

New Zealand Federation of Freshwater Anglers, (Inc.)

February 2001



The Case Against the Importation of Trout Flesh

into New Zealand

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Introduction:

The NZFFA is an affiliation of angling clubs throughout New Zealand. It has been operating continuously since 1974. It is an independent organisation, which represents the collective interests of its members. The Federation works to identify and resolve national issues affecting angling in New Zealand, and supports member clubs and organisations in their efforts to resolve local issues. The Federation's strength lies in its independence and the number of anglers it represents.

The Federation currently has an elected executive of 15, and represents 55 angling clubs from throughout New Zealand, as well as 158 individual members and associates. It has links and affiliations with 46 associated organisations. The Federation is a founding member of the Council of Recreational Organisations of New Zealand (CORANZ).

The Federation has opposed the importation of trout flesh for commercial sale into New Zealand since it has been proposed. There are several compelling reasons why, we believe, such importations should continue to be banned. We will list and expand on these below.



Issues of Sovereignty

We believe that the original intent of the Conservation Act was very clear, and still valid today. Trout were introduced and intended as, and still are, a public non-commercial recreational resource. This was accepted by the Select Committee which examined the Conservation (Protection of Trout as a non-commercial species) Amendment Bill. They described MAF's attempt to allow the importation trout flesh as using a "loophole" in current legislation. A "loophole" that the proposed Bill would rectify. All parties concerned accepted the recommendations of that Select Committee except ACT.

That proposed Bill was written to address and allay the concerns of thousands of anglers from throughout New Zealand and elsewhere in the world over the commercialisation of our recreational resource. It was adopted by the Government after the last election, and we were told by a senior cabinet minister that "all Labour MP's support this bill".

It is our belief and contention that trout fishing is a national "icon" of New Zealand. It was deliberately set up as an egalitarian public recreational resource by our forefathers who had seen and learnt from the private and commercial freshwater fisheries of their former homelands. Because it has always been protected from commercialisation by legislation, it has flourished to the point where it is used by national tourist promotions to symbolise this countries "clean green" image, and the recreational opportunities that provides. We therefore believe it is both accurate and appropriate to describe it as culturally significant to New Zealand; an egalitarian, exclusively recreational, public resource enjoyed equally by all sectors of the population, supporting an important symbol of how both we and the rest of the world sees our society.

Recreational freshwater fishing, and the fishery that supports it, is seen as something that defines part of the identity of being a New Zealander. The freedom for anyone to access public waterways and fish for world-renowned sportsfish, differentiates New Zealand from most other countries. Therefore the ability to control and protect that uniquely New Zealand 'icon' is equally important.

The Canadian agricultural minister has told our Government that, despite the ban on the sale of trout within New Zealand, if they are not allowed to sell their farmed trout here, they will take us to the WTO disputes committee and seek to have this declared a trade barrier. The current government has said in press statements that we should be prepared to accommodate this view. To be told that we must relinquish that right to determine our own cultural identity simply because some overseas countries want to import their commercially produced product into New Zealand, in direct violation of current laws, is totally unacceptable to the tens of thousands of New Zealand anglers. It is a direct challenge to a deeply cherished cultural heritage.

Prior to the current government being elected, it publically indicated it's support for the Conservation (Protection of Trout as a non-commercial species) Amendment Bill. This Bill's validity has already been tested and proven by a Select Committee process. We believe that to change that now, and allow the importation of trout flesh, would be operating without a mandate from the public.



Issues of Biosecurity

Compared to most similar overseas trout fisheries, trout in this country enjoy a remarkably disease-free status. This is particularly true of those countries indicating they wish to participate in trade in trout flesh. As in other areas, our geographical isolation has previously protected us from many of the devastating diseases found elsewhere. Trade has the ability to change that, and as is currently demonstrated by the world-wide emergence of BSE and its concurrent human health risk, can do so with devastating financial and health effects.

The Ministry of Agriculture and Forestry have reviewed the biosecurity implications of importing trout flesh, and concluded that the risk is extremely small, and "acceptable". We pointed out during submissions to such reviews, that some of their conclusions were unsubstantiated., scientifically indefensible assumptions. Our concerns, and our call for such reviews to be independently peer reviewed by someone with knowledge and experience in freshwater recreational fisheries, were ignored by MAF.

Our very real concerns with the biosecurity risks associated through participation in an insignificantly small trade in trout flesh have been confirmed by an independent consultants report, the Parliamentary Commissioner for the Environment's recent publication "NZ Under Siege", and by actual recent examples of our inability to prevent the entry of major pathogens into NZ, detect their presence when they do enter, or eradicate them once they are established. There are numerous examples of this, but perhaps the varroa bee mite illustrates such deficiencies best. It is fact that there is currently no mechanism to detect the presence of a freshwater fish pathogen should it enter this country, no plan or mechanism to monitor fish

populations should such an event occur, and no plan, effective organisation, or finance available to eradicate it if it did occur. We view such a risk as neither small or acceptable.

It is accepted by all that importing trout flesh into New Zealand when to do so is currently illegal, creates a biosecurity risk where one does not currently exist. The statistical probabilities analysis used to measure that risk does not preclude a significant disease being present in the first shipment, or even the first two shipments.



Issues of Commercial Exploitation

The non-commercial status of New Zealand's trout fishery is one of its greatest protections. It is only because trout flesh cannot be sold that it can be effectively defended against criminal activity. This is because trout populations are largely self-sustaining and are particularly vulnerable at spawning when large numbers, sometimes whole breeding populations, congregate in shallow isolated headwaters. They could be easily removed in such situations without detection, destroying whole generations of prime breeding stock. It is testament to this ease of poaching that it is still widespread. It is only the lack of a commercial market that prevents it being on a large commercial scale. Despite that, current estimates by freshwater fisheries managers is that only 14% of such illegal activity is detected.

At the present time it is illegal to sell trout, imported or local, on the New Zealand market. The current Government want to change that, and if the law *is* changed so that trout could be imported there is no known way of identifying whether trout on sale in New Zealand outlets is imported -- or local trout which has been poached. In fact, because wild trout tastes significantly better than imported farmed trout, there would be a greater risk of it being sold at a premium. It is another reason why the likelihood of commercial poaching operations producing product indistinguishable from imported product would occur.

