

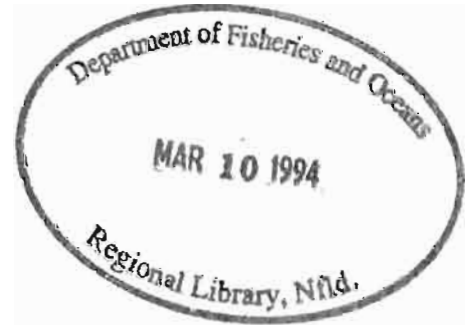
# A HISTORY OF PACIFIC FISHERIES POLICY

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*Douglas M. Swenerton*



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"Those who do not remember the past are condemned to repeat it."

*George Santayana*

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## ACKNOWLEDGEMENTS

*A History of Pacific Fisheries Policy* was completed for the Program Planning and Economics Branch of the Department of Fisheries and Oceans (Pacific Region). The project was originated and directed by Alan Greer, Senior Economist. I would like to give particular thanks to Michelle James and Steven Wright for their valuable edits.

I would also like to thank my editors from academia and government. The following people were generous both with their time and their uncanny knack for uncovering my mistakes: Gordon Munro from the Department of Economics at the University of British Columbia; Parzival Copes, Terry Heaps, and Don Devoretz from the Department of Economics at Simon Fraser University; Peter Leitz and Sandy Fraser from the Ministry of Agriculture, Fisheries and Food; and Joseph Gough from the Department of Fisheries (Scotia-Fundy Region).

Lastly, I am deeply indebted to the many writers and researchers whose work formed the basis for this paper. They have made my job a simple one of amalgamating the existing research on Pacific fisheries policy. As such, this paper is more a compilation of their ideas than a presentation of my own work. An extensive bibliography follows this paper, and I encourage the reader to refer to it for a list of more in-depth analyses of fisheries policy issues.

Douglas M. Swenerton  
May 20, 1993





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# INTRODUCTION



"All the historical books which contain no lies are extremely tedious."

*Anatole France*

## WHY A HISTORY OF POLICY?

Should anyone really care about the history of Pacific fisheries policy? The answer is a qualified yes. Managerial policy in any context is heavily influenced by events that have gone before, perhaps more so in the public service. The intransigency of regulatory change implies that the public service does things in a certain way because, after all, it's the way things have *always* been done. Likewise, industry and special interest groups come to expect certain things of government because of its assumed historical role.

One of the biggest problems administrators have to overcome is something that could be labelled 'regulatory myopia,' which may be described as the tendency to follow a policy that is politically saleable, easy to introduce, or is simply a short-term expedient reaction to get the problem off one's desk. It ignores the long-term context of one's actions. History is a valuable tool for placing these decisions in context, viewing things that have gone before, assessing why they happened, and determining how the present state of affairs came to be. Just as grown humans are products of their childhood as well as their current environment, so is present fisheries management the product of past policies.

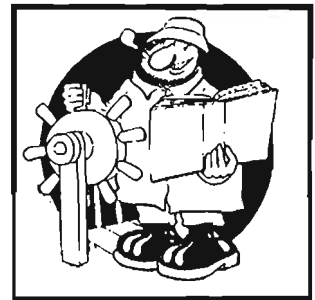
The reader may also find this paper to be a helpful introduction to the fundamental issues in fisheries management. An attempt has been made to trace the emergence of the major themes in fisheries policy, from the recognition of conservation issues to the economic consequences of overfishing.

An attempt has also been made to include anecdotal evidence in the place of statistical facts. If nothing else, this paper should germinate a few seeds of thought and generate a desire to look more deeply into the aspects of management that are of interest, regardless of one's area of expertise.

## WHO SHOULD READ THIS DOCUMENT?

This document is intended for a broad range of readers-- everyone from new staff at the Department of Fisheries and Oceans to senior managers and members of the public. Experience preferred, but not essential: it is assumed that the reader has at least a passing knowledge of fishing terminology, but this document is by no means a technical one and the direction of its train of thought is relatively straight forward. The information has been classified into historical segments, so that it need not be read in one sitting.

The paper is written with tongue firmly planted in cheek, but its tone should not be taken as an attempt to belittle the difficulties of fisheries management. The constraints on fisheries management are considerable for mere mortals; thus, when this document criticizes fisheries policy, it does not impute to individual members of the Department of Fisheries and Oceans any evil intent. Rather, it presents historical events in an effort to understand how the constraints have led to managerial responses.



It should also be noted that this paper is a synthesis rather than a thesis. As such, it does not put forth any new concepts as such, but attempts to summarize existing thought and reveal both sides of controversial issues.



## WHAT IS POLICY?

It has been said that, in one way or another, every employee of the Department of Fisheries and Oceans works on policy. This statement underlines the confusion about what exactly constitutes policy. Part of the confusion arises because it is difficult to distinguish *policy* from *regulation*: policy is focussed at a 'macro' or large-scale level, whereas regulation focusses on the 'micro' decisions required to implement policy. If policy is the direction in which a car is headed, regulation is the amalgamation of nuts and bolts that get it there. It is worth noting that, strictly speaking, policy can be changed at the whim of a Minister of Fisheries or senior administrator. In the words of Richard Sheridan, "The policy of a nation is often decided over a cup of coffee." Regulatory change, on the other hand, is generally more exacting and time-consuming.

Given the somewhat daunting task of condensing years of fisheries matters into a few pages, the scope of this paper necessarily is confined to large-scale decisions and issues. A review of all fisheries policy on the Pacific coast would be so fraught with detail that both reader and author would be hopelessly confused. To this extent, this paper reflects the biases and interests of fisheries managers throughout history -- while it would be ideal to include a synopsis of regulation of every species, interest group and aspect of fisheries management, space constraints and the need for a cohesive narrative necessitate a more limited scope. It is hoped that the resulting generalizations, though over-simplified and open to question, may be useful and thought-provoking.

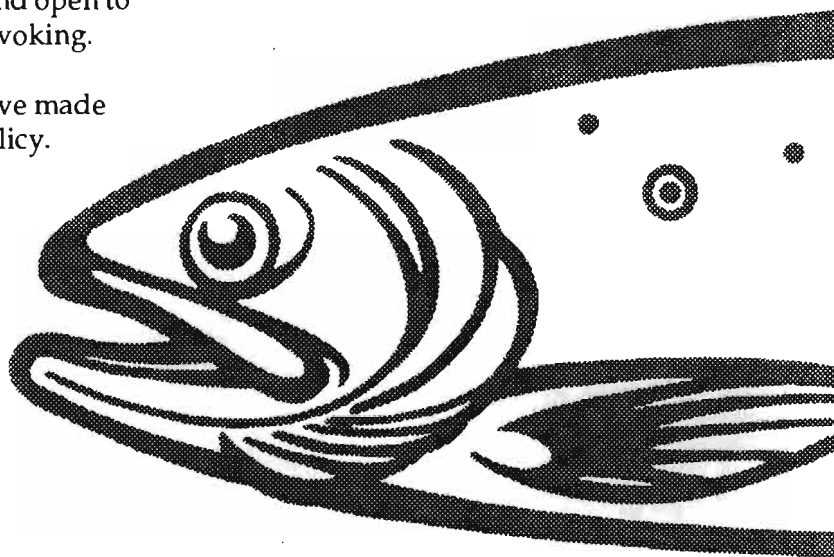
It is only recently that managers have made a concerted effort to document fisheries policy. While such statements can be taken as an *expression* of policy, it is sometimes necessary to infer *actual* policy from the Department's regulatory history. Likewise, policy must often be imputed from managers' actions and verbal statements rather than explicitly-documented policies.

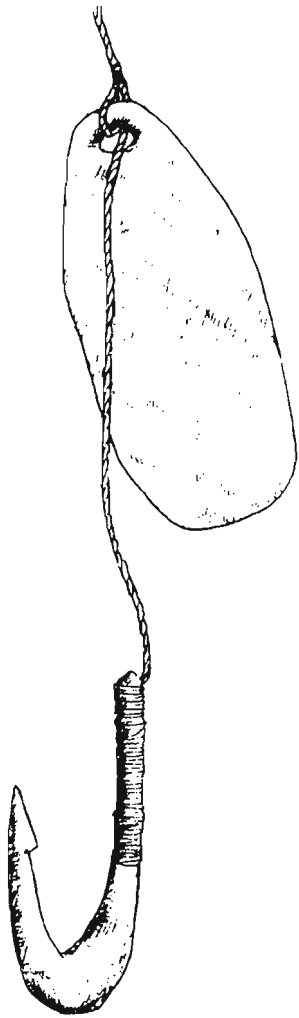
## A BRIEF HISTORY OF FISH

The pre-contact Aboriginal era is not dealt with in this document, but we should not discount the significance of a culture that, at the very least, passed on a valuable endowment of fisheries resources. Since the arrival of European settlers on the West Coast, there have been three distinct phases in the evolution of Pacific fisheries policy.

The first, lasting until about 1922, was an early regulatory period in which the government attempted to define property rights and assisted in establishing the dominance of a few large processing companies. Conservation was the primary concern of regulators, and input controls on permissible fishing gear, areas and times were used to ensure the sustainability of fish stocks.

The second phase, originating prior to the Second World War, saw the government become actively involved in the modernization of the industry through capital assistance programs to processing firms and fish harvesters. Conservation was still a policy imperative, and this period saw the rise of a scientific approach to fisheries management. Maximum Sustainable Yield as a management tool came and went, and resource economists directed attention to the degree of economic waste in the industry.





The most recent phase, commencing in 1969, has seen a radical redefinition of fisheries policy. The introduction of limited entry heralded the transition of economics from academic theory to government policy, as the industry grappled with its fundamental problem of 'too many boats chasing too few fish.' As time has gone by, limited entry has also failed to reverse the ever-expanding fishing effort, and the search for better methods continues. Individual quotas and area licensing are the subject of considerable discussion at this time, and many suspect that fisheries management may be entering a fourth phase, one that will increasingly define individual or collective property rights.

### **THE COMPLEXITY OF POLICY FORMULATION**

The brief history we have of regulated fisheries shows that there are two behavioural tendencies at work. On one hand, each fish harvester is continually trying to gain an edge on his or her counterparts, either with short-term actions or long-term capital investments. On the other hand, the Department of Fisheries and Oceans aims to curtail ag-

gregate fishing capacity by imposing restrictions on seasons, areas and gear types. Government stewardship does not necessarily pursue the same goals as market-driven mechanisms; as a result, the government's attempts to reconcile its own conflicting aims have led to ever-increasing regulatory involvement, instead of reliance on a few arm's-length controls over critical elements of the fishing industry.

Nonetheless, it is relatively simple to account for the government's behaviour. The Department has to pay attention to a number of constraints that restrict its initiatives but do not dictate how it should respond to certain situations. It has to conserve the resource. It has to protect property rights, whatever those are. It has to satisfy an electorate while ensuring some degree of economic progress. It has to recognize popular values and deal with the demands of various interest groups, all the while acting, and *appearing* to act, in the public interest. Information, too, is a precious commodity, and the outcomes of the government's actions cannot always be predicted with accuracy. Elected governments are typi-

cally as short-lived as one sockeye cycle (four years), and they preside over prototypical bureaucracies in which individual workers have their own, potentially conflicting interests.

At the same time, government policy formulation must deal with a variety of claims on the resource. Interested parties include not only aboriginal groups, but sport and commercial fish harvesters with different gear types, as well as stakeholders claiming fish stocks and their habitat for regional development, environmental preservation, and occupations of last resort. Add to these stakeholders the secondary layer of provincial government, and those who benefit from habitat-threatening activities by mining, logging, farming, manufacturing and land development, and one has "a political and administrative stew, rich in ingredients but distinctly unsavoury."<sup>1</sup> The result can be bedlam, and sometimes passive fine-tuning is the most expedient way to avoid administrative and political difficulties.

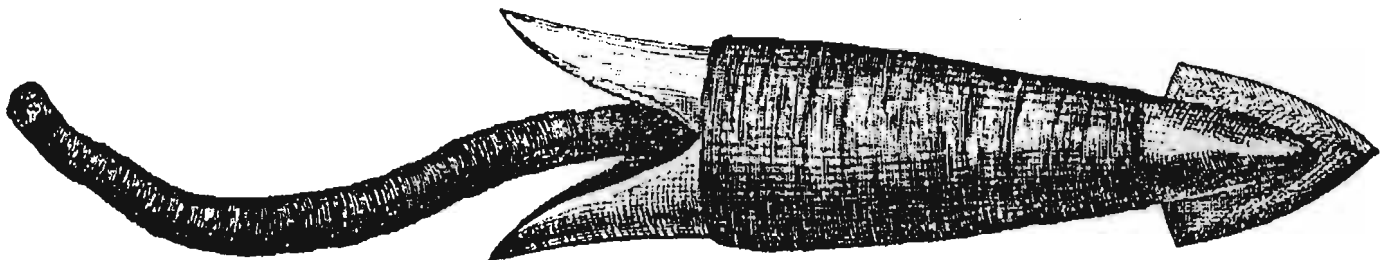
An aspect of fisheries management that is at once admirable and unfortunate is that well-motivated politicians and public servants yield to the human instinct to help. Ironically, when striving to mitigate the negative effects of change, government policy-makers can weaken the implementation of policy.

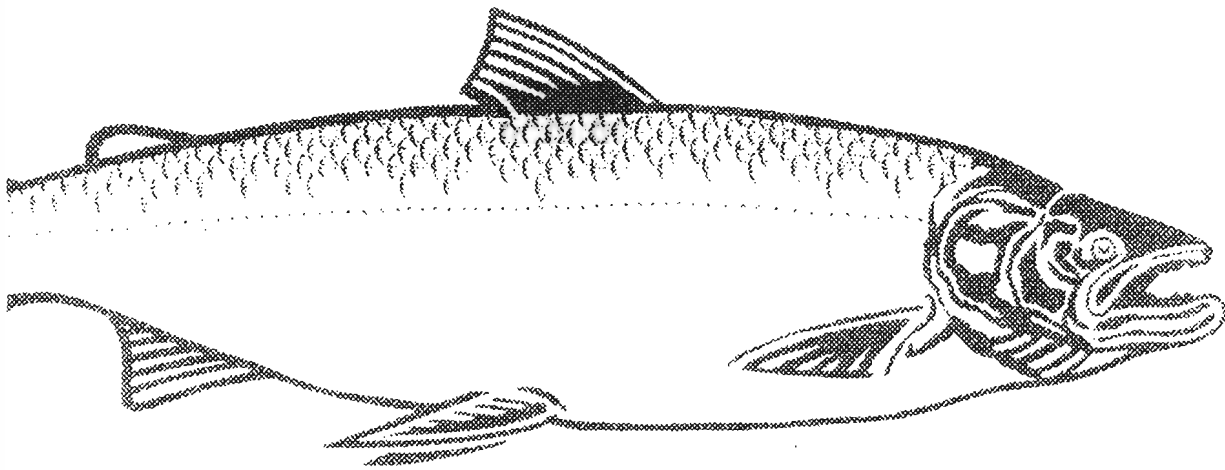
Consequently, fisheries management has been sort of like a political seismograph. Given enough of

a crisis in some corner of the industry, the Department or a Royal Commission would react. Processing firms and associations, government experts and administrators, biologists, unions, and professional fish harvesters' associations have all pressured for their own policy agendas. Frequently, the Department addressed a problem by creating new priorities and then reassessing them. For example, boat replacement procedures, fish escapement targets and licensing policies were routinely established, undermined and reset. These interventions have had adverse political and economic consequences, bolstering the view among some stakeholders that the government was uncaring and incompetent, and certainly not to be taken at its word.

## **CRISES: PRESSURE FOR CHANGE**

Radical change can be costly and risky. While the promise of greater efficiency is an incentive to undertake this kind of change, history suggests that some domestic crisis or an exogenous event is often required to galvanize authorities into active consideration of new policies. Interestingly, major crises about conservation of stocks -- in 1893, 1900, 1928, 1968 and 1982 -- have been accompanied by massive corporate restructuring, new measures to control access to the resource, or a Royal Commission. For all the hardship they cause, crises are probably the biggest contributing factors to new policy formulation.





