop is an Aussie fish
Living happily in the Murray.
It would like to eat the pretty fish
Plain, or in a curry.*

*But if the new chum swims away
To populate the waters,
Poor callop will forever pay.
So will its sons and daughters.*

*Pretty fish inside the glass
For everyone's well being
Should not into the rivers pass.
We like just what we're seeing.*

What we are seeing in the illustration, of course, is a living creature with no natural place in our environment being kept from that environment by a prison wall of glass.

But we are probably also looking at a once much-loved pet. Although over-fed by attentive new owners in the early days, its adoptive family has now grown tired of cleaning the bowl and, perhaps because the fish cannot bark or miaow for attention, feeding is erratic.

Yet do not be too quick to condemn! These are not callous people. They will release the little creature into the nearest stream and allow the children to see it swim away.

When I say callous people, I should point out, I really mean they are not callous towards the children. After all they are going to be around a lot longer than goldie and they certainly show a lot more emotion.

Pleasing the children unfortunately will not please goldie, who may swim straight into the gaping mouth of a bigger fish, die of stress, or, worse still,

do what the family imagined might happen—make its home in the new environment. It becomes Russian roulette with a live bullet in every chamber.

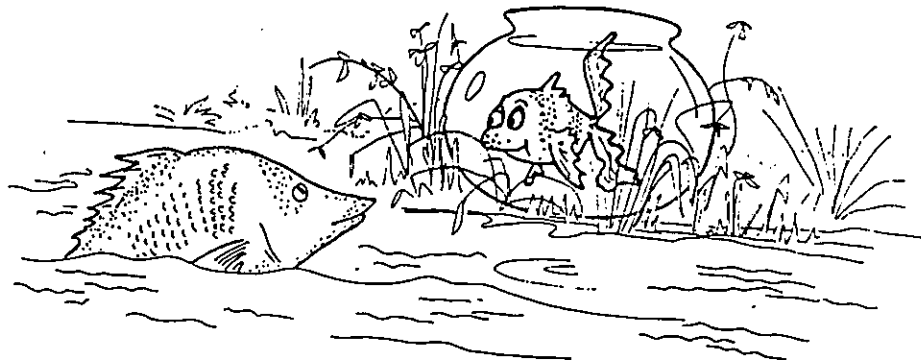
The way introduced creatures can upset the natural checks and balances is demonstrated by the rabbit, which has caused erosion; and the domestic cat, which has caused the decline and disappearance in some cases, of many native animal and bird species.

European carp's population explosion surprised fishermen and scientists alike. Other surprises have included the discovery of live tropical fish in city drains and the prolific breeding of introduced "mosquito fish" or

but they feel that the "Declare it for Australia" television advertisements featuring Harry Butler fail to push the case about fish.

Enquiries reveal that Harry has no greater preference to handling a wombat than a guppy in a jar to stress his point, its just that certain visual impact has to be considered in a public television campaign.

The Australian Quarantine Service, which hires Mr Butler, is aware of the problems posed by fish imports and the printed literature and public addresses which are part of their very enthusiastic promotional work do not ignore them.



Gambusia. In Queensland the authorities got to the stage of starting a poisoning program to attack Tilapia, a species on the banned list for years and now known to dominate freshwater areas previously occupied by native fish.

Tilapia are hardy tropicals that grow to .5 kg. Since the late 1970s several thousand have been found, breeding well in their Australian environment, and not always in warm water.

In 1971 West Australian officials destroyed 120 koi carp, brilliantly coloured and marked Asiatic fish, in a pond close to a major river.

These examples must encourage action. Bumping up the penalties, however, does not bring about a corresponding decline in offences, as experience in other States has shown. It appears that fines ranging as high as \$10,000 have not been the answer.

More hope lies in thorough quarantine and in public awareness programs. As far as the latter is concerned, there are some people who are not so wild about Harry. Nothing against him personally,



Harry's got a lot to handle.



Amazon Marine Aquariums at Glenelg East has its own quarantine room, where new arrivals are given time to show any problems before a decision is made to move them onto the main shop floor.

Like most people they have to work within constraints of budgets and time and many considerations have to be made when the priorities are set. No doubt public impact, potential economic threats and possible environmental hazards are among those considerations. So, too, would be the effectiveness of the lobby groups.

Did you know, for instance, that the wheatgrowers are often making noises about the khapra beetle, which has been described as the world's most destructive pest of stored grain and vegetable products? And did you know that meat producers are concerned about the increasing affluence of Thursday Islanders, because this means they are more able to buy cattle in Papua New Guinea and power boats that can transport them around the islands, and escape quarantine?

Then there is the sunflower lobby which wants to keep ours one of the few developed countries without sunflower downy mildew and there are the opponents of some better known threats like foot and mouth, giant African snail and potato cyst nematode.

That's tough competition for the fish folk.

Getting the message through is made difficult when there is a relatively small number of people directly concerned and well enough informed about the importance of protection of native fish against disease and environmental upsets. By contrast, many people know about foot and mouth and the mass slaughters which take place after suspected outbreaks.