We have every reason to believe that like paua and crayfish and deer and snapper, once trout are commercialised, there will be a substantial increase in the incidence of poaching. Those Government agencies which have the responsibility to eradicate or control poaching of those species mentioned above have shown themselves incapable of controlling that poaching and we have no reason to believe they will be any more successful with trout . Fish and Game NZ believe that should trout become commercialised, they would not have the resources to protect our rivers, back country and headwaters from this threat.

If it were made legally possible to import and sell trout in New Zealand there is no logical reason to ban trout farming in New Zealand. That type of fish farming, as well as being environmentally unsustainable, has been characterised overseas by disease outbreaks, pollution of the environment, misuse of chemicals to control disease and parasites, and the use of suspect animal foods -- again fish farming will undoubtedly promote the incidence of poaching.

The production of trout as a food commodity is inevitably followed by a loss of access to recreational fishing waters, wild fish kills caused by both pollution and introduced disease, a huge and commercial scale poaching industry, and because of escapes of farmed fish, the loss

of the genetic integrity and vigour of wild trout. This threat is made all the greater by the production of genetically-engineered fish, such as that currently being held by NZ King Salmon. These problems are only too apparent overseas where trout are farmed.



Appendix One

Conclusions of an independent consultants report into the non-commercial status of trout in New Zealand.

CONCLUSION

- Recreational trout fishing on rivers and lake with free public access is a valuable resource with cultural, environmental and economic dimensions.
- Resources such as the trout fishery can be successfully protected only through non-market (legislative) means. Previous legislation, which banned the sale of trout (imported or domestic) for human consumption and prevented trout farming, has protected this resource. Such protection to date has successfully limited the introduction of exotic trout diseases, maintained a recreational resource prized by New Zealanders and tourists alike, and helped support New Zealand's clean, green image.
- If this protection is removed, the threats to this resource are real, as are the threats to the environment associated with trout poaching and trout farms.
- There is no evidence to suggest that there are any benefits in relaxing the present protection regime that outweigh the potential deleterious effects likely to arise from removing this protection.

Dr Ian Johnstone, BSc, MSc (Hons), PhD
Biosecurity Manager and Advisor

[Click here for the full report.](#)



Appendix Two

Freshwater fish diseases of particular concern in countries exporting trout flesh

AUSTRALIA

Epizootic haematopoietic necrosis virus (EHN)

A particularly virulent, aggressive and resistant iridovirus which kills salmon, trout and perch. It is also credited with causing declines in native Australian fish populations, including galaxids, over recent decades.

NORTH AMERICA

Infectious Salmon Anaemia (ISA)

Both American and Canadian fish farms have outbreaks of this highly infectious viral disease which have subsequently crossed over into wild salmon populations, making control and eradication virtually impossible.

BRITAIN/SCOTLAND/IRELAND

Infectious Salmon Anaemia (ISA)

Scotland has been struggling with an outbreak of ISA in salmon farms which was transferred from Scandinavian fish farms with infected stock, since August 1998. Despite being an OIE notifiable disease, it has continued to spread, and has been found to have infected wild salmon and trout in Britain, Ireland and Scotland.

Sea lice

Parasites of trout and salmon, they occur in huge numbers on cage farmed fish. They transfer to wild fish as they pass by the fish cages and are credited with the severe decline of both wild salmon and sea trout in Scotland, Ireland and the north of England. As well as killing fish themselves they have been shown to transfer viral diseases such as ISA between fish, and have been reported as biting human bathers downstream of fish farms. Also of concern is the current treatment of farmed fish with chemicals such as Ivomectin to try and control the lice numbers.

NORWAY (also Scandinavia and Northern Europe)

Gyrodactylus salaris

An aggressive parasite of salmon and trout, its spread is a consequence of fish farming, through the transfer of infected salmonids between fish-farm businesses. Its spread to wild fish in Norway saw the poisoning of the Laerdal and six other rivers in an effort to stop it on April 9, 1998. 500 salmon, 4,000 sea-trout and upwards of 100,000 salmon smolts died, and all fishing on the Laerdal and other infected rivers was banned for the next five years. The Laerdal was a famous salmon fishery until the parasite, bred in Norwegian salmon farms, arrived and affected the wild fish. Not that it worked, the parasite has since spread throughout Europe and has been identified in Sweden, Finland, north Russia, Denmark, Germany, France, Spain and Portugal.

Infectious Salmon Anaemia (ISA)

It is also of concern that Norway doesn't seem to be required to follow OIE requirements for notifiable diseases such as ISA. While the rest of the world closes down fish farms with outbreaks and destroys all the fish stocks, Norway doesn't. We wonder why not, particularly when they export infected fish to other countries and start outbreaks there.



Appendix Three

Relevant news items from recent NZFFA Newsletters

JANUARY 2001

Trout Protection - an update:

We outlined in our last newsletter how the present Labour government was preparing to abandon its pre-election promise to New Zealand's anglers, and scrap the Conservation (Protection of trout as a non-commercial species) Amendment bill. This was because the Canadians are insisting that under WTO rules, they have the right to sell their farmed trout here, despite the fact that it has always been, and currently still is, illegal to sell trout commercially within New Zealand.

One of the reasons that the Federation was formed, was to oppose the farming of trout. It has also been fighting the importation of trout flesh ever since that was first proposed. Along with Fish & Game NZ, we believe (based on the abundant evidence from overseas) that such importation will inevitably lead to trout farming, and either would see the end of our wild trout fishery, as we currently know it.

Thanks to the participation marshalled from you, the ordinary New Zealand angler, just prior to the last election enough pressure was exerted for Mark Burton, MP for Taupo, to draft the "Protection of trout as a non-commercial species" amendment to the Conservation Act. This would have the effect of making the importation, sale or farming of trout within New Zealand illegal. The Federation was informed at the time, by Jim Sutton, that "all Labour MP's support this bill". It even went through a select committee stage unscathed, despite vigorous opposition from within the National government. Once Labour was elected, it formally adopted the bill as a government-sponsored bill, and eventually made it the responsibility of the Minister for the Environment, Marion Hobbs, to progress into law.