Naturally, the presence of a crisis is not absolutely necessary for management reform. Consideration must also be given to the role of public pressure (from various stakeholders), political pressure (from Fisheries Ministers and their senior management team), and internal pressure (from public servants).

### **PUBLIC PRESSURE FOR CHANGE**

There is no question that the Department's 'clients' include, on some level, the people of Canada. Public pressure has become increasingly complex over the years. It used to be that a fair degree of handshaking and arm-twisting by the canners was sufficient to effect regulatory change. The various fleet management regimes at the turn of the century are indicative of this phenomenon. Nowadays, with many more stakeholders maintaining an interest in the continuation of the fisheries, it is more difficult for the Department to acquiesce to one individual group. As probably ought to be the case in a democracy, those in positions of power must sort out the conflicting views of numerous interest groups or seek out some middle ground which may not be the optimal arrangement. Public pressure only becomes the driving force for change when some degree of consensus is present, thereby making the implementation of new policies politically expedient.

### **POLITICAL PRESSURE FOR CHANGE**

Because of the difficulty in obtaining this degree of consensus, political pressure by a strong-willed senior manager or Minister is often viewed as an expedient method of enacting policy change. W.H. Found, J.P. Babcock, and Jack Davis exemplify the manager whose determination to implement a given policy is a driving force behind its introduction. While Pierre De Bane's reforms of 1984 were never enacted, his resolve to alter policy in the face of substantial industry opposition could place him in this class as well.

### **INTERNAL PRESSURE FOR CHANGE**

Behind these forces for change lie the public servants, who hold the tripartite responsibility of implementing government policies, regulating existing policies, and proposing new methods of management. While internal pressure for change has been a recurring phenomenon for some time (particularly since the arrival of biology and economics within the Department), a typical trend is for internal policy initiatives to sit on the back burner until one or more of the other conditions for change arises. That is, in the presence of a crisis, a strong-willed Minister or significant industry demand for change, the ideas of public servants are more readily accepted.

James Crutchfield is somewhat pessimistic about this complex framework for policy development:

"Given...all the splendid research that has gone into expanding our knowledge of the sea, its living resources, and the technical problems of harvesting them, the results are remarkably disappointing. The number of programs that have actually succeeded in checking depletion of ocean fish stocks can be counted on the fingers of one hand. And those that have protected the stocks while providing some real improvement in earnings, stability of employment, and ability to withstand the usual economic jolts to which fisheries are subject can be counted by someone with no hands at all."<sup>2</sup>

In following Crutchfield's line of thinking, it can be surmised that the wealth of the industry has been redistributed, rightly or wrongly, to serve policies that are tangential to the fishery itself: regional development; the maintenance of isolated communities; equity in the distribution of income; and the provision of 'free' services, to name a few.

In addressing these conflicting desires, it seems logical to distinguish between wistful dreams and urgent priorities. It is admirable to want a perfectly-managed fishery with more fish for everyone, but can this dream realistically be expressed as *policy*? Until a state of near-perfection is reached, it may make more sense to have some sort of interim arrangement to establish management priorities. It is this frame-

work that has been missing throughout most of the history of Pacific fisheries policy, partly because it is politically very difficult to appear to be granting preferential rights to one group or sector of the industry. Senior managers have become acutely aware in recent years of the need for long-term plans, and the results of their efforts are eagerly anticipated.

Part of the continuing frustration in fisheries management arises because the industry's problems are not new ones. In fact, complaints about the lack of policy and consultation, the persistence of overcapitalization, and misallocation among user groups are not revolutionary. Even so, after all is said and done, Canada has kept its fish, its fishing communities, and a dedicated fisheries Department. For all its inconsistencies, Pacific fisheries policy must have done something right. Like all slow-moving, meandering rivers, it will continue towards its destination.

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## ENDNOTES

<sup>1</sup> Philip A. Neher, Ragnar Arnason and Nina Mollett (eds.), *Rights Based Fishing* (Boston: Kluwer, 1989) 8.

<sup>2</sup> David Wesley, "Applied Fisheries Management Plans: Individual Transferable Quotas and Input Controls." In *Rights Based Fishing*, Neher, Arnason and Mollett (eds.) (Boston: Kluwer, 1989) 153.



# CHAPTER ONE: THE TREND SETTERS

*Pre-Confederation - 1922*



*"To attempt change without a policy is to plow the sea."*

*Native Brotherhood of British Columbia*

## EARLY NATIVE MANAGEMENT

Contrary to popular belief, Pacific fisheries haven't always been in a state of crisis. Prior to the arrival of the Europeans, B.C.'s aboriginal peoples employed a system of management that sustained the fish stocks for centuries.

Although Aboriginal social organization varied from group to group, fishing rights were generally granted to the kin-based group or extended family. On the coast, the chiefs exercised complex property rights according to standards established over generations. The chief had first rights of access and regulated other members' access to the site, in theory ensuring equity of access as well as conservation. In the interior, where fisheries were usually river-based and the runs were almost always intercepted by many groups, fishing rights were more community-oriented. Weirs and traps were constructed by the whole community, and the houses standing at weir sites indirectly regulated access. In this sense, Natives perceived the resource not as 'common property,' but as 'communal property.' Nevertheless, despite the prevalence of access rights in Native management, most Natives did not believe that land or fish could be 'owned' in the modern sense of the word.

## EARLY CONCEPTIONS OF FISHING RIGHTS

Historical conceptions of fishing rights have heavily influenced fisheries policy around the world. Until recently, the most dominant of these traditions has been the unrestricted right to fish. Ready access has been taken for granted for so long that most of us are unaware of where it originated. In fact, the Magna Carta has often been cited as the first European declaration of fishing rights.

Among more portentous things, the Magna Carta committed the monarch to cease granting exclusive property rights in tidal waters. Until this time, the King had granted fishing rights over in-shore tidal waters and estuaries, but the proliferation of weirs in these areas interfered with the barons' growing interest in navigation. Not wanting to offend his barons, King John included 'the public right of fishery' in the Magna Carta as an afterthought. In retrospect, this afterthought was to have a profound effect upon future fisheries management regimes. Henceforth, countries that adopted English law were to treat tidal fisheries as public property.

The ill-fated King John was not the only policy-maker of old to inadvertently shape the direction of

The first European to arrive overland on the Pacific coast of Canada was Alexander Mackenzie, whose threatening stance on Native fishing was an ominous indication of things to come. Mackenzie wrote in his diary: *"I gravely added that the salmon, which was not only their favorite food but absolutely essential to their existence, came from the sea which belonged to us white men; and that as, at the entrance to the river, we could prevent those fish from coming up it, we possessed the power to starve them and their children."*





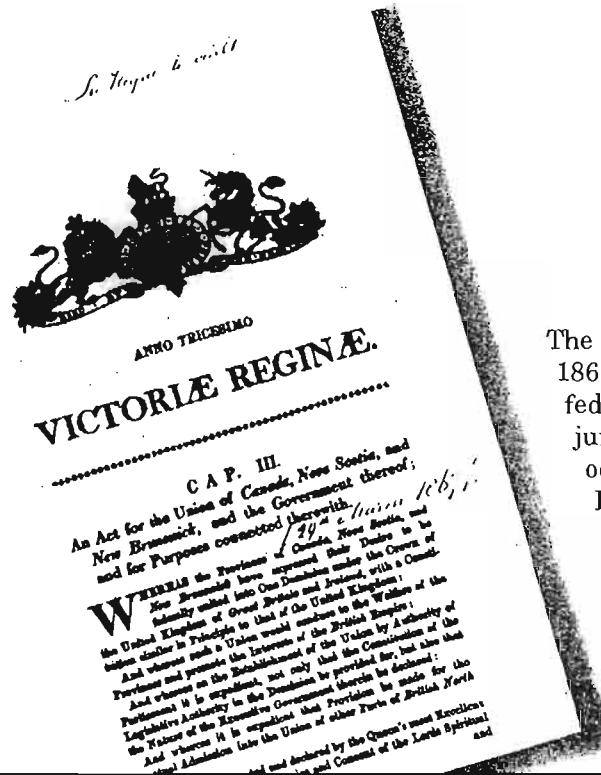
Canada's Pacific fisheries: the Dutch jurist Hugo Grotius also took a hand. In 1609, Grotius established the doctrine of *mare liberum*, or 'freedom of the seas,' arguing that private property could not exist on the world's oceans as it would be both inexhaustible and unenforceable. The maritime powers of Britain and Holland were pleased with this principle, as it annulled the Pope's bisection of the world's oceans between Portugal and Holland. Freedom of the seas quickly became a generally-accepted principle of international law. Its relevance for the twentieth century, however, was later called into question: a recent observer has noted that, "however appropriate this doctrine might have been for over three centuries, it is now inimical to rational exploitation of wild fish stocks."<sup>1</sup>

The end results of John and Hugo's proclamations were that citizens of European descent had a right to fish in their own country's territorial waters, and anyone could fish on the high seas. These basic principles have been underlying themes in fisheries policy until only recently. Even when B.C. fisheries development began again in the late 19th century, it was taken for granted that the right to fish could not be challenged by the government. Legislation and regulation focused instead on preventing fishery depletion and maintaining access to the high seas.

## THE GOVERNMENT ENTERS THE FISHERY

"Territory: 7,000 miles of shoreline; patrol boats: none yet, suggest an open launch and some rowboats; officers and guardians, as few as possible; laws: framed in Ottawa for Atlantic fisheries; conditions: unknown. Now, sir, as duly appointed agent of the Department of Fisheries and Marine, we charge you with enforcing the laws and regulations with respect to the fisheries on our Pacific shores."<sup>2</sup>

These were the somewhat daunting conditions under which James Cooper took office when he was appointed B.C.'s first Inspector of Fisheries. The federal government had been content to ignore the emerging B.C. fishery until canner John Sullivan Deas, in 1874, applied for a gillnetting monopoly on the Fraser River. Deas' correspondence alerted the Department to its new responsibilities on the Pacific coast. Cooper didn't have a whole lot to do until 1876, when the Fisheries Act was extended to B.C. for the first time.



The British North America Act of 1867 laid out the boundaries of federal and provincial jurisdiction over fisheries and oceans...or did it? While the BNA Act granted control over sea coast and inland fisheries to the federal parliament, the proprietary rights of the provinces were to become a basic obstacle to a clear division of authority.

## EARLY ENHANCEMENT INITIATIVES

Years later, Prime Minister Trudeau was asked why the federal government retained control of the fisheries. "Because fish swim" was his eloquent reply.<sup>3</sup> In reality, the 1867 British North America Act and the Fisheries Act had set out a division of constitutional responsibilities for fisheries management that was more tangled and subtle. While the apparent intent of the BNA Act was to create a single jurisdiction over fisheries, it eventually failed to do so. The BNA Act granted the federal parliament control over 'sea coast and inland fisheries,' which seemed simple enough. In reality, the proprietary rights of the provinces were a basic obstacle to a clear division of authority. In non-tidal waters, the provincial government's jurisdiction over property and civil rights granted them indirect control of fishing activities. Also, under common law, fish were treated as a product of the land, which created a fundamental conflict in jurisdiction. An attempt to resolve these conflicts was made by a 1898 Imperial Privy Council judgment on fisheries, which allotted a larger role in fisheries management to the province. In practice, the Department of Fisheries' policy has been to delegate almost complete responsibility for non-tidal, inland fisheries and the processing industry to the B.C. government.

The Fisheries Act itself was one of the most sweeping and powerful pieces of legislation drafted by the new government. The Act was intentionally vague, permitting flexibility in the face of new developments. One of the Act's potentially comprehensive powers, for instance, prohibited anyone from 'altering or polluting' fish habitat. Clauses such as these granted the Minister of Fisheries substantial powers under the Act; swift changes in policy were both theoretically possible and officially sanctioned.

Swift policy change by the Minister of Fisheries was the theory, anyway. It is a truism in fisheries management that policy changes are not always swift, and the three or four years after the Fisheries Act was extended to B.C. were no exception. With a powerful piece of legislation in hand, the first regulators of the Pacific fishery vigorously set about doing nothing. Their first regulations, introduced by an Order-in-Council in 1878, were ineffectual: no offal was to be dumped in the river, and canners were to stop fishing each weekend for thirty-six hours to ensure adequate escapement. These regulations were promptly ignored. After all, who was going to enforce them? As it turned out, government policy was sensitive to canners' needs. In order to ease the strain on the pack in 1881, the thirty-six hour ban was rescinded.



J.P. Babcock

Fisheries management soon broke out of its rut of inactivity, however. All of the early regulations were indicative of the government's basic policy for years to come: conservation was to be ensured by specifying permissible gears, areas and times for fishing. More effective regulations banned the use of fishwheels, pound nets and traps on the Fraser, and set a weekly close time. New rules in 1889 set the mesh size for salmon drift-nets and prohibited the use of seines (this regulation was revoked in 1903).

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*"Because fish swim."*

**Prime Minister Pierre Elliot Trudeau, when asked why the federal government retained control of the fisheries.**

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- Fisheries Minister Louis Prefontaine even proposed a one-year closure of the Fraser River in an effort to resolve a conflict with the U.S. over their continued use of fish traps.

Federal policy at the turn of the century was heavily influenced by an emerging understanding of biological sciences, with a particular emphasis on hatchery development. Fearful of a decline in stocks but determined to maintain the size of the harvest, the canners lobbied the government to step up artificial production, stating that "practically nothing has been done to clear the natural spawning beds, clearing log jams and the construction of fish ladders where necessary."<sup>4</sup>

Hatcheries were also viewed as a panacea for the problems of the fishery by John Pease Babcock, B.C.'s Deputy Commissioner of Fisheries. Babcock believed that hatcheries could make the weak years of the Fraser sockeye cycle just as strong as the big years. Consequently, he constructed eight hatcheries by 1910. Unfortunately, most of the hatcheries were unsuccessful and short-lived. For one thing, Babcock mistakenly believed that all sockeye could be transplanted anywhere, since he thought they were a single race. Despite such shortcomings, Babcock was instrumental in introducing a systematic biological approach to fisheries management. He initiated a process whereby the numbers of salmon escaping up-river were recorded, eventually leading to harvest management that focussed on achieving sufficient levels of 'escapement.'

Increasingly, the Department of Fisheries saw itself as more than a conservation agency. Its influence had begun to extend into marketing as well. A 1904 regulation prohibited exporting fresh salmon caught in trap nets, and in 1907 the Department required that all sockeye and pink salmon had to be processed in Canada before it was exported. This protectionist policy was to last for more than eighty years.

Fisheries research in Canada originated in 1903, when Dr. E.E. Prince, then the federal Commissioner of Fisheries, concluded that Canada should be a world leader in marine biological research. His efforts eventually led to the 1908 establishment of the Pacific Biological Station in Nanaimo.



An unfortunate figure in early fisheries management, Thomas Mowat was the federal Fisheries Inspector from 1886-1891. Mowat is noted for his attempts to diversify the Pacific fisheries by leading 'fish prospecting expeditions' along the coast and offshore. He also attempted in vain to transplant lobster at the appropriately-named Cape Disappointment. Ironically, the Department of Fisheries was to encounter similar results at Useless Inlet eighty years later.