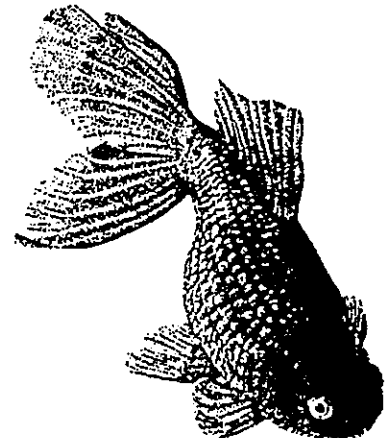
Australian Quarantine Service inspector Bob Freak (left) and Department of Fisheries officer Barry Waters examine part of a consignment of 6000 tropical fish from Singapore. Adelaide Airport is one of many possible points of entry for imported fish and inspection and certification is a regular task.

Ministers responsible for fisheries matters in each of the States have for more than 10 years urged greater Commonwealth appreciation of the potential dangers of importing fish. They do not want the experience of a further calamity to be necessary to prompt better restrictions on imports. In the case of goldfish, which can be easily bred in Australia, a strong view is held that a total ban on imports is warranted to cut the flow of potential disease carriers.

Last year about 10 million live fish were imported into Australia, with more than 9 million coming through Singapore. Other supplying countries include Hong Kong, Japan, Indonesia, the Philippines, the US, and Sri Lanka. There are now 505 different types of fish on the latest list of approved imports (until recently there were over 700).

Quarantine officials inspect the sources of supply and are concerned with the

hygiene of the fish and their facilities for holding overseas. They also check the fish on arrival in Australia. Nevertheless, the very number of fish coming in increases the risk of diseases passing through and means there are many families with fish that one day may not be disposed of properly.



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Disease transmission a reality

Transmission of diseases of fish from other countries is not only a possibility but, in isolated cases, a reality.

Since 1974, fish at a goldfish farm in Victoria have been suffering from an ulcerative disease. The disease is believed to have been transmitted by original stock from an Asian country.

Australia's foremost authority on fish diseases, Dr L. D. Ashburner, says importing exotic fish must be considered very carefully. He is a senior research officer with the Victorian Fisheries and Wildlife Division and works at the Snobs Creek Freshwater Research Station at Alexandra.

He lists, among diseases of greatest concern: infectious pancreatic necrosis (IPN), viral haemorrhagic septicaemia, fish furunculosis, whirling disease, infectious dropsy of carp, fish tuberculosis, oodinium disease, white spot disease, infectious haematopoietic necrosis, gill necrosis of cyprinids, swim bladder inflammation of cyprinids, and cestode parasites.

Fish furunculosis is a bacterial disease which has, in both its chronic and acute forms, caused heavy mortalities in the salmonid group of fish in most countries.

In its acute form infections pancreatic necrosis (IPN), a virus disease affecting young trout, has devastated hatchery stocks in some countries.

"Because Australia is located well away from other land masses, it has been isolated from most recognised fish diseases", Dr Ashburner said.

"In the early days of fish introduction the eggs of the introduced fish (mainly salmonids) were subjected to a relatively effective quarantine period because of Australia's distance from areas of sporting fish production. Eggs which were diseased died at sea as did fry which hatched but faster transport has eliminated this time factor and it is more likely that diseases can be introduced on eggs or fish products.

The intra- and inter-continental transfer of fish diseases and parasites has caused concern in the northern hemisphere since the First American Fisheries Society Fish Diseases Symposium was held in 1954.

From that time fisheries biologists, hatchery biologists, and the veterinary profession in Europe recognised that there was a large movement of infected fish stocks within and between various continents and, even more surprising, an inter-continental transfer of various fish parasites.

For instance, whirling disease, which was first found in Germany in 1904, has since been found in France (1952), Poland (1953), Czechoslovakia and Italy (1954), USSR (Leningrad and Black Sea) (1954), Denmark (1962), USA (1964), South Africa (1968), New Zealand (1972), and other countries.

It is known that the IPN which caused fish mortalities in Denmark was introduced with trout eggs imported from France in 1960 and later from the USA in 1963. Similarly high fish mortalities were observed in Japan for several years before 1968 when it was finally thought that the mortalities were closely identified with IPN.

In the light of such examples it is probable that ornamental cold water fish have already brought in various diseases."

One thing that we can be sure of, however, is that fish are prone to hundreds of parasitic and non-parasitic diseases, especially when grown under artificial conditions. Adverse hydrological conditions often precede disease attacks because resistance of the fish is lowered.

Mechanical injuries sustained by fish when handled carelessly or during transport may also facilitate infections.

PROSECUTIONS

Listed here are two recent court cases. Further cases are pending for hearing.

<u>Court Date</u>	<u>Offender and Address</u>	<u>Nature of Offence</u>	<u>Fine</u>	<u>Costs</u>
1. 3.1982	Raymond George Meagher	Fishing without a licence	\$ 50	\$15.10
1. 2.1982	Timothy Dale Allison	Fishing without a licence	\$ 50	\$15.10



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COMMISSIONER