Now we find that the Labour cabinet has been captured by a dry-right element reminiscent of the 'Roger Douglas' days, and Ministers, including Jim Sutton, are actively campaigning against the bill they once so vociferously championed. We are told that the Crown Law Office has decided that the Bill does indeed contravene some of the international trade agreements that the last National government obligingly signed us up to. We are also told that the current Labour government is prepared to "roll over" and let WTO backed commerce take precedence over its own legislation. In other words, the freshwater anglers of New Zealand are being sold down the river to appease overseas commercial fish farmers (notably Canadian).

We think that if NZ's anglers can make a difference to this process, and keep the government to its promises, then it has to be done now. The moratorium on the importation of trout (an extension of the original one) ends in April. The alternative is the destruction of a national icon, the end of the egalitarian right for anyone to buy a licence and fish for wild, world-class, self-sustaining trout in clean, freely accessible rivers and lakes. Failure to support and pass this bill in its current form will see the ending of an age of fishing within New Zealand.

The current state of play

The Conservation (Protection of Trout as a non-commercial species) Amendment bill continues to languish within the Ministry for the Environment. At the time of writing, the "revision" of the bill which was due at the end of 2000 shows no sign of re-emerging. Correspondence from Environment Minister Marian Hobbs continues to state that Cabinet has decided to refer the bill back to a Select Committee, so that any changes can be thoroughly scrutinised by Parliament, and to allow further submissions from the public and interest groups. Given that the bill has already been through this process once, we can only assume

that Government is expecting a hostile reception to its changes from anglers like yourselves, while trying to placate self-seeking organisations such as Federated Farmers and industry groups. So they should. Changes to the bill they themselves sponsored, to allow overseas business interests precedence over New Zealand law is a shameful cop-out. Putting a world-class recreational fishery at risk for a insignificant and unimportant trade in trout flesh is even worse. Anglers have long memories and passionate feelings about this public resource.

Government commissions reports. . .

We asked the Minister for a copy of a couple of reports that they had commissioned as part of the review process, under the Official Information Act. The Minister released one to us, a report by APR Consultants of Rotorua, on the fisheries management consequences of trout imports. The other, a Crown Law opinion of the World Trade Organisation implications of trout imports, was refused, on the grounds of legal professional privilege. Fancy that! A Minister, elected to represent you the public, withholds from the public, a report by public servants (albeit the Crown Law Office) on the basis of professional privilege. No such worries with the report from commercial consultants. This must be the "open government" we keep hearing about! We are going to have to apply to the Ombudsman to review this decision.

A preliminary glance of the said 50 page report (it is Christmas) indicates that it addresses the trade implications in greater depth than the fisheries management consequences, and would appear to be based on a number of preconceptions:

- that the requirements of international trade agreements take absolute precedence over national law, (and hence),
- that the only valid management method for species such as trout is based on "free-market" principles,
- that the MAF Import Health Risk Analysis was complete, accurate and unquestionably correct and valid,
- that trout would not only be imported into New Zealand, but also harvested or farmed as well,
- that what hard information it (this report) contains is based on the Taupo fishery, because they have no knowledge of (or hard data on) any other freshwater recreational trout fisheries

That the Minister is being given this sort of advice to base decisions about the future of our recreational resource upon, is of great concern.

In the end, it might all boil down to. . . .

So why all this fuss about importing a fish for which there isn't a market in New Zealand? Where the return is unlikely to justify the cost, especially when in direct competition with salmon? Because, *that* isn't the main agenda. The Canadians may simply be trying to prove a point - that they can use the WTO and international trade agreements to usurp national laws that they don't see as being in their best interest. Within NZ however, the aquaculture industry is lining up to have a crack at farming trout. They know that if it can be imported, there is no justification for not growing (or like eels - harvesting) our own. APR Consultants seem to consider that such fish would fetch \$5/kg ex-farm, \$8/kg wholesale, and \$21/kg retail. We think it much more likely that the public wouldn't find commercially reared fish particularly acceptable (once all the wild stock had been poached out, or killed off from disease and pollution). That is certainly the message that we get from overseas markets. We

think that it is more likely that the real market can already be found on supermarket shelves. Nestles, the trans-national company that could afford to buy NZ, and with whom the dairy board certainly doesn't want a quarrel, already import trout into New Zealand. Marketed under their Fiskies "Fancy Feasts" label, their Flaked Trout Feast is Gourmet Cat Food made in the USA.

It would be somewhat ironic, but absolutely typical of industry and international trade, if we lost a priceless recreational resource so that we could produce catfood.



Other news and issues:

You are what you eat.

One of the reasons we oppose salmonid farming, is that it is environmentally unsustainable. For every kilo of salmon or trout grown, four kilos of shrimp and small fish are sucked out of the ocean to produce fish pellets. Now new research by Dr Miriam Jacobs of Surrey University has found the farmed fish contain high levels of polychlorinated biphenyls (PCBs). The production of PCBs is banned in most countries - but the chemicals accumulate in oceans after being released in industrial waste. UK scientists are calling for urgent research to be carried out into the safety of farmed salmon after research showed that some fish contain worrying levels of these potentially dangerous chemicals.

PCBs are among the most toxic and persistent pollutants in existence. The chemicals are thought to affect human nervous, immune and reproductive systems. They are also thought to be responsible for so-called "gender bending" effects because they mimic the female sex hormone oestrogen. Studies indicate the chemicals can cause cancer, decreased sperm counts, deformed genitals and sterility. The World Health Organisation is sufficiently concerned about the potential consequences to have cut its guidelines on the recommended intake of dioxins.

Dr Jacobs traced the contamination back to the feed that includes fish meal and oil which come from wild fish trawled from the world's oceans in vast quantities by industrial fleets. Concentrating the nutritional value of these fish into pellets to produce a high-protein diet for farmed salmon multiplies the minute traces of toxins present in each individual fish to a more significant level. Once ingested, PCBs build up in body fat and take years to break down.

A spokesman for the UK Fishmeal and Oil Manufacturers Association said it was aware of chemical concentration in feed. We can therefore assume that salmon and trout producers are, or should be, aware of this also. So how many warning labels have you seen on salmon products in shops and supermarkets? Oops! Must have slipped their minds.