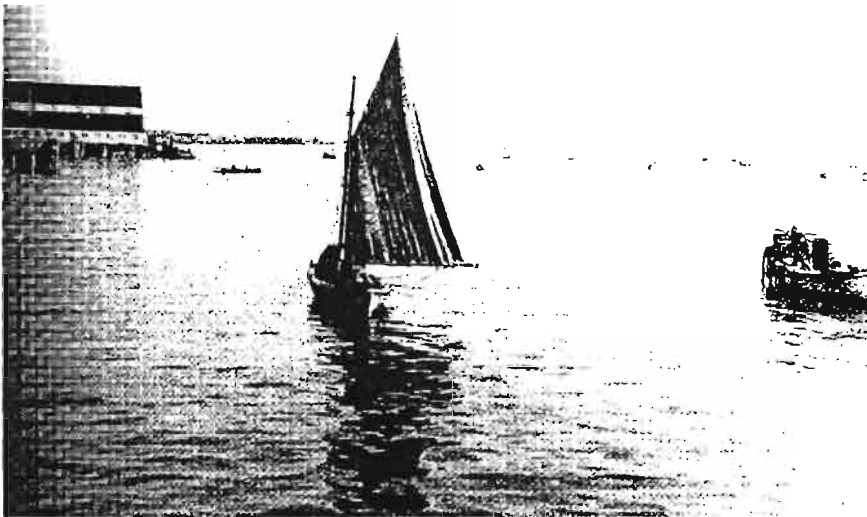
## STOP, OR I'LL SAY STOP AGAIN: THE LOW PRIORITY OF ENFORCEMENT

Eager as the fledgling Department of Fisheries and Marine was to effect its conservation policy on the Pacific coast, little attention was given to the corresponding policy imperative of enforcement. A comedy of errors that occurred in 1894 is a fitting testimony to the laughable state of enforcement at the turn of the century.

At that time, the canners' disposal procedures for fish offal were, well, awful. Public protest against such dumping was mounting in 1894, so fisheries inspector John McNab hired W.M. Galbraith to investigate enforcement of the existing regulations. Galbraith was highly critical of enforcement policy, stating that, in two months of investigation, he had "never seen a fishing boat properly marked on the Fraser River." The Department's enforcement of a ban on dumping of offal, too, was suspect: "none of the fishery regulations had ever been enforced." Galbraith estimated that five fully-staffed steamers would be needed to adequately cover the river, but only one fisheries guardian was employed at the time. Of particular note is the testimony of fisheries guardian Charles F. Green, who informed Galbraith that "it was never intended that the regulations should be enforced as I enforced them, that no man could afford to do it, for if he did he would make an enemy of every man on the river and be driven out of the country."

McNab, it seems, was not as zealous about enforcement as Galbraith. He instructed Galbraith to ignore illegally-marked boats, and when Galbraith proved too eager, he was fired. Incidents such as this one typify the legacy of enforcement in the early days of the commercial fishery.

*· adapted from Geoff Meggs, Salmon: The Decline of the British Columbia Fishery*



## LIMITED ENTRY, TAKE 1

Prince remains a pivotal figure in fisheries management for other reasons. The government's regulatory policy until the 1960s -- limits on everything but the numbers of fish and people fishing -- was in large part his creation. Prince also "recognized the importance of limiting licences and adjusting the number of people to the abundance of fish."<sup>5</sup> The good news for Prince is that he wasn't the only one to fail in limiting entry. Licence limitation did not become a practical concept, at least in policy-making circles, until 1969.

Even prior to Prince's time, the Department of Fisheries had envisioned the potentially disastrous consequences of overfishing. In 1887, fisheries guardian Charles F. Green noted that about 250 boats were fishing in Canoe Pass on the Fraser. He suggested issuing a limited number of licences and allowing no cannery more than forty boats. Said fellow guardian John Bute, "it is about time that some limit...be placed on the number of nets allowed on this river."<sup>6</sup>

Two years later, Minister Charles Tupper heeded the guardians' words. The number of licences on the Fraser was limited to 500, of which 350 went to canneries in proportion to their capacity. The only way the canneries could obtain more licences, then, was by obtaining more capacity. As fishing became more profitable, they did just that. The canners were also upset by the instatement of a 48-hour closure on the weekends, as it "conduces to laziness, gambling and drunkenness, diminishes the profits of all parties, etc., etc."<sup>7</sup> In addition, it was politically difficult to deny access to what was considered a public resource. The vessel limitation scheme, therefore, broke down and was abandoned in 1892. Some historians view this first attempt at licence limitation as an example of the government's unstated policy of assisting cannery development: "While conservation was the justification for these restrictions, they also bolstered the...position of established canneries."<sup>8</sup>

## ROYAL COMMISSION, ANYONE?

Royal commissions are a natural response in times of crisis. The first-ever commission of inquiry into Pacific fisheries policy was headed by Samuel Wilmot, the Superintendent-General of Fish Culture, "a man who had seen his personal obsession with the artificial rearing of fish turn into a building block of government policy."<sup>9</sup> Wilmot mistakenly believed that Pacific salmon were of a single species, and that they could spawn several times.

Wilmot's commission was an unmitigated failure. He spent only two days on the Fraser, and his criticisms of cannery waste were ill-received. Wilmot's recommendations for a 500 boat limit, an annual closed time and a limit on the number of canneries were also unpopular. They outlined the problems of the industry without addressing the fundamental economic problem of who should control the sale of raw fish.

## ANYONE FOR SECONDS?

In response to Wilmot's failure, the federal government employed a tactic that was to become routine over the years: it launched another Royal Commission. In another routine move, they placed Wilmot in charge. However, the atmosphere of the inquiry was less than cordial and Wilmot once again failed to make a big impression. The Department passed new licensing regulations in 1894, limiting the number of licences held by each enterprise (twenty for canners, one for each bona fide fisherman), but the overall limit on the number of boats mysteriously vanished. Either the government was not fully committed to its policy of limiting effort, or it did not realize the implications of its regulations (that is, the number of canneries and boats could continue to escalate).

## ANYONE FOR THIRDS?

The new Fisheries Minister took refuge in yet another Royal Commission, which lasted from 1905 to 1907. This commission was headed by Dr. E.E. Prince, whose advancement of science as a component of government policy has already been noted. The Prince Commission quickly became a rather large sounding board for an industry that was entering adolescence. Everything from stream obstructions to the problems of the Native fishery were discussed during the hearings, but the majority of the attention was focused on the Americans' use of fish traps and Fisheries Minister Louis Prefontaine's proposed closure of the Fraser River.

Prince's majority report achieved what some had said would be an impossible task, in that it did not stir up too much controversy. It appealed to the interests of both canners and fish harvesters to some degree, recommending sharp restrictions in gillnetting and a 36-hour closure of the entire Fraser system. It was the Commission's minority report, prepared by Babcock, that was the more contentious: he recommended a four-year closure of the Fraser, and suggested that "overfishing is the sole cause of the decline and elimination of river fishing the only available solution."<sup>10</sup>

## A NEW SUPERINTENDENT TAKES CHARGE

If, as Thomas Carlyle said, "the history of the world is but the history of great men," then W.A. Found could be considered one such person. Found shaped fisheries policy from Prince's retirement in 1908 until his own in 1938, standing "at the peak of the national fisheries bureaucracy with a decisive role in every significant policy decision."<sup>11</sup> It has been suggested that Found's policy was motivated by a desire to move the fisheries to an entirely open system, where in theory the opportunity to fish would be available to all without discrimination.

It was only a theory. In order to open the fishery to some, others had to be excluded. The government's policy from the Hell's Gate slide until the Great Depression was to support the processing sector through intensive harvesting of the remaining salmon stocks. The move to an unlimited seine fishery, among other things, curbed the involvement of Natives and Japanese in Pacific fishing, as they owned a relatively greater proportion of the gillnet and troll fleets.

## LIMITED ENTRY, TAKE 2

Found attempted the most thorough limiting of effort to date on the North Coast, where nearly all the fleet was owned by canneries. Interestingly, limitation came not from government-imposed policies, but from an industry-government consensus. In 1908, the government announced that "no additional canneries should be permitted to be constructed in the North, and that a limit be placed upon the number of boats which the existing canneries should be permitted to operate."<sup>12</sup> The canneries voluntarily set a limit on their number of boats and allotted boats amongst themselves.

When dissent among the participants began to undermine this agreement, the provincial government stepped in under Babcock, who specified the number of boats eligible to fish and the allocation of boats to canneries. Again, high profits for the canneries led to the demise of the regulatory system. As the value of salmon escalated during the First World War, the government bowed to pressures to issue more cannery licenses. When returning soldiers needed jobs at war's end, licence restrictions were lifted altogether in 1917.

## DEALING WITH THE HELL'S GATE SLIDE

"The river was black with fish...the air was foul with the stench arising from the dead fish that covered the exposed parts of the river...the living were not spawning and the dead were unspawned."<sup>13</sup>

One of the worst environmental disasters in Pacific fisheries history occurred in 1913, when railway construction on the Fraser River dislodged great quantities of rock and mud that completely blocked the river to returning salmon. Of great import was the absence of a habitat management policy with which to address potential environmental catastrophes. During the immediate aftermath of the slide, the Department of Fisheries denied the existence of a problem while its policy-making officials worked at cross-purposes. When Ottawa ordered a closure of the Fraser in October, federal Chief Fisheries Inspector F.H. Cunningham wired back that "a closure would prove disastrous to cold storages and fishermen...I recommend the fishery be allowed to continue."<sup>14</sup> Not surprisingly, Cunningham ignored Ottawa's directive.



The Department of Fisheries also proved unable to enforce the sweeping habitat-protection measures of the Fisheries Act. When Ottawa issued a warning to the Canadian Pacific Railway in 1914, the CPR simply replied, "perhaps this letter has been misaddressed and was intended for others."<sup>15</sup> Railway construction continued, unfettered by the desires of fisheries officials.

Even when the tremendous losses on the Fraser became obvious, critics felt that the Department did not have a coherent policy to deal with the crisis. Some fisheries officers under Babcock toiled for years clearing debris, and others found it easier to restore stock abundance by curtailing aboriginal fishing on the river. Faced with substantially lower runs after the slide, the Department once again turned to a Royal Commission for help.

## THE 1917 EVANS COMMISSION

One of the more comprehensive Royal Commissions ever undertaken was chaired by W. Sanford Evans, an economist whose rather broad mandate was "to explore the problems of the salmon industry."<sup>16</sup> The report was remarkably prescient for its time, exhibiting a clear understanding of the economic implications of unchecked fleet growth. In an oft-quoted passage, Evans writes:

"It is clear public duty not merely to conserve the supply of salmon in its present proportion, but to increase it until each year it reaches its economic maximum and it appears to us equally clear that all condi-

tions surrounding the industry should as far as possible be stabilized and the excessive use of capital and labour obviated and prevented...the solution of this problem would not seem to be found in encouraging or permitting the employment of more capital or more labour than can efficiently perform the work...if the cost of production becomes too great all hope of advantage to the public as consumers will disappear."<sup>17</sup>

Here, in 1917, was advance notice of the modern theories in fisheries economics. Evans argued that free entry would contribute to unnecessarily high costs, thereby squandering the economic potential of the resource. Consequently, he recommended that the fleet be limited and excess profits be collected by the government. Provincial fisheries Commissioner William Sloan took this idea one gargantuan step further in 1919 by advocating government control of the fishery.

In response to the Evans Commission and Sloan's report, Fisheries Director W.H. Found took a deep breath and recommended that there be "not only *not* any restriction on the number of cannery licenses but on the number of fishery licences as well, and that we must safeguard the situation by decreasing the fishing season where necessary and putting on sufficient Fishery Officers to prevent illegal fishing."<sup>18</sup> Found had dismissed Evans' objectives, but he was still advocating a policy direction for fisheries management. The government's role would be not to regulate the economic direction of the industry, but solely to ensure conservation of the resource.

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***"...all conditions surrounding the industry should as far as possible be stabilized and the excessive use of capital and labour obviated and prevented..."***

**Evans Commission, 1917**

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None of Evans' recommendations were adopted, partly because of the need for employment among returning soldiers. G. Alex Fraser suggests that Evans was "simply too far ahead of his time...it was a cry in the wilderness; a cry that was not heard for over forty years."<sup>19</sup>

## LEASES AS AN EARLY MANAGEMENT TOOL

Meanwhile, another form of limiting effort had been discreetly operating for fifty years. From 1871 to 1920, the Department gave out exclusive dragsine and cannery licenses that effectively amounted to area-specific monopolies. In return for the monopoly, the lessee was usually obliged to pay rent or engage in enhancement.

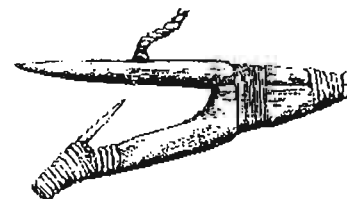
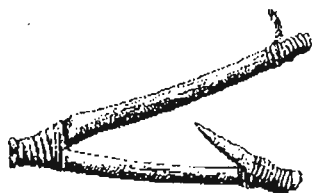
The reasoning behind these leases seemed to make sense. Lease-holders would, in their own self-interest, promote conservation. In practice, however, "the door was left wide open to political procurement and, as might be expected, some abuses did result."<sup>20</sup> Leases fell into disuse after 1907, when Prince's Royal Commission pronounced them undesirable. Even so, some old privileges stayed in operation until World War II.

For the time being, all forms of limited entry had failed. Nonetheless, historian Joseph Gough approves of the Department's attempt, saying that they "pioneered in the thorough application of lim-

ited entry...from the beginning, fisheries people on the Pacific were quicker to grapple with fundamental questions of management."<sup>21</sup> The fundamental problem with licence limitation appeared to be the difficulty of developing an acceptable mechanism for allocating licences. The government was willing to charge only nominal fees for fishing, and its criteria for allocating licences were subjective, to say the least. As a result, licensing and leasing were subordinated to the secondary role of an enforcement aid. Licensing came to be used mainly for statistical purposes, while the Department's conservation policy relied increasingly on gear, area and time restrictions.

## SALMONCENTRIC POLICIES

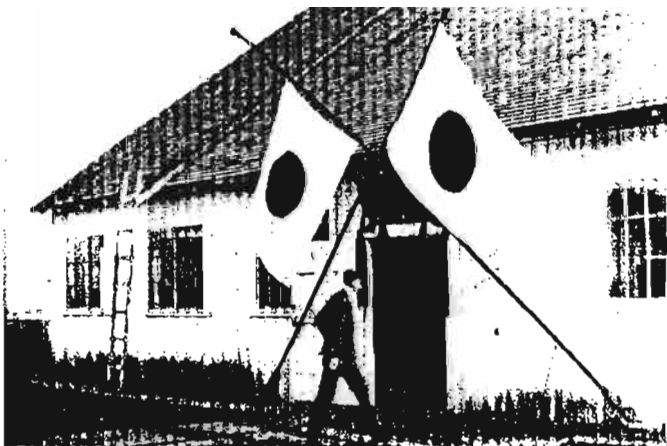
Early Department policy focused almost exclusively on salmon. To some degree, this emphasis is understandable. No fisheries for other species were of large-scale economic significance, with the possible exceptions of herring and halibut, which had been fished commercially since the 1880s. Despite the introduction of more effective seine nets to catch halibut and other deep sea species, the government steadfastly pursued a *laissez-faire* policy in ocean fisheries. Arguing that there was no evidence that the new gear types were damaging the resource, the Dominion Commissioner stated, "as in all other instances of deep sea fishing, it appears highly desirable to abstain from interference as much as possible."<sup>22</sup>



## DISCRIMINATION IN EARLY FISHERIES MANAGEMENT

In the early days of fisheries regulation on the Pacific coast, the government recognized its power to allocate the opportunity to fish among citizens. While unlimited fishing rights were theoretically not open to question, some people were still excluded from the industry. In fact, such exclusionary policies were often racist in practice. Historical hindsight suggests that the government's policy of meeting socio-economic objectives through racial segregation was not only morally reprehensible, but it aggravated the problems of the industry as well.

By 1893, the assortment of ethnic groups fishing in B.C. included Scandinavians, Greeks, Italians, English and French, but Asians bore the brunt of the racial hostility. Anti-Oriental sentiment was sweeping the province, fuelled by increasing immigration. Canner Henry Bell-Irving's attitude was not uncommon: "I look upon them as steam engines or any other machine."<sup>23</sup> Racial hostility was given official sanction by fisheries managers: in 1903, the legalization of purse-seining was accompanied by the clause, "white men and Indians only to be permitted, thus excluding Chinese, Japanese, etc."<sup>24</sup> During and after the First World War, numerous industry associations, labour councils and town governments lobbied for a preferential licence system for whites and Natives. Fisheries Inspector W.H. Found was strongly supportive, and "the question was no longer whether Asiatic licences would be reduced, but by how many and when."<sup>25</sup>



Japanese efforts to remain in the fishing industry were further suppressed by the return of soldiers after the First World War. To aid the soldiers' re-entry into the industry, Japanese licences were curtailed and returning soldiers were guaranteed 30% of gillnet licenses.

Perhaps more frightening is that these policies were officially sanctioned at the highest levels of fisheries management. A 1922 Royal Commission, headed by William Duff, recommended a 40% reduction in the number of Oriental licences in all fisheries. The Department acted on Duff's proposal, feeling that it would provide "greater encouragement to white men and Canadian Indians to take up fishing for a living."<sup>26</sup> Duff's method of inquiry was suspect, to say the least. Twelve meetings were held in order to collect information, not one of them inviting a Japanese-Canadian.

It is interesting to note that the exclusion of Japanese from the fishing industry ran counter to the interests of the canneries. The canneries preferred Japanese workers, viewing them as a source of inexpensive, productive labour. Protests against Japanese exclusion from fishing had little effect until 1928, when the Supreme Court of Canada held that "Any British subject residing in British Columbia...has the right to receive a licence."<sup>27</sup>

So committed was the government to its policy of racial exclusion, however, that it circumvented the Supreme Court's decision. The Ministry of Fisheries drafted legislation that reaffirmed its absolute right to issue or withhold licences. Japanese were permitted to use only sails and oars, rather than power boats, until 1930; Natives and whites faced no such restrictions. The government-sponsored exclusion of Asians was to continue until after the Second World War.

Japanese flags cross a cannery door in Steveston, July 1912. Discrimination against Orientals was prevalent in the early days of the fishery. As said by one canner, "I look upon them as steam engines or any other machine."

## NATIVE RIGHTS (?)

During the early years of their contact with Natives, Europeans were generally content to preserve the Native right to fish in its existing form. The aboriginal system of exchanging fish among groups was simply extended to include sales to Hudson's Bay posts. The Department of Fisheries' early requests for opening weirs and closing the fishery during poor runs were viewed as minor inconveniences by Natives at the time, and the Department had no desire to encroach on Natives in any significant way. Historian Reuben Ware supports this contention, stating that "in this era there was no distinction between food fishing and commercial fishing. There were no regulations, no Proclamations, no Orders-in-Council, no laws of any kind which specifically restricted or regulated Indian fishing in British Columbia."<sup>28</sup>

Subsequent to this initial contact, fisheries managers constructed a legal and institutional framework for Native rights whose lack of clarity was its only clear feature. The Native right to fish was first recognized in 1877 by a joint Indian Reserve Commission. The provincial government, it seems, had convinced federal authorities that B.C. Natives would not require large land reserves if they were accorded their traditional fishing rights.

For the most part, the government's policy of recognizing Native fishing rights was in jeopardy from its inception, and it gradually shifted to an implicit policy of encouraging commercial sector development at the Natives' expense. While canneries were all too eager to enlist Natives in the commercial salmon harvest (in 1880, Natives operated more than 600 gillnetters), the canners were increasingly seeking fish stocks upon which the Natives depended, and began lobbying the government to curtail Native fishing on the spawning grounds. "As always in the fishing industry, the argument was cloaked in the rhetoric of conservation, and as always, it was really about money."<sup>29</sup>

Even the first Inspector of Fisheries was unable to salvage the government's policy. A.C. Anderson, who included protection of aboriginal rights as one of the cornerstones of his policy, declared that "any

interference with the natives...would be imprudent as well as unjust...the exercise of aboriginal fishing rights cannot be legally interfered with."<sup>30</sup> Anderson reasoned that when Natives fished for subsistence with traditional locations and gear, their right to harvest, trade and sell their catch should be unrestricted. When Natives fished for delivery to the canneries, however, they would be subject to the same restrictions as everyone else.

Anderson's efforts to protect aboriginal fishing sites and exempt Natives from the Fisheries Act were heeded by Ottawa, albeit in diluted form. An 1888 amendment to the Fisheries Act specified that "Indians shall, at all times, have liberty to fish for the purpose of providing food for themselves, but not for sale, barter or traffic, by any means other than drift nets or spearing."<sup>31</sup> Unfortunately, the distinction between commercial and food fishing was not as clear as it seemed. Native chiefs categorically rejected limits on their right to trade and sell their catch, as well as any notion of a licensing system. Consequently, collecting licence fees proved to be difficult.

Some astute Natives, in fact, began to wonder why *they* were the ones being regulated, and they found it preferable to collect fees from everyone else instead. In 1888, a chief on the Nass River declared that he owned all the fish, and that his people were entitled to all of the licence money. Evidently a reasonable chap, the chief offered the local fisheries guardian half of the money for his trouble and let the guardian off with a warning.

Limits to the Native fishing effort did not subside, however. By 1894, Natives required formal permission of the Department in order to fish. By 1910, Natives had to obtain a permit that outlined permissible fishing gear types, areas and times. In the 1920s, the Department stated that Natives would be denied independent licences in northern waters, a regulation that was created "based on the government's unstated objective of creating a white fishing population."<sup>32</sup> This hypothesis is corroborated by the recommendations of the 1919 Sloan Report, written by the provincial Fisheries Commissioner, who urged that Ottawa purchase and eliminate aboriginal fishing rights. In the following year, the Superintendent of Fisheries, W.H. Found, directed his staff to

issue seine licences to members of the white race only. Chief Inspector F.H. Cunningham went so far as to state, "it is my desire to eliminate [Native beach seine fisheries] as much as possible."<sup>33</sup> The Department of Fisheries' shifting priorities were even explicitly noted in its Annual Report of 1929: "in view of the intensive commercial fishing which has developed in recent years, the operators feel that the catch of the Indians, on the spawning grounds particularly, should be curtailed if not discontinued entirely."<sup>34</sup>

Nonetheless, Department officials were cognizant of maintaining at least a semblance of equity. No motor boats were allowed north of Cape Caution until 1924, the stated purpose being not to ensure

conservation of the fish stocks, but to allow Natives to compete more or less equally. When the Fraser River was completely shut above Mission in 1919, the government significantly promised compensation to the Natives (though this commitment was not kept).

Aboriginal rights wouldn't be erased from official recognition until 1927, when a special parliamentary committee rejected Native land claims and made it a crime to raise money for the pursuit of these claims. Superintendent Found's goal of curtailing Native fishing had been realized. At least for the time being, he "not only dramatically curbed the Interior native fishery, he had reduced the coastal people to supplicants for jobs on the decks of seine boats."<sup>35</sup>

### **UP THE CREEK WITHOUT A PADDLE: THE BABINE BARRICADES**

The Barricade Agreements on the Babine River remain a landmark in the government's conception of aboriginal rights. In many ways, the Department's treatment of the Babine incident is typical of its aboriginal policy during the turn of the century. The good news: the Department acknowledged the Natives' right to fish and sell their catch. The bad news (at least in the short term): when that catch interfered with commercial harvesting and cannery production, a compromise would have to be reached. When it came to conflict between canneries and Native fisheries, Natives were invariably shut down – nonetheless, most historians concur that Native fishing was shut down with the best of intentions (i.e. concern for the long-run productive potential of the stocks).

In the early 1900s, the enormously productive traps and weirs of the Babine system, known as the Babine Barricades, were the object of criticism from canners up and down the coast. If the barricades were not removed, reasoned the canners, virtually no fish would be available for commercial production.

The canneries' lobbying had the desired effect. Dutiful fisheries overseer Hans Hegelsen paddled up the Skeena to enforce a ban on trap fishing and investigate the barricades, which he described as "a magnificent fence which not a single fish could get through...beautifully made of slats woven together with bark set in front of all." Beautiful as they were, the traps had to go. The Babine people took down the weirs, waited until Hegelsen left, then promptly put

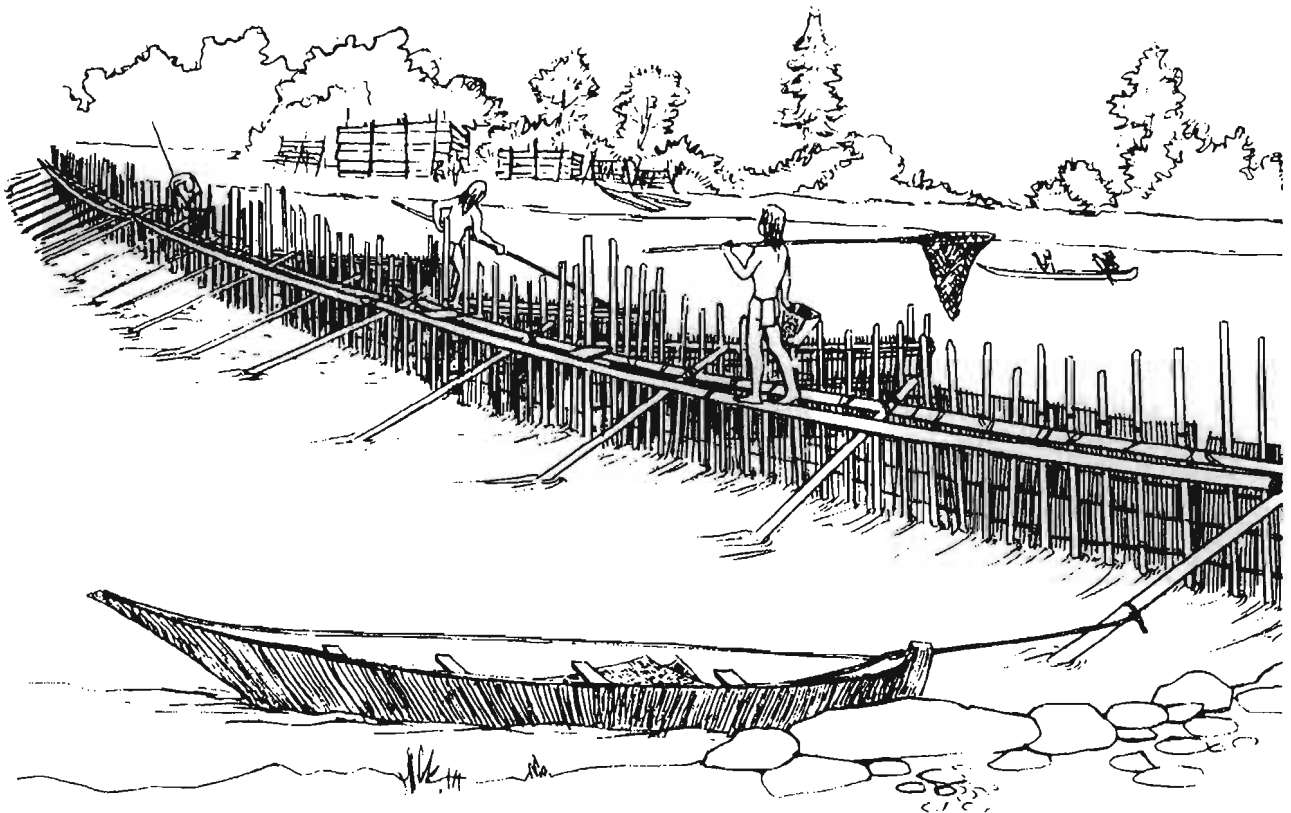
them up again, figuring that they could not survive the winter without the catch of fish provided by the barricades.

Hegelsen and his crew paddled back up the river, only to discover "a desperate situation...an infuriated mob, with their sleeves rolled up, their fierce passion aroused, shaking with excitement." After being "jostled about in a fearful manner" by "multitudes of squaws armed with clubs," Hegelsen yelled to Ottawa for help.

In the resulting Barricades Agreement of 1906, the Department of Fisheries promised to provide the Natives with nets, on the condition that the fish caught with the nets would be used for subsistence purposes only. The government had acknowledged a Native right to fish, although harvesting methods such as the barricades had been outlawed.

Hans, as it turns out, got the best of the deal. With a gold cane, a purse of \$630 and a letter of appreciation from the canners "for the active and important part you played in obtaining the permanent prohibition of the Babine Barricades," Hegelsen retired in style.

*adapted from Geoff Meggs, Salmon: The Decline of the British Columbia Fishery*



## EARLY INTERNATIONAL CONFLICTS

Even in the early days of commercial harvesting, Pacific fisheries policy was deeply committed to protecting Canadian territorial rights. It was widely recognized that sound fisheries management could not take place in isolation from other nations. The disrespect of certain species (including salmon) for international boundaries implied that there would always be international disputes over access to fish. For one thing, the competition to catch fish migrating across borders resulted in higher fishing costs. More importantly, there would be no incentive for the country where the spawning stream was located to invest in the stock if the returns from that investment would be intercepted by another nation.

At the turn of the 20th century, conflict, rather than cooperation, characterized international relations in the Pacific fishery. "Relations with the United States have been...indelicate,"<sup>36</sup> a British spokesperson declared tactfully in 1854. The U.S. had just imposed import duties on Canadian fish, contrary to provisions in the pre-Confederation Reciprocity Treaty. This indelicacy was to continue: in 1869, the Canadian government entertained a motion "to absolutely prohibit fishing by United States fishermen in colonial waters."<sup>37</sup>

It was not until the 1890s that Canadian policymakers focused their attention on resolving disputes rather than taking an eye for an eye (or a fish for a fish). Developing international agreements for management of fish stocks became a priority, in addition to the implicit goal of securing access to as many fish as possible. Throughout the 1890s, a variety of appeals were made in vain to the United States concerning the need for joint regulation in contiguous waters, but "the efficacy of the conservation measures...was undermined by relatively unrestricted

fishing in U.S. waters."<sup>38</sup> Cooperative efforts were also confounded by a controversial tribunal decision in 1903, which awarded the U.S. its present territory in the Alaska panhandle, along what has come to be known as the A-B Line. American claims to territorial sea running off the A-B Line have since been the source of sporadic fishery disputes.

A classic example of incongruent goals between Canada and the U.S. occurred in the Fraser River salmon fishery. The majority of Fraser River sockeye travel through the Strait of Juan de Fuca, passing through U.S. territorial waters before reaching Canadian fishing grounds. As already noted, Canada had introduced restrictive fishing policies as early as the 1880s in order to conserve Fraser River stocks. Weekly closed periods, fishing boundaries, a closed season, and a ban on seine, trap and net gear had all been used in an effort to conserve the resource. Significantly, no such restrictions existed south of the border. In 1891, U.S. fish harvesters set up an interception fishery using fish traps and purse seiners, and the American catch of Fraser River runs exceeded 60% of the total by 1900.

Canadian fishing interests were, to put it mildly, disconcerted. In an abrupt reversal of previous policy, the Department of Fisheries allowed Canadians to match the Americans' fishing effort by using traps and purse-seine gear. Getting even with the Yanks, it seems, was of greater short-term satisfaction than conservation. Historian Joseph Gough suggests that the necessity of keeping up with the U.S. "may have strengthened the tendency on the Pacific to regulate capacity and effort—the number of boats and fishermen and the length of fishing times—rather than method."<sup>39</sup>

However, efforts at cooperation were not completely abandoned. Nor were they completely successful. In 1908, the Canadian and American govern-

ments negotiated a treaty setting up an International Fisheries Commission to govern Fraser River fishing. While the Canadian government amended the Fisheries Act to conform with the Commission, the treaty was never approved by the U.S. Congress. Another draft treaty was rejected in the U.S. Senate in 1919. The major points of contention during this second round of talks were the American use of seines and traps and Canada's failure to unplug the cork in Hell's Gate.