One last point. Last August New Zealand's only dedicated fish food producing factory closed, after King Salmon decided to import their fish food rather than buy NZ-made. All 13 staff were made redundant at the plant at Hope, which was owned by NRM, a division of Tegel Foods. So why should fish farmed in this country be any different?



Salmon farming troubles on both sides of the Atlantic

New England's salmon farmers are under attack, as the federal government declared wild salmon in 8 Maine rivers as endangered, and said that the fish-farming industry was partially to blame. Environmentalists, backed by the National Environmental Law Centre are also suing three salmon farms for operating without discharge permits. They claim that concentrated fish waste, excess fish food, and a chemical used to clean the fish of sea lice, are running unchecked into the sea. Meanwhile, no fewer than 7 government agencies are beefing up or creating regulations that will impact on fish farming.

The listing of Maine's wild salmon as endangered is seen as such a threat to the salmon industry, the governor and a coalition of aquaculture companies are challenging it in court. They fear that fish pens might have to be moved further offshore to prevent escaped fish interbreeding with native fish, increasing production costs.

Sea lice also feature in news from Scottish salmon farms, where a family claim they were attacked by these blood-sucking little creatures whilst bathing from a beach near a fish farm. Sea lice breed in billions amongst salmon in farm cages. They have been shown to transmit bacterial and viral diseases. For the second year running in Scotland, thousands of miles of coastline have been closed to shellfish harvesting because of toxic algal blooms. Out of the 60 sites affected, 57 are in areas used for fish farming. None has any record of toxicity prior to 1988, when a massive expansion of fake salmon farming occurred, dumping huge quantities of untreated fish farm sewage into the marine environment.



Poached fish

Organisations such as Federated Farmers and APR Consultants continue to point out in articles and submissions that it is easy to tell the difference between farmed fish delivered in shrink-wrapped plastic, and poached fish delivered in newspaper or an old sack. We really wonder which world these people live in. Do they really think that vacuum packing machines are so hard to come by?

A recent article from Britain illustrates the commercial nature and the huge damage that poaching can inflict on a fishery. The biggest recorded kill of fish in one of Britain's most protected rivers has been blamed on bungling poachers. 100,000 fish have died in 10 days in the Dee's lower reaches on the border of England and Wales near Chester. Poachers often use chemicals to cut oxygen in the water and suffocate fish quickly. Ten days ago, dead and dying fish began surfacing in the river at Farndon, starved of oxygen. "There have been occasions when poachers have used a substance in the water illegally which results in them getting the fish out quickly," said an Environment Agency spokeswoman yesterday. "Poaching these days is no longer the chap taking home a bit of fish for his tea." The contaminating agent was colourless and odourless and is proving difficult to identify. Anglers believe the stretch of river will be of no use to them for 10 years. Steve Fitzpatrick, news editor of the *Angling Times*, said: "An incident at a trout farm two years ago killed 300,000 fish but we've seen nothing like this in their natural domain. He grew up fishing the Dee's waters and believes 100,000 fish have died.

It couldn't happen here, if there was a market for trout, - *could it?*

Over the last month, we have seen:

- Marine poaching described as a major source of income for gangs in between cannabis seasons, by Ministry of Fisheries.
- a New Plymouth man convicted of possession of fish (rock lobster) for sale other than from an authorised source.
- a large amount of paua found dumped in the Linwood Avenue waterway. It was believed the find was connected to a known group of paua poachers.
- A total of 1081kg of kina roe valued at \$28,997 was illegally taken by a Picton fisherman.
- 25 kg of illegal shucked frozen paua was found in chilly bins owned by a Blenheim diving instructor. 148 were undersized.
- Another offender was fined a total of \$14,970 after pleading guilty to four charges relating to taking excess paua, undersize paua, taking paua with underwater breathing apparatus and taking fish while a banned fisher. The offending took place in the Marlborough Sounds.
- Fisheries officers nabbed three men at Turakirae Head with 890 paua, police stopped a motorist with 600 paua, and a man was caught with nearly 200 crayfish taken illegally from the Wairarapa coast.
- Fisheries officers seized 1500 paua taken by five men at Makara.
- A huge haul of illegal crayfish nabbed by the Fisheries Ministry off the Wairarapa coast. It included 90 cooked and 40 fresh crayfish, along with five craypots and the four-metre aluminium runabout they were transported in.
- Kaikoura volunteer fisheries officers have netted a fisherman with a catch of 300 paua, 30 times the legal limit.
- Taranaki Fisheries officers caught more than half a dozen recreational anglers who hauled in undersized snapper.
- A 200m net packed with rotting fish was found off the West Coast yesterday after floating 200km untended.

NOVEMBER 2000



Government goes 'belly-up' on Trout Protection

On October 13th, 2000 the (Hon.) Jim Sutton said of the Burton Bill, (which is designed to protect the non-commercial status of trout in NZ), ***"New Zealand might have to look at its ban on trout imports in order to meet international obligations on removing trade barriers. ... We are going to have to examine that to see if there are less trade restrictive ways of meeting our own policy objectives.... This is going to cause a stir, of course, in New Zealand"***.

Mr Sutton was speaking after a meeting with the Cairns Group in Canada, where he had the hard word put on him by Canadian Agriculture Minister Lyle Vanclief. Mr Vanclief told Sutton that regardless of the status of trout in NZ, if the Canadians weren't allowed to import their trout here, they would consider it a restrictive trade practice and initiate actions accordingly. They have already used this argument to good effect against the Australians through the World Trade Organisation.

Contrast that with what Mr Sutton was saying on 27th November, 1998, ***"This bill has the important effect of avoiding exposing New Zealand to attack in the WTO for discriminating against imported product. ... All Labour MP's support the Burton's bill"*** We

outlined the process involved in our Newsletter of September 1999, and wondered at the time whether the government of the day would have the guts necessary to withstand the pressure from overseas exporters. Well, I guess we now know. We did expect a little more spirited resolve from a Labour/Alliance government. I guess that makes two elections in a row that we have been suckered in by promises that politicians have no intention of keeping.

So, it appears that this governments policies and legislation on NZ recreational resources (like the previous governments) are being made, not by our elected representatives in Wellington based on the wishes of their constituents, but by overseas businessmen in foreign countries, out to make a quick buck at any cost. We firmly believe that this government is preparing to back down on the promise they were elected to carry out. We expect them to gut the Burton bill to appease foreign trade advocates.. Democracy, if not dead, would appear to be very, very sick indeed.