Efforts at international management had been frustrated, and Canada's reaction was to fight like mad for the fish that were left. As such, bilateral negotiations with the U.S. after 1908 assumed a confrontational, give-and-take character. For example, the U.S. requested an extension of their fishing privileges in Canadian waters in return for removing duties on unprocessed Canadian fish. The U.S. even entertained a bill that would have prevented imports of Canadian fish altogether. Despite its best efforts, Canada was to remain without the desired treaties until after the First World War.

### **FUR SEAL BONANZA: CANADA'S FIRST INTERNATIONAL FISHERIES AGREEMENT**

Despite their protestations of angelic innocence, the Canadians were not blameless in encroaching on foreign fishing grounds. In the 1880s, Canadian schooners travelled to the Bering Sea in search of fur seals, and began "launching Indians in canoes for dare-devil ocean hunting." Accusing Canadians of decimating their resource, the Americans seized Canadian vessels in four successive years from 1886 to 1889.

For the first time in the Pacific, international tribunals were used to settle a fisheries dispute. Canadians were barred from the Bering Sea in 1891 and reinstated in 1893; despite continued harassment, the pesky Canadians kept sealing. The dispute was finally put to rest in 1911, when it was agreed that the U.S. alone would conduct the fur seal hunt, on land only. The other countries involved – Japan, Canada, and Russia -- each received a share of the proceeds, with Canada's share at 15%.

Thus, the first international agreement on fisheries management pertained to a single fishery, one that was largely carried on in international waters outside any country's jurisdiction. The agreement established two precedents for international disputes: third-parties and international tribunals were henceforth viewed as effective dispute resolution mechanisms; and compromise between the extreme views of the opposing parties became the norm, perhaps encouraging countries to take an extreme position in hopes of a more favourable settlement.

*· adapted from Joseph Gough, Fisheries Management in Canada 1880-1910*



## SUMMARY

The first regulators of the fishing resource were B.C.'s aboriginal peoples, who sustained themselves and the fish stocks for centuries using a relatively simple regulatory framework. Property rights were usually vested in the community, with the chief regulating access to the fish.

When Europeans voyaged across the Atlantic, they carried with them centuries-old traditions governing fishing rights. These rights had been laid out by both the Magna Carta, which granted a universal right to fish, and a Dutch jurist named Hugo Grotius, who held that the high seas were open to all.

Given these ideologies, the government's initial reaction to the fledgling commercial fishing industry was understandable. The British North America Act, apparently influenced by the view that neither fish nor the waters in which they live are respectful of political boundaries, gave the federal government responsibility for the regulation of fisheries. The Fisheries Act set forth broad regulatory powers relating to the harvesting of living aquatic resources and the protection of their environment from pollution and obstructions.

When the new Act was extended to B.C. after Confederation, the primary policy of the government was to limit its intervention to resource conservation issues. The regulations themselves were based on popular concepts -- protect the young and don't interfere with reproduction. The chosen method was 'input restriction,' which limited allowable fishing times, gear types and areas. Early regulation, like early fishing, moved from the rivers out, and attention was concentrated on those stocks where the danger appeared to be greatest (i.e. the fish and shellfish caught close to shore and the freshwater and

anadromous species). Salmon was the most visible and commercially significant species, so fisheries policy centered on it to the virtual exclusion of other aquatic resources.

Conserving fish was an attractive prospect, but *increasing* the catch held even greater appeal. Under the influential John Pease Babcock, the government devoted itself to enhancement and constructed a number of spawning channels and fishways. This faith in hatcheries was largely unjustified from a scientific standpoint at the turn of the century, and the pendulum eventually swung to widespread dissatisfaction with the failure of these early attempts. Dr. E.E. Prince was another influential figure in early fisheries management, and his construction of the Pacific Biological Station established science as a management support mechanism. These two men saw much of their work in stock enhancement be-



Portrait of a Makah fisherman, *circa* 1900.



come nullified after the Hell's Gate slide of 1913, when the Fraser River salmon runs were reduced to a fraction of their former abundance.

The Hell's Gate slide and similar threats to resource conservation pressured the government to envision a different way to manage the fisheries. Even at this early date, fisheries managers were highly resourceful in developing new policies. Limited entry was attempted not once, but twice around the turn of the century, both times being repealed following a boom in the industry and a corresponding desire for more boats. In the decades before World War II, fishery managers had already thought up licence limitation, overall quotas, and individual boat quotas. Application was often weak, partly because Fisheries Ministers were disinclined to act without a combination of political and industry will to make major improvements.

Consequently, people became accustomed to the assistance of Royal Commissions, no fewer than five of which were completed by 1922. The most famous of these was the Evans Commission, which saw the first recognition of the economic problems associated with overfishing.

Discrimination was not only prevalent in those days, it was an explicitly-stated government policy. Consequently, early Native involvement in the commercial fishery was subject to racism as well. Traditional Native fishing practices were first tolerated, then curbed as overfishing became noticeable. By 1922, Native participation in commercial fishing had declined to a fraction of its pre-Confederation level.

Aside from its conservation imperative, the government saw itself as the defender of Canadian fishing interests in the international arena. The earliest fisheries policies in Canada protected local fish harvesters against foreign competition in a number

of ways, including controls on exports and relaxation of gear restrictions. In the absence of stringent restrictions in the U.S., Canada felt itself to be suffering unduly, and the turn of the century was characterized by bickering over foreign fish interceptions.

The needs of fishing communities dominated early fisheries policy as well, and the lack of alternative employment was recognized by the earliest fishery managers. Intuitively, maximization of the catch seemed to solve this problem in the long run. From an early date, policy-makers took care to minimize the negative short-run impacts of regulatory measures, and the government became committed to supporting an adequate level of employment in the industry.

Roughly put, then, the early attempts to regulate were aimed at stock conservation and reconciling conflicts between fish harvesters competing for access to stocks. In resolving these conflicts, politicians and administrators were essentially managing the distribution of fishing income. This task was regarded by some officials as a welcome source of power and prestige, but others saw it as an onerous responsibility for which they lacked a mandate.

The turn of the twentieth century provided the essence of the present management system -- keeping a careful eye on everything in sight. This period was dominated by supremacy of open fishing in ocean waters, respect for the public right to fish, and a 'game warden' approach to regulation. Regulations accumulated on mesh and net sizes, types of gear, boundaries, and so on, creating a proliferation of *ad hoc* restrictions. In the 1880s, the main fishery regulations filled only one page; by 1911, a summary of federal and provincial laws and regulations took up thirty pages; today, *War and Peace* resembles a pamphlet by comparison.

From our own turn-of-the-century vantage point, the Royal Commissions of the early management period left out a few things. First, they created no provision for consultation with industry representatives. Second, in spite of Prince and Babcock's efforts, they failed to apply science to fisheries management in a systematic way (some argued that it was science that was not ready for fisheries, rather than the other way around). Biological Board scientists were not integrated with the Department and rarely took part in experimental management. A number of hatcheries were constructed, but nobody measured their effects until half a century later. Early faith in the hatchery process may have contributed to complacency in some instances of overfishing and may have slowed the progression to sound fisheries management.

In addition, the economic questions of fisheries management were addressed only tangentially. Early

managers did not tackle the issue of excessive fishing capacity. In effect, fishing was reduced by tying one hand behind the back of the fish harvester. In response, the other hand kept getting bigger, thereby increasing the cost per unit of catch and reducing the net returns per fish harvester.

Despite such drawbacks, the Department of Fisheries and the Royal Commissions did reasonably well in building the Canadian system of management. Most importantly, they instilled a conservationist attitude that has persisted to this day. By the end of the First World War, the industry was aggressive and organized, as likely to lead government in management as to accept change passively. There became entrenched a thriving group of fish harvesters whose access to fish could be regulated but not eliminated. Consequently, the government felt obliged to ensure employment in the industry.



## ENDNOTES

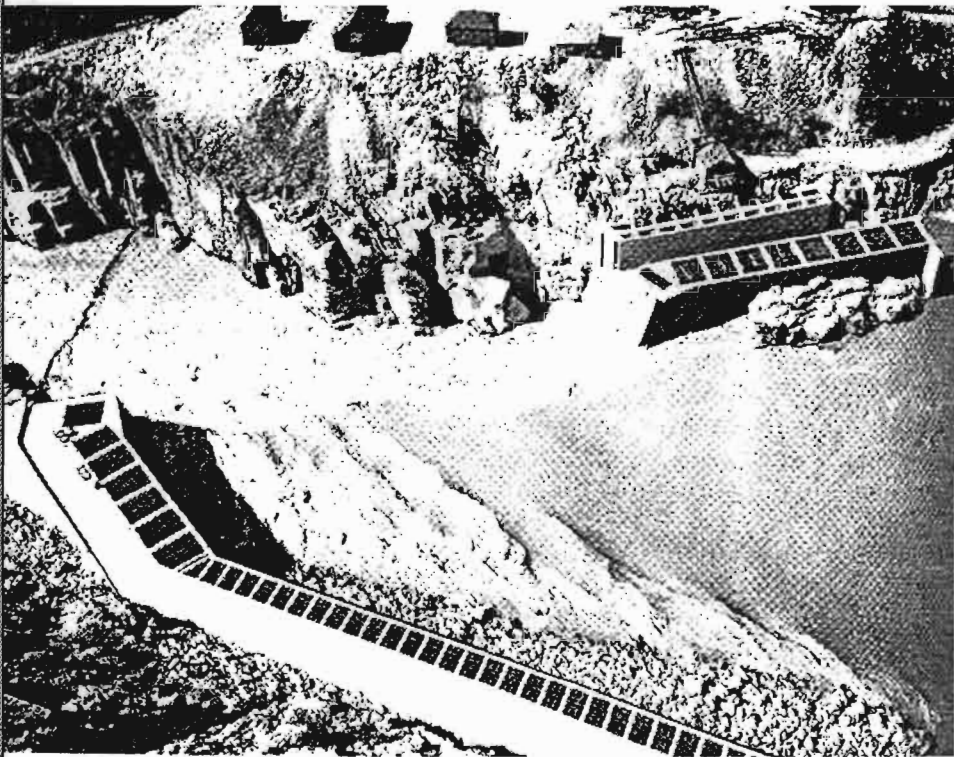
- <sup>1</sup> Neher, 2.
- <sup>2</sup> Joseph E. Forester and Anne D. Forester, *Fishing: British Columbia's Commercial Fishing Industry* (Saanichton: Hancock House, 1975) 200.
- <sup>3</sup> Patricia Marchak, Neil Guppy and John McMullan (eds.), *Uncommon Property: The Fishing and Fish-Processing Industries in British Columbia* (Toronto: Methuen, 1987) 153.
- <sup>4</sup> Geoff Meggs, *Salmon: The Decline of the British Columbia Fishery* (Vancouver: Douglas and McIntyre, 1991) 81.
- <sup>5</sup> Joseph Gough, *Fisheries Management in Canada 1880 - 1910* (Halifax: Canadian Manuscript Report of Fisheries and Aquatic Sciences No. 2105, 1991) 64.
- <sup>6</sup> Peter H. Pearse, *Turning the Tide: A New Policy for Canada's Pacific Fisheries* (Vancouver: Department of Fisheries and Oceans, 1982) 78.
- <sup>7</sup> Meggs, 33.
- <sup>8</sup> Marchak *et. al.*, 109.
- <sup>9</sup> Meggs, 35.
- <sup>10</sup> Department of Marine and Fisheries, *Report of the Dominion Fisheries Commission*, 1908.
- <sup>11</sup> Meggs, 102.
- <sup>12</sup> Pearse, 78.
- <sup>13</sup> Department of Marine and Fisheries, *Report of the Dominion Fisheries Commission*, 1908.
- <sup>14</sup> Canada, *Sessional Papers*, 1915.
- <sup>15</sup> *Ibid.*
- <sup>16</sup> Department of Marine and Fisheries, *Report of the Special Fishery Commission 1917* (Ottawa: King's Printer, 1918).
- <sup>17</sup> *Ibid.*
- <sup>18</sup> Meggs, 118.
- <sup>19</sup> G. Alex Fraser, *Licence Limitation in the British Columbia Salmon Fishery* (Vancouver: Economics and Special Services Directorate, Technical Report Series No. PAC/T-77-13, 1977) 6.
- <sup>20</sup> Cicely Lyons, *Salmon: Our Heritage* (Vancouver: B.C. Packers, 1967) 150.
- <sup>21</sup> Gough, 59.
- <sup>22</sup> Anthony Scott and Philip A. Neher (eds.), *The Public Regulation of Commercial Fisheries in Canada* (Ottawa: Economic Council of Canada, 1981) 11.
- <sup>23</sup> Meggs, 25.
- <sup>24</sup> *Ibid.*, 89.
- <sup>25</sup> Marchak *et. al.*, 111.
- <sup>26</sup> Forester *et. al.*, 159.
- <sup>27</sup> *Ibid.*, 160.
- <sup>28</sup> Reuben M. Ware, *Five Issues Five Battlegrounds - An Introduction to the History of Indian Fishing in British Columbia 1850-1930* (Vancouver: Coqualeetza Educational Training Centre, 1978) 14.
- <sup>29</sup> Meggs, 52.
- <sup>30</sup> *Ibid.*, 55.
- <sup>31</sup> Canada, *Sessional Papers*, 1888..
- <sup>32</sup> Meggs, 105.
- <sup>33</sup> *Ibid.*, 108.
- <sup>34</sup> Department of Fisheries, *Annual Report 1929/30*.
- <sup>35</sup> Meggs, 112.
- <sup>36</sup> Canada, *Sessional Papers*, 1887.
- <sup>37</sup> Marchak *et. al.*, 155.
- <sup>38</sup> Scott *et. al.*, 17.
- <sup>39</sup> Gough, 60.



# CHAPTER TWO:

# MODERNIZATION AND DEVELOPMENT

*1923-1968*



*"The nicest thing about not planning is that failure comes as a complete surprise, and is not preceded by a period of worry and depression."*

*John Preston*

## GOVERNMENT ASSISTANCE IN INDUSTRY GROWTH

In 1927, an economic crisis shook the industry. It was claimed that Fisheries Inspector W.H. Found's policy of de-regulation had resulted in additional gear entering the industry, leading to poor runs and losses all around. Author Cicely Lyons reports that "the ordinary weekly restricted periods were extended, all salmon fishing areas were closed for seven consecutive days... while an earlier than usual closure of the fishing season was enforced."<sup>1</sup> The policy of ensuring conservation through gear, area and time restrictions was pursued even more vigorously in 1929, 1930 and in subsequent years.

Chief Fisheries Inspector J.A. Motherwell confidentially advised Found that the crisis had been partially precipitated by government policy. Late runs, dry streams and mounting fleet capacity had necessitated tough closures. As well, "it was hoped that the more stringent regulations would have the effect of compelling the fishermen to get together and materially reduce the amount of gear in the water," wrote Motherwell.<sup>2</sup>

Motherwell's tactic was successful, to a point. In 1927, a conference of canners and fishermen asked Ottawa for a 50% reduction in the number of purse seines, a 30% reduction in the number of gillnetters, and a moratorium on cannery licences. They also suggested the creation of area licensing to compel seines and gillnetters to fish and to deliver in specified areas (a concept of fishing rights that would be resuscitated years later by resource economists). Found deflected these proposals, partly because they did not represent the views of the entire industry: seine fishermen, Natives, and some processors were infuriated with the plan.

Found, it seems, had an even more compelling reason to do nothing. That was all he *could* do. In 1927, a canner named Francis Millerd made use of an obscure clause in the Fisheries Act that permitted processing at sea. Millerd's mobile cannery incensed the existing canneries as well as the feds, who insisted that Millerd pick a location for five years and remain there. Millerd ignored the warning, and his licence was rescinded. The ensuing trial in the B.C. Supreme Court acquitted Millerd. In one fell swoop, federal authority to control cannery licensing was completely eradicated.

The processors, who knew Found's newfound splendid isolation, took it upon themselves to shape the future direction of the fishery. They proposed that the coast be divided into seventeen areas, each of which would have strict limits on the number of boats and the kinds of gear allowed. More ominously, the canners agreed not to buy fish from independent fishermen and to impose penalties on fishermen who delivered outside of their specified area.