Biosecurity Issues

We have highlighted these of late, because of our continuing perception that they are symptomatic of a general breakdown in NZ's ability to recognise, intercept or respond to the introduction of unwanted organisms. As anglers, one of our greatest fears is the introduction of freshwater fish pathogens, which we have been highlighting since 1997, and which successive governments have been ignoring or marginalising because they interfere with "free trade agreements". We have seen the extreme devastation such pathogens have brought to overseas freshwater fisheries when introduced in this manner, and we are determined not to see that repeated here.

Recent NZ examples include:

- the inability to contain or eradicate veroa bee mites devastating our agricultural industries,
- the inability to prevent the spread of mosquitos capable of carrying fatal human diseases down the east coast of the North Island,
- the inability to eradicate the Guava moth from Northland,
- the discovery of Australian frogs and poisonous cane toads,
- a potentially fatal toxic algal bloom, introduced from ship ballast water discharge, affecting shellfish from most of the North Island,
- an introduced tube worm devastating the Coromandel scallop fishery,
- the discovery of four venomous spiders within six weeks, and thirteen snakes in the last two years ,

Now comes confirmation of our concerns from a most unlikely quarter - MAF themselves. 23 of their last 26 internal biosecurity audits have shown up major problems, many of which aren't even being addressed, let alone fixed. Mind you, it took an application under the official secrets act to wrinkle this information out of them. We aren't sure which was most disappointing; the confirmation of NZ's inability to protect its borders, or listening to Biosecurity Minister Marian Hobbs and MAF's spin-doctors defending the public servants responsible (or irresponsible, as the case may be).

Just so you don't think that the problems are all one-way traffic, the CSIRO reports that the introduced NZ screw shell has established itself off the coasts of eastern Tasmania, Victoria

and New South Wales, and now covers an area of seafloor about the size of Tasmania. It is impacting on other mollusc species, including scallops and the native screw shells, shellfish-eating fish species, and the food chain that depends on them.



AUGUST 2000

Importation of uncooked Salmonid flesh

The importation of uncooked salmon, including those from Australia with heads and gills still attached, is still permitted by MAF. Despite the okay of the Australian Quarantine Inspection Service, a WTO ruling, and the threat of trade restrictions from the Canadians, Tasmania is still banning the importation of raw Canadian salmon. The AQIS report allowing these imports, (similar to our MAF's report doing the same for NZ) has been blasted by an Australian joint Senate Committee.

An ABC News report, prepared when AQIS made their decision, gives an interesting insight into the views of Australian Aquacultural Scientists, Salmon Farmers and others. It describes raw fish imports as "biological Chernobyl's", describes the devastating disease threats involved, and fails to find anyone who isn't hostile to the prospect, described by an international Aquacultural Scientist as "absolute madness". It also gives interesting insights into the pressure applied by the Canadians and WTO, and how one industry (the tuna industry) is played off against another (the salmon industry). It reenforces the view that such decisions (by both AQIS and our MAF) have little to do with science, or even common sense, and a whole lot to do with the implementation of international trade agreements at the expense of individual countries sovereign rights.

Only recently, a joint meeting of Federated Farmers and its Australian equivalent, has called for a new round of international trade negotiations by the WTO (after the abject failure of the Seattle Summit) and *the 'uncoupling' of these negotiations from labour and environmental issues*. Talk about an abdication of responsibility for their actions! Perhaps the heads of Federated Farmers need to get out of Wellington and have a closer look at some of NZ's rivers and streams downstream of intensive farm holdings. Or where stock have uncontrolled access to them. That is assuming that the streams and rivers still flow after most of their water has been extracted for irrigation. We are sure that what they would find is not the image of farming in NZ that they prefer to present to the rest of the world! A full version of the ABC News transcript can be found on the Federation's web site at:
http://www.geocities.com/ken_sims_98/nzffa/tassiereaction.htm



Genetically altered salmon cause debate among U.S. officials

In New Zealand, researchers using genetic engineering developed a strain of chinook salmon they believed could eventually weigh 550 pounds. On Canada's Prince Edward Island, "transgenic" Atlantic salmon injected with a protein grow four times faster than ordinary fish. The "blue revolution" - like the green revolution in biotech agriculture - is on the verge of exploding, and new breeds of salmon could be the first genetically altered animals sold in the local supermarket. But from the shores of Puget Sound to the California statehouse and from the Alaska governor's office to two streams on Vancouver Island, fishermen, government

officials and environmentalists are increasingly wary of what critics are calling "Frankenfish."

"We are very worried," said Glen Spain, Northwest regional director of the Pacific Coast Federation of Fishermen's Associations. "Once you let the genies out of the bottle, you are at the mercy of the genies." No one is quite sure what the long-term biological or environmental consequences might be if genetically altered salmon escaped from the fish farms, where they would be raised, and cross-bred or competed with wild, native stocks for food and spawning sites. "It's a hot issue," said Kevin Amos of the Washington Department of Fish and Wildlife.

A Massachusetts company, A/F Protein Inc., has said it has orders for 15 million eggs from genetically engineered, or transgenic, Atlantic salmon it has been raising on Prince Edward Island. The company has sought FDA approval to start marketing the eggs to fish farms. The fish can reach market size in 18 months, rather than the 36 months it now takes a typical Atlantic salmon. An A/F Protein spokesman was unavailable for comment, but the company's supporters say such transgenic salmon could dramatically expand fish farm operations around the world and relieve the pressure on wild stocks. Already, more than half the salmon sold in the United States are raised in farms.

In New Zealand, a company using genetic engineering was developing what could have been a mammoth chinook, or King salmon, they believed could eventually grow to 550 pounds. Wild chinook have been caught weighing 100 pounds or so. According to reports out of New Zealand, some of the first generation of chinook under development had lumps on their heads and other deformities. Following a public outcry and rising government scrutiny, the company abandoned its research earlier this year and killed and buried the fish. The company, however, held onto frozen sperm.