Independent fish harvesters were chagrined. In response, the Department substantially watered down the processors' area licensing proposal. Twenty-seven areas were to be used instead of seventeen, and raw fish was permitted to be transferred from area to area. The number of seines was fixed in each area; if it exceeded the allowable total, the closure of that area would be extended from forty-eight to seventy-two hours. One of the aspects of the agreement that the Department left untouched was the industrial structure implied by the processors' agreement. In a nutshell, it heralded the emergence of B.C. Packers as a dominant firm in the postwar processing industry.

## GOVERNMENT INVOLVEMENT DURING WORLD WAR II

The outbreak of World War II and the expropriation of extraordinary powers by the government created a major change in the structure of the fishing industry. As Geoff Meggs writes, "the exigencies of war required a single-minded dedication of all governments to what the canners did best: harvest and preserve every available fish. Concerns about conservation and the underlying structural problems of the industry were pushed aside."<sup>3</sup>

The Department of Fisheries came under the authority of a Wartime Fisheries Advisory Board, among other organizations, and wasted no time in reorienting its policy to meet the new situation. The stated intent of government policy during the war was to accelerate the modernization of the industry while providing supplies for overseas soldiers.

The Fishing Vessel Assistance Program (FVAP) was introduced in 1942, its objective "to assist Canadian fishermen in the purchase of fishing vessels...in doing so, it is expected to help modernize the fleet and improve its fishing capacity."<sup>4</sup> The FVAP was another 'good news, bad news' policy for the federal government. It achieved its objectives admirably. They just happened to be the wrong ones, as critics of fleet overexpansion were to point out in future years.

The government also took an active role in promoting new markets for B.C.'s fish products. Through their boards and committees, the Canadian government purchased 80% of the canned salmon pack, 90% of the canned herring pack, most of the dogfish liver oil, and all of the fish meal produced during the war years.

## DISCRIMINATION DURING WORLD WAR II

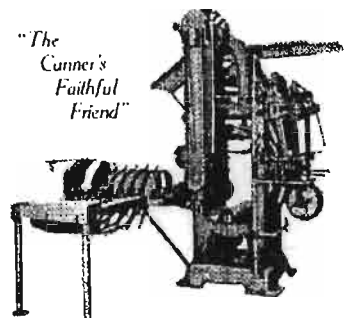
The onset of war with Japan finally signalled the elimination of the Japanese from Pacific fisheries. Regardless of citizenship, Japanese-Canadians had their boats seized and impounded. For the duration of the war, no person of Japanese origin was employed in B.C. commercial fishing in any capacity whatsoever. No thought was apparently given to the loss of skilled labour and vessels at a time when all hands and boats were sorely needed.

As it turned out, the government was unprepared to deal with the large fleet of boats it suddenly had on its hands. The Department's 1942-43 Annual Report mentions "scarcity of labour, shortage of fishing vessels, closure of canneries in outlying areas, and the necessity of using inexperienced labour"<sup>5</sup> as pervasive problems during the war. Joseph and Anne Forester state that "most of these difficulties could have been mitigated had it not been for the removal of the Japanese from the fishing industry."<sup>6</sup>

It was not until 1948 that the restrictions were lifted and the Japanese were allowed to return to commercial fishing. In the meantime, the financial investment necessary to enter the fishery had risen dramatically, and many Japanese had not been compensated for the loss of their fishing vessels. Consequently, Japanese involvement in the commercial fishery has never returned to its pre-war level.

Advertisement appearing in the February 1936 issue of *Western Fisheries* magazine. Automated canning machines were but one example of advances in technology facilitated by dramatic increases in government assistance during the Second World War. "The Iron Chink" was the racist label given to one such machine, in sarcastic acknowledgement of the Chinese workers it replaced.

### THE "IRON CHINK"



## FINANCIAL ASSISTANCE AFTER THE WAR

The government's desire to modernize the fishing fleet did not stop with the end of the war. The major thrust of modernization occurred in the processing industry, which utilized government subsidies to build new plants and expand their facilities.

The policy of subsidising development was not limited to processors, however. In 1953, the Fishermen's Indemnity Plan (later the Fishing Vessel Insurance Plan) was initiated to provide fish harvesters with affordable insurance. In addition, the Fisheries Improvement Loans Act (FILA) was instituted in 1955 to increase credit availability to fish harvesters by guaranteeing loans from private sector lending institutions. The Department of Trade and Industry also contributed to the expansion of capacity by introducing accelerated capital cost allowances after World War II. Essentially, vessel owners were able to write off the cost of their vessel over three years instead of fifteen, thereby increasing their incentive to invest. The Income Tax Act provided for investment tax credits for vessel construction, and fish harvesters became eligible for excise tax rebates on fuel and equipment.

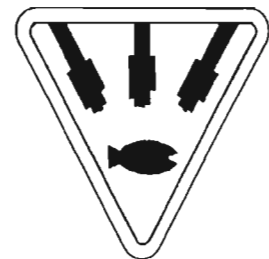
Marketing assistance after the war was particularly generous. The collapse of the U.K., European, and sterling bloc markets meant that processors had to develop an increased presence in the domestic market. They were assisted in this regard by the Fisheries Prices Support Board (FPSB), which was set up in 1947. This board granted two types of support: deficiency payments, representing the difference

between a prescribed price and the average market price (in order to ensure adequate returns for fish harvesters); and inventory financing, which consisted of payments to remove products from the market temporarily (these products were sold back to suppliers when market conditions improved).

B.C.'s involvement with the FPSB was heightened in 1955, when B.C. fish harvesters received substantial assistance to destroy dogfish. Dogfish had been highly-valued during the war for their Vitamin A content, but the development of low-priced synthetic Vitamin A in 1949 led to the closure of the fishery. Consequently, by the 1950s the species was so abundant that it was interfering with the harvesting of other species. The FPSB's support helped curb the expanding dogfish population to manageable levels.

The government's policy of fleet and processing sector modernization gathered steam throughout the 1950s and 1960s. When coupled with the Department's ongoing policy of regulating fishing effort through area, gear and time restrictions, fleet development expanded to the point of threatening some stocks and undermining the level and stability of some returns. Vessel owners adopted innovations that increased the speed of their boats and their hold capacity, reduced running time, and made possible offshore operations. In a nutshell, the assistance programs launched after the war served to "encourage a larger, more capitalized fleet, structured more towards seine vessels...the move to more seine vessels increased overall buyer concentration because of the high concentration of purchases of seine-caught salmon."<sup>8</sup>

Following World War II, the Department of Fisheries tried its hand at marketing. In one instance, \$300,000 was provided to west coast processors for a marketing program to sell canned salmon in the domestic market. The highlight of this program was apparently "an experimental kitchen, where home economists tested and developed fish recipes."<sup>7</sup> Consequently, more home economists than fisheries economists were employed in the Department of Fisheries -- some found this arrangement quite palatable.





## INTERNATIONAL COOPERATION IN STOCK MANAGEMENT

Since the 1860s, bilateral negotiations between Canada and the U.S. to reduce overfishing had been a frustrating process. Finally, in 1923, the first substantive multilateral agreement governing Pacific fishing was introduced. Significantly, it was for a species other than salmon.

While the halibut fishery is one of the oldest and most valuable on the Pacific coast, it was not strictly regulated until 1923, when the Duff Commission hastened the establishment of the International Fisheries Commission (renamed the International Pacific Halibut Commission, or IPHC, in 1953). The IPHC made recommendations to both the U.S. and Canadian governments in order to reverse the overfishing and stock decline that had become self-evident. It has been claimed that "this was the first international treaty designed for conservation purposes."<sup>9</sup>

The Commission took some time to find its bearings. Its initial imposition of three-month closures in order to facilitate biological management "proved to be inadequate."<sup>10</sup> Consequently, at the Commission's next convention in 1930, it acquired greater power to establish catch quotas by area, to regulate gear, and to close spawning areas.

The 1953 Convention was also significant because it mentioned, for the first time, the explicit biological objective of Maximum Sustainable Yield. The 1953 Convention

also ushered in an era of regulation which continued for another thirty-five years: the Commission was henceforth to set a Total Allowable Catch (TAC) for each of three administrative areas in the North Pacific. These quotas were backed up by size and gear limits.

The Commission was adamant about managing for conservation only, and it had an explicit policy of "prohibiting management for economic purposes."<sup>11</sup> James Crutchfield suggests that this mandate may not have been followed in the strictest sense: in regulating the fishery, "the favourable impact on both fishermen and most processors was clearly a prime concern as well."<sup>12</sup> Despite -- some would say because of -- its lack of an economic



The members of the International Pacific Halibut Commission ham it up for the camera. The IPHC was instrumental in introducing a methodological scientific approach to fisheries management, and it helped secure lasting increases in the halibut catch.

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***"The IPHC had an explicit policy of prohibiting management for economic purposes."***

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mandate, the Commission's policy appeared to be successful in conserving stocks. Catches increased from just over thirty million pounds in the early 1930s to a peak of seventy-five million pounds in 1962.

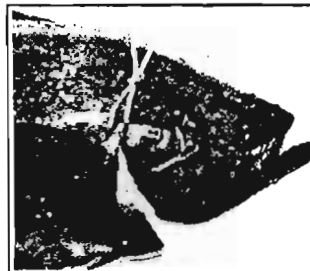
However, the Commission's success had its limits. Because the Commission had no authority to regulate participation in the fishery, the fleet expanded under unrestricted entry and the fishing season grew progressively shorter. Crutchfield notes that:

"the overall economic results of the IPHC programme to 1960 were disheartening ...the same catch could have been taken at far lower costs...it is a hollow victory to preserve an industry that could contribute so little to the overall welfare of the Canadian and American economies."<sup>13</sup>

This shortcoming is somewhat understandable. The Commission was limited by treaty in the actions it could take to deal with the undesirable effects of shortened seasons, even though it was able to limit departure of vessels when the quota was about to be reached. In the 1930s and again in the 1950s, the industry voluntarily agreed to a lay-up program that required ten days between trips and limited catch according to crew size. Lay-up programs eventually fell into disuse as they proved difficult to enforce and could not be incorporated into the Commission's regulations.

# TAGGED HALIBUT

The INTERNATIONAL PACIFIC HALIBUT COMMISSION tags halibut with plastic tags and metal strap tags attached to the cheek on the dark side of the fish. Some fish have two tags. Retain all tagged halibut regardless of size or gear used.



## REWARD

\$2.00 WILL BE PAID FOR THE RETURN OF THE TAGS AND RECOVERY INFORMATION FROM EACH FISH. \$100.00 WILL BE PAID FOR SPECIAL PRESELECTED TAGS.

### WHEN YOU CATCH A TAGGED HALIBUT:

1. Record Tag Numbers, Date, Location and Depth in your log book.
2. Leave Tags on the fish.
3. Mark the fish with a gangion

### WHEN YOU LAND A TAGGED HALIBUT:

1. Report fish to a Commission Representative or Government Officer  
or
2. Forward tags to address below and enclose recovery information (see above), your name, address, boat name, gear, overall length of fish and, if possible, earstones from the fish.

FINDER WILL BE ADVISED OF MIGRATION AND GROWTH OF THE FISH.

International Pacific Halibut Commission  
P. O. Box 9  
University Station  
Seattle, Washington 98108

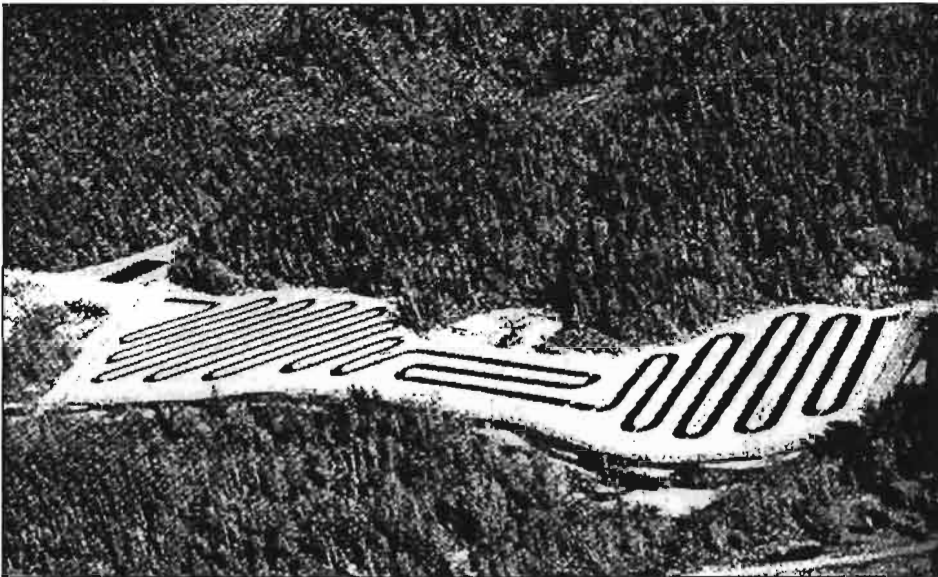
Tag Reward Poster.

## OTHER INTERNATIONAL AGREEMENTS

Success in halibut regulation had convinced Canada and the U.S. that bilateral negotiations for salmon may work after all. In 1937, the International Pacific Salmon Fisheries Commission (IPSF) was established, assigning half of the Fraser's sockeye salmon (and pink, after 1957) to each country and banning net fishing on the high seas.

The Commission was subsequently charged with building fish ladders in the Fraser Canyon and undertaking research to improve spawning beds. In

Another interesting international agreement occurred in 1953 at the North Pacific Fisheries Convention, which was heavily influenced by American peace treaty negotiations with the Japanese. Canada became a secondary power in the negotiations, largely because American policy was concerned with establishing Japan as a post-war ally and the fisheries were a convenient bargaining chip in this strategy. Patricia Marchak states that, "because fish provided the staple in the Japanese diet, compromise between the demands of the American and Canadian fishing interests and the political aims of the American government had to be achieved."<sup>14</sup>



Major fishways and spawning channels, like the one shown here at Weaver Creek, were given new emphasis during the 1950s. Constructed by the International Pacific Salmon Fisheries Commission, the channel approximates conditions in Weaver Creek itself with the added protection of controlled water levels. Spawning channels such as these proved vastly superior to the old hatchery methods.

the two decades following the war, the Department of Fisheries used IPSFC resources to re-dedicate itself to a policy of salmon enhancement. The Hell's Gate fishways, financed in 1945 under the auspices of the IPSFC, were perhaps the most ambitious and successful project:

The Department of Fisheries launched its own enhancement initiatives as well. Major fishways to help salmon upstream were constructed on the Fraser, Bulkley, Nass, Cowichan, Somass, Sproat, Indian and Naden Rivers. These enhancement measures may have had a small positive effect, increasing average annual landings from twenty million fish in the 1930s to twenty-three million fish in the 1970s.

The outcome of the Convention for Canada was that salmon, halibut and herring fisheries were protected from Japanese fishing for a period of ten years. Canada received the right to fish in U.S. waters except for Bristol Bay, and granted in return reciprocal rights to the Americans.

Canadian support for the Convention revealed that an important element of national fishery policy was to protect coastal fishing interests from high-seas fishing. A 1950s surf line agreement between the U.S. and Canada gave further expression to this policy.

Many historians are highly supportive of the collective efforts at international management; writes Joseph Forester, "though the Department of Fisheries was already guided by its mandate to protect and encourage the fisheries, the formation of these international bodies added the elements of international cooperation and extensive research."<sup>15</sup> At the turn of the century, Babcock had undertaken scientific investigations, but not until international treaties were signed did such research weigh heavily in the formulation and enforcement of fisheries policy.

## GROWING INTEREST IN EXTENDED FISHERIES JURISDICTION

As foreign fishing pressure and internal political pressure built up in the years after World War II, Canada took an increasingly assertive role in international fisheries negotiations. The Law of the Sea Conferences and numerous bilateral negotiations were indicative of a more expansionist oceans policy. Over the next thirty years, Canada was to become a forceful advocate of coastal state interests and contribute extensively to the development of international fisheries relations. In the process, as Parzival Copes writes, "Canada had to modify its traditional internationalist approach to foreign relations that was marked by Pearsonian overtones of altruistic mission."<sup>16</sup>

The first Law of the Sea Conferences were held in 1958 and 1960, and most nations quickly became entrenched in one of two positions. The *maritime group*, including the U.S.S.R. and the U.S., was generally opposed to the extension of territorial jurisdiction because of the adverse consequences it might have for military passage and mineral rights, among other things. The *coastal states group*, of whom Canada and many underdeveloped countries were members, was more concerned with preservation and expansion of their fishing jurisdictions. Canada was

instrumental in developing the concept of a fishing zone beyond the territorial sea in which the coastal state would exercise its functional jurisdiction in fisheries. Consequently, Canada proposed a fishing zone of twelve miles.

This proposal narrowly failed to be adopted, however. In fact, none of the proposals that were adopted during the first two Law of the Sea Conferences affected the west coast fisheries in any significant way, concentrating instead on agreements regarding the continental shelf. With the failure of the Law of the Sea Conferences, Canada's efforts moved once again towards bilateral negotiations.

Extended fishing jurisdiction became a topic of interest again by 1964, when Canada unilaterally established a twelve-mile fisheries zone. Canadian negotiators in the Pearson era had been strongly committed to limited economic jurisdictions at the general level, but to greater jurisdiction for fisheries specifically. Marchak suggests that the Pearson government was motivated by "concern about dwindling stocks in the Atlantic...in the west coast fisheries, the major dispute concerned the baselines determining the boundary at sea."<sup>17</sup> Partially because the twelve-mile boundaries were in direct conflict with those claimed by the U.S., contending nations were permitted to enter Canadian waters despite the legislation. Fry suggests that the Pearson government was so committed to multilateral action that it simply could not uphold the interests of its own nationals. On the other hand, Copes argues that "Canada's timing of these measures appears to have been judicious,"<sup>18</sup> since it paved the way for subsequent negotiations at the Third Law of the Sea Conference later in the 1970s.

By 1970, Canada had joined with 57 other nations in declaring a 12-mile limit, but this extension was seen merely as a first step. Increasingly, international opinion was mounting in favour of 200-mile limits.

## LICENCE LIMITATION RETURNS

While international agreements were taking up the headlines, the government's basic policy of regulating based on stock conservation principles had quietly continued. The primary policy goal was to allow adequate spawning escapement, while a secondary purpose was to allocate the catch between each of the three gear types. The basic mechanism for carrying out these policies was area and time closure. The only significant yardstick available to managers from 1920 to 1950 was the estimated number of spawners in periods of former abundance, which had not been reached since before the Hell's Gate slide. To top off the confusion of enforcing government policy, nobody had a great understanding of the productive potential of the stocks. At what level of spawners would they be most productive? How much of the original spawning grounds had been destroyed? Naturally, some degree of guesswork was present. Ray Hilborn and Randall M. Peterman, fisheries scientists of this era, phrase these difficulties quite succinctly:

"the 1920-1950 period can be characterized by a great uncertainty about sufficient escapement, and by important political constraints which required a sufficient harvest for the commercial fisherman. The objective appears to have been a compromise between pressure applied by fishermen for large catches and the biologists' desire for large escapements."<sup>19</sup>

The more things changed, the more they seemed to stay the same. Overcapacity was still a growing concern, and political pressure was mounting once again for the enactment of licence limitation on a fishery-specific basis. At its 1948 annual convention, the United Fishermen and Allied Workers' Union passed a resolution requesting "the formulation and enactment of practical plans of licence limitation based upon conditions in each fishery."<sup>20</sup> In doing so, the Union had, knowingly or otherwise, reiterated the objectives of the Sanford Evans Commission thirty years earlier.

On the other hand, the government had not yet awoken to the presumed need for licence limitation. In 1954, Fisheries Minister James Sinclair stated that "the objection to licence limitation is that those who have a licence are in preferred positions...the licences which cost only a dollar become things of value."<sup>21</sup> The government was also unsure how to address the issue of allocating the excess profits of limited entry to the public at large.

Even so, regulators knew that *something* wasn't working optimally. Beginning in the early 1950s, increased pressure on the resource was leading to much more stringent application of closures. By 1959, the average number of fishing days per week had declined from five and a half to three and a half in only eight years. As written by Doug MacDonald, "it is clear that more effort per unit of time being applied in the fishery was frustrating management attempts to ensure adequate escapement."<sup>22</sup> Fisheries management needed a regulatory overhaul, which was to be arrive in the form of fisheries biologists and economists.

## THE RISE OF FISHERIES BIOLOGISTS AND ECONOMISTS

Despite the efforts of people like Babcock and Prince at the turn of the century, a widespread scientific approach was largely absent from fisheries management. As previously noted, the International Pacific Halibut Commission and International Pacific Salmon Fisheries Commission made perhaps the most significant strides by initiating international research efforts during the 1930s.

Because science itself was not a clear component of policy formation, there was not a demonstrable need to hire scientists. Prior to World War II, fisheries department officials were primarily political appointees with little training beyond their apprenticeship in the department. Their role was "to deliver the maximum volume of fish to the canners at minimum cost to the government, political or otherwise."<sup>23</sup>

In the post-war period, a new generation of fisheries managers emerged, many with formal training in biology. The science of fisheries management assumed increasing importance, with the Hell's Gate fishways standing as a symbol of the emerging prestige of fisheries biology. This shift in the composition of personnel is indicative of a corresponding shift in policy imperatives: science, and later economics, directed management in addition to the various stakeholders within the industry.

The work of the biologists laid the foundation for the principle of Maximum Sustainable Yield (MSY), which was quickly adopted as a policy of harvest management. Peter Larkin, 'the dean of Pacific fisheries biology,' describes MSY as follows:

"the dogma is this: any species each year produces a harvestable surplus and if you take that much, and no more, you can go on

getting it forever and ever (Amen). You only need to have as much effort as is necessary to catch this magic amount, so to use more is wasteful of effort; to use less is wasteful of food."<sup>24</sup>

Unfortunately, fish are by and large non-scholarly creatures, and they tend to ignore even the most sensible theories: MSY did not initially achieve its theoretical promise. Larkin postulated that MSY would only be 100% effective if it commanded research and management expenditures that were greater than the value of the resource itself. Resource economists, in particular, argued that the notion of harvesting to an MSY level violated economic common sense by forcing the fishing effort above its most cost-efficient level. Not content merely to question the biological basis for stock management, the resource economists tried out their own ideas.



Dr. William Ricker undertook studies of population dynamics that assisted the Department of Fisheries' staff biologists, who were experiencing some population growth of their own during the 1950s.

## FISH BY NUMBERS: MAXIMUM SUSTAINABLE YIELD EMERGES AS A MANAGEMENT TOOL

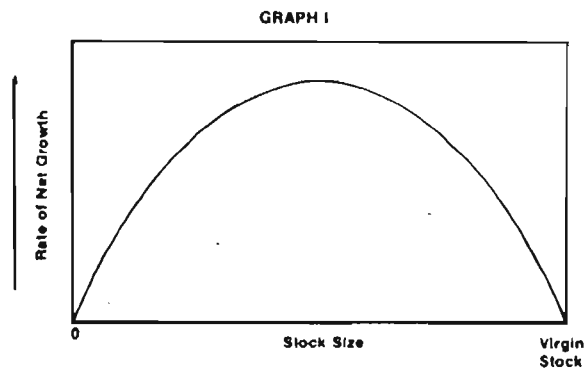
The 1950s brought in the era of extensive use of mathematical models for salmon management, including the Maximum Sustainable Yield model. The following explanation of Maximum Sustainable Yield is an excerpt from *Fisheries Science: How and Why It Works For Marine Fisheries*. While the economic consequences of MSY were not realized for several years after its introduction, they are presented here for clarification.

We'll start at a square one situation. When a stock of fish has never been fished, scientists call it a virgin stock. The total weight of this stock is larger at this time than at any other time after it has been fished. A virgin stock exists in balance with its environment. It's balanced because growth of individual fish in the stock and additions through reproduction equals the weight of fish which die from natural causes (natural mortality) such as predators, starvation or disease. The net (total) growth rate of a virgin stock is zero because the weight of the fish which die from natural causes cancels out the weight of the fish being hatched and growing in the stock.

Fishing upsets the balance of a virgin stock. As soon as fishing begins, the death or mortality rate of the stock goes up, and because deaths by fishing are removing fish from the stock, the size of the stock goes down. However, because there are less fish in the stock, there is more food for the fish that escape the fishermen. In other words, there is less competition for food. When there is less competition for food, individual fish grow faster and fewer fish die from natural causes.

The faster and more intensively a virgin stock is fished, the faster the remaining fish grow and replace themselves. So even though the stock size goes down because fish are being taken from it, the net growth rate of the stock as a whole goes up. The stock keeps trying to replace itself as though it was in the virgin state. It adds new weight to itself at a faster rate, trying to replace the weight the fishermen remove.

But this net growth rate does not continue to go up forever - it's related to the size of the stock. When the size of the stock goes down to a certain level, the net growth rate reaches its highest point and then drops off quickly. It will eventually diminish to zero, when the stock size approaches extinction. This up and down relationship between stock size and the rate of net growth is shown in *Graph 1*.



When fish harvesters start fishing a virgin stock, their total catch (total tons of fish caught) will be high and the catch rate (pounds of fish per hundred hooks fished, or pounds per otter trawl tow, for example) will be high at the beginning, too. At this time, the stock is being only

lightly exploited, the net growth is increasing, and the size of the stock as yet hasn't gone down very much.

However, as more and more vessels fish the stock, the stock size is, of course, dropping down from fishing mortality, and the net growth rate of the stock is getting closer and closer to reaching its peak. Scientists call the level at which this peak or high level of total catch is reached the level of Maximum Sustainable Yield or level of MSY.

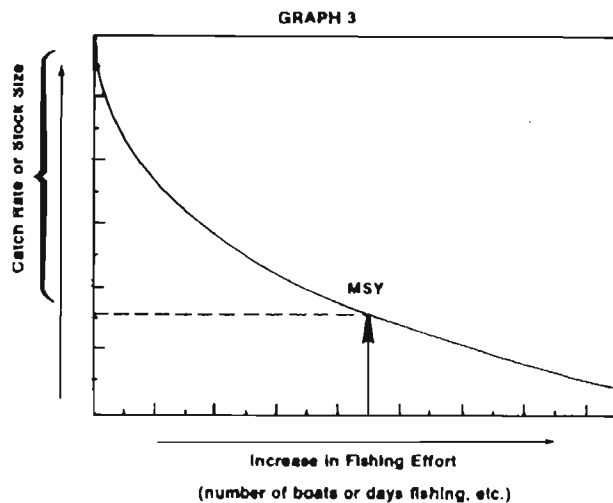
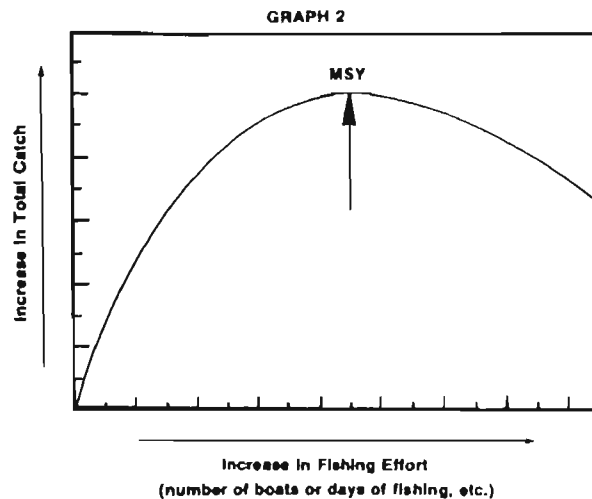
As more fishing brings the stock closer and closer to the level of MSY, the total catch will increase slowly, but a single boat's catch rate will really start to drop off. At the level of MSY, individual catch rates will have gone down 50% or more from what they were for the virgin stock. *Graph 2* shows how the total catch increases before the MSY level is reached and drops off after. *Graph 3* shows how both the size of the stock and the catch rates drop down quickly from the point when the stock is first fished.

To sum up: if a stock is fished at the level of MSY or close to it, the total catch will be maximized but individual catch rates will become lower and lower as the MSY level is approached.

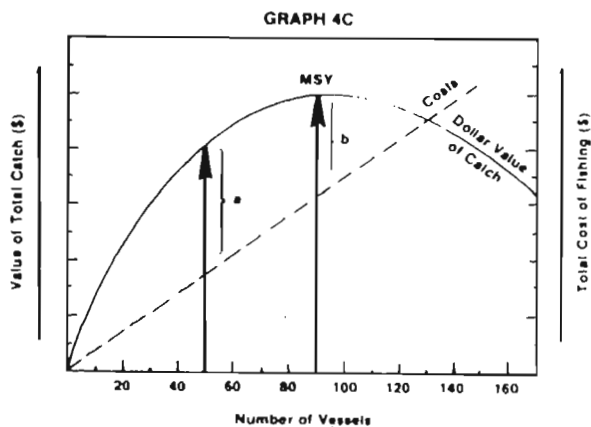
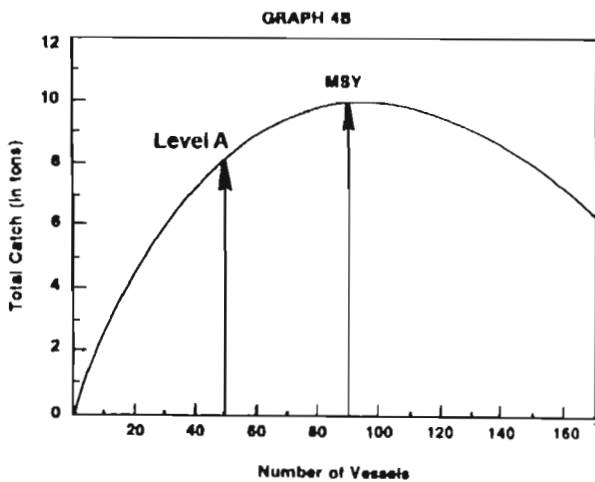
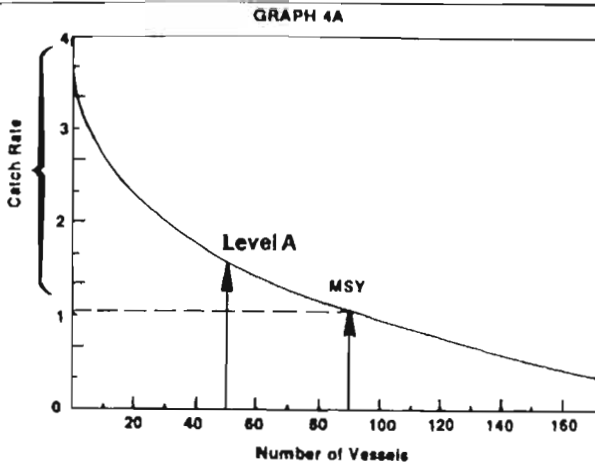
If fish harvesters' catch rates are low, they will soon be placed in a break-even financial situation at best, and will lose money at worst. They will be making more trips out, for example, to catch basically the same amount of fish. On the other hand, if the whole fishing effort is controlled (as it is under the limited entry program) so that fish harvesters take a certain amount of fish at some point before the level of MSY is reached, their costs will be lower and their returns higher.

*In other words, if our purpose of fishing is to maximize the poundage of fish caught, regardless of the cost of doing so, then the MSY level is the most favourable approach. However, if our purpose is to maximize earnings from our fishing effort (as is the case in Canada), then we need to fish at a yield level where the costs of fishing are taken into account.*

Let's look at these two approaches in terms of vessels, catch rates (or cost of fishing) and total catch, using an example stock. If the stock was fished at the level indicated by the arrow







Level of Fishing	Number of Vessels	Tons per trip	Total Catch (in tons)
Level A	50	1.75	87.5
MSY Level	90	1.09	98.0

"A" on *Graph 4A* (which shows catch rates) and *Graph 4B* (which shows total catch), the results would be those shown on the table.