On the US West Coast, surprisingly, it's the Atlantic salmon that could actually pose the greatest threat. It has become the staple of fish farming operations in Washington and British Columbia. About 10 million pounds are raised annually, and it's a \$40-million-a-year business. Fish farms in British Columbia raise 80 million pounds of Atlantic salmon annually. The problem is, the Atlantic salmon escape. Since 1996, almost 600,000 Atlantic salmon have escaped from the net pens in Washington waters, and at least 60,000 in British Columbia waters. Genetically engineered Atlantic salmon could provide an even greater danger to Pacific salmon. They would grow faster and be more competitive. "It's a recipe for extinction," said Kate Neiswender, an aide to California state Sen. Tom Hayden. The Los Angeles Democrat wrote a resolution approved unanimously by the California Legislature that calls, among other things, on the National Marine Fisheries Service to ensure transgenic salmon are prevented from threatening wild stocks. Neiswender said salmon migrate up and down the West Coast, and Alaska salmon have been found as far south as California. Bob King, a spokesman for Alaska Gov. Tony Knowles, said that salmon farming is banned in the state and that the governor considers Atlantic salmon an "invasive" species. "Having genetically engineered salmon escape into the wild is a scary prospect," King said, adding that with a current surplus and depressed salmon prices "we would question altering Mother Nature to add to the glut."

In the Northwest, an official of the Omega Salmon Group Ltd., which owns the Washington salmon farms, said he knew of no plans to start raising transgenic Atlantic salmon. Omega is a subsidiary of the one of the largest salmon farming companies in the world, Pan Fish ASA, a Norwegian company with operations in Norway, Scotland, Canada and the United States.

A/F Protein officials, however, said they have had private discussions about transgenic Atlantic salmon with virtually every salmon company in the world.



JULY 2000

The effects of aquaculture and trade on fisheries.

The scientific journal "Nature" has published research showing that the farming of carnivorous fish such as trout and salmon is environmentally unsustainable and damaging. New research has confirmed that, as well as problems involving conversion of coastal wetlands to fish ponds, habitat modification, wild seedstock collection, the spreading of fish disease and the discharge of untreated fish wastes, producing one pound of carnivorous farmed fish such as salmon or shrimp requires about three pounds of wild fish in the form of fish meal. "Many consumers believe that when they purchase farmed fish they are helping to take pressure off of wild fisheries," said an author of the study. "In fact, for many types of farmed fish, the opposite is true."

Meanwhile, fish farmers here were warned that using alternatives to fish-meal, or genetically-modified fish, would see their products banned from European markets by the EU, still worried about the human variant of Creutzfeld-Jacob Disease. Treaty of Waitangi Fisheries Commission member John Mitchell told the commission's annual meeting that farmers also had to exclude dioxin-containing chemicals from their farms. Dr Mitchell, just back from an aquaculture conference in France, said New Zealand's farmed seafood would be rejected in Europe if farmers could not prove they were meeting the European Union's health regulations. Genetically-engineered fish, like those in a now-defunct King Salmon experiment in Marlborough, could not be exported to Europe either. New Zealand's aquaculture exports earned about \$200 million last year. (ie less than one third of what the freshwater recreational fishery earned, about one fifth of what recreational seafishing earned). Fish could no longer be fed on meal derived from beef, sheep, pork, or chicken by-products, Dr Mitchell said after the conference, because of the danger of the human variant of Creutzfeld-Jacob Disease, commonly known as mad cow disease. The concerns were with the food fed to cage-reared salmon, snapper, kingfish and flounder. "They'd better be pretty damn sure they are using fish-meal - by-products from a fish factory that cannot be fashioned into food products for human consumption - and clean fish-meal at that," he said. Salmon Farmers' Association chairman Mark Gillard, from King Salmon, said meat and bone-based meal was used in New Zealand because it was cheap and efficient, and he did not believe there was a health risk. MAF, who seem to work on the theory that the customer is always wrong, immediately pointed out that there was no scientific basis to such trade restrictions, only to trip themselves up on the issue of meal imported from Australia.

An interesting aside to such issues arose from Jim Sutton's speech to the NZ Veterinarians annual conference, and serves to illustrate how international trade agreements over-ride national and consumer concerns. The Minister of Agriculture and Overseas Trade pointed out that "World Trade Organisation rules preclude the use of animal welfare issues as non-tariff trade barriers to prevent market access. By continuing to actively participate in bilateral, regional and multilateral trade negotiations, both MAF and the Ministry of Foreign Affairs and Trade will continue to ensure that animal welfare is not used as a market access issue". What this means in practice is that when you learn that farmed salmon have been kept so tightly packed in cages that their eyeballs had been rubbed out by bodily contact, resulting in

the death of 240,000 fish; or that they have been feed fish-meal so full of oils that they have diarrhoea their whole lives and the structure of their flesh breaks down, you can't decide that you aren't going to import the product because of that, or you will be taken to the WTO disputes process for using non-tariff trade barriers. It gives an interesting insight into the sort of trade agreements that previous governments have signed us up to, and how they might impact on the Conservation (Protection of trout as a non-commercial species) Amendment Bill. If you want a really scary example of the logical conclusion of this sort of thinking, read how the WTO advocates the use of free trade agreements as the most efficient means of environmental protection, available from the WTO web site!

The farcical nature of these trade rules has been graphically illustrated by MAF's previous reports allowing the importation of salmon and trout into New Zealand (which sparked both the Customs Order banning the importation of trout, and the Conservation Amendment Bill designed to keep trout as a non-commercial species), and the report on the importation of fresh Salmonid flesh (heads on, gills in) from Australia. These were part of bilateral and multilateral trade deals and MAF was required to produce a report to scientifically show that they posed no problems, as part of the WTO rules. Well they produced the reports to show it was okay, but the scientific part was dubious to say the least. Not only were they based entirely upon conjecture, but they dismissed as 'negligible risk' the exact same scenario that saw the introduction of whirling disease into the USA, - with the resulting destruction of freshwater trout fisheries, and economic losses of hundreds of millions of dollars. Even when other scientists pointed out inaccuracies in the reports, such criticism was ignored. (After all, it might have prevented the trade agreements going ahead). Now we have the situation where these reports are being politically accepted as scientifically based justification according to WTO rules, solely on the basis that their authors say they are. Does that sound like science, or does that sound like commerce, to you? Interestingly, an Australian Senate Committee has blasted the Australian Quarantine Inspection Service's report allowing the importation of Canadian salmon into their country (see report above). What a pity no-one in our government is prepared to critically examine the finding of their own government departments over similar reports, even when such departments have clearly demonstrated bias and their own agendas.

Meanwhile, King Salmon went back on the offensive over seals eating their fish. It has applied to DoC to move 100 seals a month out of their home in the Marlborough Sounds. Forest and Bird responded by saying West Coast seal colonies have been declining recently, partly because about 10,000 seals have drowned in trawler nets, mostly in the hoki fishery.

Overseas, Scottish reports indicate that the total number of salmon caught by all methods in the North West and West coast regions, where fish farms are most prevalent, has fallen from close to 30,000 in the early 1980's, to 3,699 wild fish in 1998. Sea-trout are in a worse state. In 1998 the figure was 1,431 fish. In the early 1980s it was over 10,000. Even more worrying, new legislation in connection with the control of the disease Infectious Salmon Anaemia will allow fish farmers to sell to the public salmon from farms where the disease is present. Environmental groups have renewed their calls for a public inquiry into fish farming in Scotland. They said fish escaping from farms were spreading disease and causing genetic changes in the wild salmon population.

And from America comes confirmation of what many anglers already know, that wild salmon tastes better than its cousin on the farm. At a recent blind taste test conducted by conservation groups, diners evaluated the flavour, texture, mouth feel and colour of wild salmon and

farmed salmon, which were prepared the same way. "This blind tasting was important to show the consumer the differences in flavour brought about by the environment in which the fish are raised - one manipulated by man versus the superior flavour of the wild salmon, which has been allowed to mature through its natural lifecycle." said Nora Pouillon, owner of Restaurant Nora where the salmon tasting took place. The luncheon at Restaurant Nora coincided with SeaWeb's release of a national poll, which indicates most Americans are unaware of the environmental and health concerns surrounding fish farms. The majority of those surveyed indicated they have no idea where the salmon they eat comes from. Most believe farmed salmon is healthier and better for the environment. Tasters at Restaurant Nora said the wild salmon was "full of flavour." Several added that there was "no comparison" with farmed salmon. About half of the salmon eaten by Americans is farmed. From 1990 to 1991 alone, farmed salmon production increased by 4,600 percent. Conservationists cite a litany of environmental concerns involving farmed salmon, from water pollution to bycatch of marine birds and mammals to disease to algal blooms. According to SeaWeb, 32,000 tons of farmed salmon may produce the same volume of sewage as that generated by a city of 50,000 people. Farm salmon regularly escape from coastal pens and often breed with wild salmon. In Norway, as many as 1.3 million salmon wander from farms each year. Recently, a genetically engineered "supersalmon" has put salmon at the centre of the biotechnology debate. "If you mess up the gene pool, you can make wild salmon populations less able to survive and reproduce in the future," warns Environmental Defense biologist Rebecca Goldberg.

And from Canada, comes news that a flotilla of boats led by five native war canoes protested the presence of fish farms in the Broughton Archipelago, by serving a symbolic eviction notice. Thirty fishing vessels joined the demonstration against what organizers, the Musgamawg Tsawataineuk Tribal Council, called an invasion of their territory by the fish farming industry. Twenty-six fish farms operate in the Broughton Archipelago, a B.C. Marine Provincial Park and wilderness area comprising several small islands, numerous islets and adjacent foreshore at the southern extremity of Queen Charlotte Strait between Vancouver island and mainland British Columbia. Protesters claim Broughton Archipelago has the highest concentration of fish farms in the world. Environmentalists like whale researcher Alexandra Morton, who has lived in the area for 13 years, claim fish farming is responsible for a multitude of sins - toxic algae blooms, diseased Atlantic salmon escaping and breeding in Pacific streams, displacement of killer whales by acoustic harassment devices and plummeting populations of wild salmon. Yvon Gesinghaus of the Musgamawg Tsawataineuk Tribal Council said the council has protested every fish farm licence application for 15 years. "Today's protest is our way of saying we've tried everything else - enough is enough. They can take their frigging fish farms and put them somewhere else."



JANUARY 2000

Infectious Salmon Anaemia Outbreak

We have followed the unfolding story of this outbreak in Scottish salmon farms, since it broke in August 1998. Following its introduction, apparently from Norway by multinational salmon farming companies, all efforts by the Salmon Farming Industry and MAFF to contain, let alone eradicate, the disease have failed. Now comes even more disturbing news, that:

- the disease is still spreading among fish farms, with 6 new sites affected,

- 24 sites are suspected or confirmed as having the disease (10% of all salmon farms) and millions of salmon have been destroyed.
- 20,000 fully grown farmed salmon escaped from a farm in a "high-risk" (infected) zone. It was 10 days before this was publically notified.
- The diseases spread to Scotland's wild salmon has finally been admitted,
- Other results indicate it could be in brown trout in the Rivers Conan and Easaidh; Atlantic salmon parr in the Rivers Conan, Easaidh and the Tweed and Rainbow Trout in freshwater farms in Aberdeenshire and Kinross-shire.

You can find heaps more information about this outbreak on the Federations website at:
<http://www.geocities.com/Yosemite/Rapids/6737/nzffa/scottishisa.htm>



Whirling Disease Update - from Trout Unlimited

Four years ago the term "whirling disease" entered the lexicon of trout fishers throughout the United States. Although it had been in a number of fish hatcheries around the country since at least the 1970s, whirling disease had not troubled most fish managers, who took solace in the absence of proof that the disease had the same deadly effects in the wild that it had demonstrated in a captive fish breeding environment. But then, beginning in 1994, came disturbing reports from Colorado and Montana suggesting that whirling disease was responsible for the decline of such blue-ribbon fisheries as the Madison, the Colorado, the South Platte, and the Gunnison. In short order, whirling disease became a spectre haunting the future of American trout fishing.

Now, several years after whirling disease's emergence as a recognized threat to coldwater fisheries, we offer a follow-up report, whose purpose is to evaluate progress in implementing the 1996 report's research and management recommendations. This report attempts to answer a basic question: What have scientists and fishery managers learned about whirling disease? To start with, it is important to note that no one as yet has been able to explain why whirling disease has had such deadly effects on wild fish in Colorado and in some Montana waters, but has not demonstrated pronounced adverse effects on fish in such places as California and New York. Yet scientists have gained new insight into the environmental factors that seem to influence the intensity of infection. Adding strength to the role of environmental factors, there has been no evidence of genetic differences in *M.cerebralis* (the whirling disease parasite) in samples from a broad geographic range. In addition to the varying influence of environmental factors, researchers have confirmed varying responses to infection among salmonid species. To aid in the disease's detection, thanks to work done at the University of California-Davis, we now have a quick, cost-effective diagnostic test. These are all solid achievements, made possible by public-private sector cooperation in meeting the disease's threat.

In the final analysis, success in controlling whirling disease will depend on the willingness of fishery managers to use the information and tools that science provides. We remain far from finding a "cure"; indeed, we may never find one. That by itself conveys a valuable, cautionary lesson. Whirling disease demonstrates that, in addition to documented genetic risks, the use of artificially propagated fish for supplementation can entail significant pathological risks to wild populations and should be undertaken with far greater care and deliberation than has been the norm. It also tells us that our ability and willingness to protect and restore our streams and rivers may prove the best long-term protection to whirling

disease and other pathogens.

NOVEMBER 1999



Importation of Fresh Canadian Lake Trout

The great news is that Conservation Minister Nick Smith has refused Southfresh permission to import fresh Canadian lake trout prior to the Conservation Amendment (Trout as a recreational species) Bill being considered by Parliament. We commend the Minister on his decision. The other good news is that, as trout can only currently be imported at the discretion of the Minister of Conservation (under the Customs Import Prohibition (Trout) Order 1998), the Department of Conservation, rather than MAF advise the Minister. (The reason that Dr Smith took so long to make a decision on Southfresh's application was that DoC prepared a report on the proposal).

Funnily enough, Southfresh were less than impressed by the decision, indicating that freshwater fishing organisations were elitist greenies determined to destroy world trade and deny the public the right to buy what they wanted to. They widely published their arguments, most notably in The Dominion. They have vowed to reapply and keep fighting, claiming that a number of exhaustive MAF studies have shown that there is absolutely no risk involved. This is very interesting, given that the Ministry of Agriculture and Forestry and Minister Luxton (who seem to think that they have a sole right to decide such matters) are openly advocating the importation of trout into New Zealand, and that the MAF 'studies' that support that decision could at best be described as very suspect 'science'.



Submission on the Importation of Salmonids from Australia

The Australians, having decided that we can send our whirling disease over there, have reciprocated by requesting that they be allowed to send their 'nasties' over here. They want to export their fresh salmon to us with the heads and gills attached. Why would they want to do that, when such bits are inedible and carry many of the disease organisms capable of decimating our fisheries? Presumably, to save their aquaculturalists a couple of bob in processing costs. And the potential costs to NZ? Think about how whirling disease was introduced into the USA. There, almost a decade later, some trout streams are still experiencing losses of wild juvenile rainbow trout of 95% - 98%. The prospect of eliminating it from the environment is nil.

We covered this application in our last newsletter, at which time, the information released by MAF sounded pretty straightforward and feasible. Then we read their proposal (supplementary import risk analysis), and changed our minds. We're not sure what it is, but whatever it is, it isn't science. It is our view, covered in our submission to MAF, that:

- the analysis is full of unscientific supposition and opinion, unsupported by fact or data
- the recommendations and conclusions reached are not supported by the presented scientific facts or data
- the report, while spending considerable detail on wild fisheries, shows an appalling ignorance of them
- a considerable portion of the report is spent on the importation of trout, and leaves no doubt of MAF's advocacy for this.

Of particular concern is the increased potential to import and release Epizootic haematopoietic necrosis virus (EHNV) which, apart from infecting Salmon, can also kill Perch, Trout and native Galaxiids, and has been implicated in the decline of Australian native fish populations. It is an extremely hardy virus which may be present in apparently healthy farmed fish.

Frankly, we simply don't think that MAF are capable or competent of assessing the risk to our wild recreational fisheries of these sort of proposals, and the fact that they form the basis of our international trade agreements gives us grave concerns. We have to question why the Ministry of Agriculture and Forestry is making decisions on fish species which directly affect our recreational fisheries, (why not, more properly, the Ministry of Conservation?), when they obviously have no expertise in the subject. And we would question how the Minister, or anyone else, can expect balanced impartial studies and decisions from a Government Ministry that has an openly declared bias.

Among the greatest of our concerns is that, should such imports be allowed, there is absolutely no suggestion that its results be monitored. In other words, MAF is quite happy to relax our biosecurity standards in the name of free trade, but is unwilling to accept any responsibility for the consequences, let alone monitor them. We find that unacceptable.



Salmon Farms strip South Island trout spawning stream

It is also of grave concern to the Federation that two South Island commercial salmon companies, Farm Fresh Salmon Company and Rebco Salmon Farm, have been found with 200 penned trout and 400kg of processed trout fillets in their possession. As reported in the Press (9/11/99), the brown trout were apparently poached from the Sisters Stream, a tributary of the North Hurunui River (the best trout fishery in the region), and where one of the 'farms' is located. They represent almost the entire spawning run and their removal has devastated the fishery according to Fish and Game, whose officers raided the 'farms'. The fish had been described by one of the companies as "Pacific Salmon".

This incident serves to confirm and highlight a number of the concerns that the Federation has been stating for some time now about commercial fish farms. Firstly, there was a complete disdain for the natural fisheries and surrounding environment. Secondly, when it was a question of money or ethics, it ain't always the ethics that wins. Thirdly, some commercial operators are prepared to break the law to make a buck. Obviously, these commercial operators were able to carry out this crime with impunity. Now we were under the impression that MAF had a monitoring programme for commercial salmon farms. It would appear that either: (a) We were wrong, (b) It isn't operating, or (c) MAF can't tell the difference between a farmed salmon and a wild brown trout!

We can only imagine what would have happened if there had been a disease outbreak on such a salmon farm. Either it would have been ignored, covered up, or remained undetected. Either way, it is probable that dead fish would have been dumped to infect our wild trout populations. But then, MAF tell us that this would be "unlikely" and that the risk is "negligible".

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New Zealand Federation of Freshwater Anglers, (Inc.) Dated: February 2001