Worked out in percentages, it can be seen that from the level indicated by the arrow "A" to the MSY level, the number of vessels fishing has gone up 80% and the total catch has gone up 12%. However, the tons of fish caught per trip out, or catch rate, has gone down 37%. In other words, the more the stock is fished, the faster it reaches the MSY level, and the closer one gets to the MSY level, the more it costs to fish.

We can examine *Graph 4C* to see more clearly how the cost of fishing is higher at the MSY level than at a point before MSY is reached. Look at the distance between the dollar value of the catch and the cost line at the level indicated by the arrow "a" and the MSY level "b".

Marine fisheries management is now founded on the principle discussed above, commonly called a "best use" basis. The cut-off point for total allowable catches is now geared to the optimum sustainable yield level which corresponds to a point where net returns from the total fishery are highest- i.e. before the MSY level is reached. In other words, catch quotas are set on the basis of economic catch rates, with the biological facts setting the limits. These economic catch rates will vary, of course, from species to species, and depend very much on costs and prices received.

*from Fisheries Science: How and Why It Works For Marine Fisheries*

## H. SCOTT GORDON CATCHES THE GOVERNMENT'S EYE

It's been said that an economist is someone who sees something work in practice and wonders if it will work in theory. Enter Canadian economist H. Scott Gordon, who is widely cited as the first to give overt recognition to the economic consequences of overfishing. "The Economic Theory of a Common Property Resource: The Fishery" expressed in a dozen pages what many people had been trying to say for more than a century. Although fishery managers such as Prince, Babcock and Found had understood the effects of too much competition, only in the 1950s did Gordon give theoretical expression to the way that increased effort reduces both abundance and profitability.

Gordon wished to direct attention away from the strictly biological issue of fish depletion to such economic problems as the dissipation of profits ('rent'), misallocation of the fleet, and the poverty of fish harvesters. He used the phrase 'common property' to describe the nature of sea fisheries, meaning that they are not privately owned or controlled, but that everyone has access to fish.

Essentially, Gordon reasoned that common property is a permanent invitation to overfishing. Where fish harvesters can claim as much as possible in open competition with each other, they have a strong incentive to expand fishing power to catch a bigger share of a fixed pie. Every fish that is left alone will probably end up in someone else's nets, so individuals are induced to catch what they can as quickly as possible. Temporary profits stimulate fish harvesters to expand their vessels' fishing capacity in order to increase their catch. Short-term profits have the additional side-effect of attracting new entrants into the fishery.

The end result will inevitably be expansion of the fishing fleets, even if the fleets are *already* large enough to take the available catch. As they expand, the additional labour and capital raise costs and reduce profits. This process continues until the fishery reaches a kind of Malthusian equilibrium, characterized by higher costs and redundant fishing

capacity. Fisheries research scientist Michael Graham has referred to this process as The Great Law of Fishing: "Fisheries that are unlimited become unprofitable."<sup>25</sup> Paradoxically, this process of decline is most pronounced in fisheries with the greatest economic potential.

Gordon's work, and the work of other early resource economists such as F.T. Christy, Anthony Scott and James Crutchfield, was groundbreaking for another reason. It heralded an absolute shift in fisheries policy, giving expression to something that had been an implicit desire of regulators for years. The success of fisheries management would henceforth be measured not only in terms of stock survival, but the economic benefits of fishing. The offspring of MSY and maximum economic rents was Optimum Economic Yield, which Peter Larkin defined as "the maximum sustained yield of social benefits."<sup>26</sup>

This new concept of a common property problem gained momentum in regulators' thinking so quickly that it was no longer an idea, but an ideology. It motivated fisheries biologists to conserve and enhance the resource, and it motivated fish harvesters to accept government management of the resource. On the other hand, if the government ever tried to assume rights of ownership (e.g. in attempting to reallocate the resource), fish harvesters would henceforth have a justification for mounting opposition.

Other theorists were to investigate the common property problem in a wider context. Garrett Hardin coined the term 'tragedy of the commons,' suggesting that "freedom in a commons brings ruin to all."<sup>27</sup> That is, commonly-owned resources, even when replenishable, will ultimately be depleted and destroyed as population increases. Others take a different viewpoint, arguing that the term 'common property' is at least technically inaccurate, since the government has implicitly defined property rights by granting licences to fish. The real problem, reason these critics, is a disjuncture between rights of access and rights of management: fish harvesters lack the management rights normally associated with property. Consequently, "instead of talking about the tragedy of the commons, we should be concerned with the tragedy of mismanaged state property."<sup>28</sup>

## **SHARING THE GOLD: AN ILLUSTRATION OF THE COMMON PROPERTY PROBLEM**

For those whose grasp of economic jargon is as feeble as my own, the following story from Scott and Neher's *The Public Regulation of Commercial Fisheries in Canada*, while admittedly fanciful, should shed some light on the nature of the common property problem.

To start with, we will create an imaginary resource "in the form of a widow's cruse (pot or vessel) streaming with gold coins at 20 troy ounces per minute. Assuming that gold has true social value, does having the cruse truly represent value to society? The answer is not obvious. It depends crucially on the social and economic arrangements devised to reap the harvest.

"If citizens have freedom of access to the common-property pot, it would be natural to expose the cruse in the city square with an invitation for all to help themselves. It would be in the interests of individuals to drop their normal employment to reap free gold. People would crowd about the pot, each grubbing what he or she could. We could predict that the harvest would go to the powerful, the agile, and the clever...

"...more important for this exercise is the efficiency problem in the remainder of the economy. As citizens downed tools and congregated at the fount, society would lose its usual product. And the crowd would increase, with crowding reducing each person's expected reward, until the marginal grubber for gold could expect to earn no more (or less) at the pot than he or she could have earned in regular employment. At this point, the value of the gold would be matched by lost production elsewhere in the economy, and the cruse would have lost most, if not all, of its social value.

"If simple crowding and altercation are sufficient to diminish the pot's social value to nothing, then it is perhaps academic to speculate how human ingenuity can enlarge the waste of the free-for-all arrangement. Escalation of effort, from the introduction of pocket knives through poison gas and laser death-rays, is constrained only by external law-and-order rules and by the relative costs and benefits of these warlike measures, as calculated by each individual without regard for the welfare of the group. If we call this yield a rent, we can say that the rent has been *dissipated* by free-for-all stuffing and crowding. So long as citizens had free access to it, the cruse had no value, and nobody would pay to own or acquire it."

We will leave it to the reader to draw parallels between the cruse of gold and commercial fisheries. One critical distinction should be drawn, however: fisheries have the added complication of being an 'extinguishable' resource.

*· adapted from Scott and Neher, The Public Regulation of Commercial Fisheries in Canada*

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***"The success of fisheries management would henceforth be measured not only in terms of stock survival, but the economic benefits of fishing."***

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## THE GROWTH OF THE SPORT FISHERY

While sport fishing has existed in some form throughout B.C.'s history, the growth in affluence and leisure time after World War II assured sportfishing of greater importance in the fishery. As the sector grew, however, the government was conspicuous in its absence of a sportfishing policy. In 1960, Sol Sinclair wrote:

"The policy of the Department of Fisheries is to impose a minimum of restrictions on sport fishing, with year-round fishing permitted in all tidal waters. In keeping with this policy to encourage sports fishing and to promote recreational and tourist activities, certain fishing areas are denied to commercial fishermen."<sup>29</sup>

This policy of abstaining from regulation of the sport fishery was increasingly tested over time, as catch, size and area restrictions were applied to the fishery. A daily bag limit of ten salmon was introduced in 1951; this was reduced to eight in 1959 and four in 1963. The minimum size for keeping salmon increased from eight inches in 1951 to twelve inches in 1965 and eighteen inches for chinook in 1981. Even so, a sportfishing licence was not required, and would not be for some time.



The growing sportfishing industry came to the attention of policy-makers after the Second World War. Increasingly stringent restrictions on daily limits and allowable catch sizes became the favoured means of ensuring conservation.

## THE 1960 SINCLAIR REPORT

In 1960, the Department of Fisheries was not universally admired by stakeholders in the fishing industry. Fish harvesters and processors were particularly upset with the government's response to the huge Adams River runs of 1958. Fearful that the sudden abundance of fish would lead to overcrowding, the IPSFC had killed almost a million fish by placing an electric fence at the mouth of the Adams River. Consequently, the commercial sector felt that they had been denied a bonanza harvest. A costly strike in 1959 had also raised tensions within the industry.

In the great tradition of Royal Commissions, Fisheries Minister J. Angus MacLean appointed a University of Manitoba economist named Sol Sinclair to study the issue of licence limitation. Though its recommendations took some time to be enacted, Sinclair's report eventually "was to form the cornerstone of fisheries licensing policy for more than a generation."<sup>30</sup>

Relying on Scott Gordon's ideas, Sinclair concluded that "in a fishery with unrestricted entry, fishing will always be intensified beyond the optimum economic level and most likely to the point where the net yield is wholly dissipated."<sup>31</sup> The theories of the tragedy of the commons and optimum sustainable yield had become an influence on government policy. Sinclair's plan was fairly simple, calling for a five-year moratorium on new licences followed by a competitive auction for the existing licences. These licences would be transferable among fish harvesters, who would pay only token fees.

One alternative that Sinclair dismissed was sole ownership of the resource. Theoretically, it would be in the interests of a sole owner to maximize returns by optimizing exploitation of the resource. Given the political difficulties of implementing such an option, however, Sinclair decided against it. In his mind, it would be "out of the question on many legal, political, or social grounds quite apart from any possible abuses that may arise out of the monopoly position...we must therefore look for some middle position."<sup>32</sup> For similar reasons, Sinclair felt that a system of taxes on fish harvesters and their catch would not diminish the difficulties associated with overcapitalization.

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***"Anyone who can come up with a plan to limit licences justly and in a democratic manner would be blessed with so much insight and intelligence he would be too smart to have anything to do with the fishing industry."***

**Western Fisheries Magazine**

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## THE AFTERMATH OF THE SINCLAIR REPORT

As convenient as they must seem during times of crisis, the recommendations of Royal Commissions can certainly prove controversial and difficult to enact for the federal government. Angus MacLean was the Fisheries Minister in a crisis-ridden government, and was unsure about how to deal with Sinclair's controversial recommendations. Even though most interest groups agreed with the principle of limited entry, they had very different ideas about the form it should take.

The UFAWU, the largest labour organization in the industry, was both the most consistent proponent of licence limitation through the years and the most vocal critic of Sinclair's report. They considered cyclical and seasonal unemployment to be the most significant contributors to overcrowding in the fisheries, and suggested that alternative employment opportunities were not as readily available as Sinclair implied. The Union also vigorously opposed the idea of a licence auction that might eliminate some *bona fide* fish harvesters from the industry and 'enslave' the remainder to the processors.

Other organizations reflected the diversity of views on licence limitation: the Pacific Trollers' Association was in favour of single-gear licensing; the Fishing Vessel Owners' Association wanted licences to apply to gear and vessels instead of fish harvesters; the Prince Rupert Fishermen's Co-op didn't want any licence limitation at all; and the processors felt that the proposal "failed to guarantee their future through some control on entry to processing and threatened to make fishermen more powerful."<sup>33</sup>

Unable to find strong backers from any sector of the industry, MacLean declined to act. The window of political opportunity passed when minority governments were in power from 1962 to 1968, a period that G. Alex Fraser labels 'the twilight years.' In March 1962, *Western Fisheries Magazine* had this to say:

"It looks as if licence limitation is going to be quietly forgotten by the government, if not by some fishermen. There are many in the industry, especially the independents,

who will say good riddance, and we are inclined to agree with them...anyone who can come up with a plan to [limit licences] justly and in a democratic manner would be blessed with so much insight and intelligence he would be too smart to have anything to do with the fishing industry."<sup>34</sup>

As it turned out, this viewpoint was incorrect. Whether negotiations were just and democratic or not, the government had accepted the sermons of Gordon and Sinclair as gospel. It was determined to enact licence limitation in some form. Geoff Meggs sees the government's steadfast pursuit of its policy as a turning point in fisheries management:

"For more than eighty years, it had been the processors who wanted changes and dictated them to government. This time, it was the government that forced its views on the processors...Ottawa's officials agreed some form of licence limitation was essential."<sup>35</sup>

For the first time, the main pressure for limitation was coming from outside the industry. Fisheries minister Louis Robichaud announced a licence limitation program in 1965, only to withdraw it within the year "because of unforeseen difficulties."<sup>36</sup>

The difficulties surrounding the implementation of licence limitation were to disappear. The processing sector, recognizing Ottawa's commitment to the idea of limited entry, made an abrupt about-face and became determined to make the most of licence limitation. In 1967, the Fisheries Association of B.C. (representing the processors) proposed a full limitation program that would ensure "passage of the buyers' licences to the most stable and continuously operating processors."<sup>37</sup> Significantly, the processors added the concept of a government-funded buyback in order to reduce the fleet to some magic number. With a few minor exceptions, the processors' plans were to become government policy.

The election of the Trudeau government in 1968 stirred licence limitation out of an eight-year hiatus. With the processors fully committed to action and a majority government, Ottawa was able to move at last.

## SUMMARY

Fisheries policy during its second phase was a double-edged sword, centering around extensive government assistance in industry development and the continuing use of watchful regulation to ensure conservation.

Federal assistance increased significantly during and after World War II. Subsidies were introduced to facilitate marketing, to ensure the continued presence of fish harvesters, to improve fish handling and processing, and to encourage regional development and corporate restructuring. It has been suggested that, by causing fishing and processing capacity to expand excessively, assistance programs probably exacerbated cycles and enhanced the industry's dependence on the public treasury. In other words, government assistance clearly undermined the second policy objective of controlling the fishing effort. Not only that, but government assistance came to be taken for granted by both the donors and the recipients of the financial aid. Consequently, the eventual removal of assistance programs was painful and difficult to accomplish.

That is not to say that fisheries policy-makers did not envision better methods of management. The explosion of fishing technology and capacity had far-reaching consequences, and the government showed an interest in extension of Canadian fishing jurisdiction. International cooperation in fisheries management was strengthened, with the International Pacific Salmon Fisheries Commission and the International Pacific Halibut Commission demonstrating that cooperation in stock management was both possible and profitable. The sport fishery, too, was showing signs of economic growth as it attracted increasing numbers of participants. Better methods of management had their price, though. Japanese fishing was all but eliminated amidst the xenophobia of World War II, and Native involvement in commercial fishing was still diminished from its historical levels.

Up until the end of the Second World War, fisheries policy had been concerned almost exclusively with conservation of the stocks, using a huge variety of controls on permissible gear, area and times. These measures were aimed at limiting catches to something that biologists called Maximum Sustainable Yield (MSY), which became the governing ideology in stock management. By restricting the technology and efficiency of fishing effort, though, government regulators found themselves on a treadmill, designing new restrictions to keep pace with technology and the ever-present tendency of fishing fleets to expand.

The results were mixed. While some attempts at conservation were successful, a new breed of academics, called resource economists, came out of the woodwork in the 1950s to say that little or nothing had been achieved in economic terms. Prominent among them was H. Scott Gordon, whose seminal article "The Economic Theory of a Common Property Resource: The Fishery" established a new standard for fisheries management. The potential benefits of fish conservation, argued Gordon, were wasted by excessive costs in an unlimited fishery. In a sense, Gordon's arguments signalled the beginning of the end for MSY.

As alternate employment increased after World War II, limiting the number of licences became more feasible. The ancient ideas of Whitcher and Prince were finally to form the basis for the modern system of management. The notion of limited entry found increasing support among government regulators, who commissioned economist Sol Sinclair to investigate limited entry in 1960. Sinclair's support for a licence limitation program met with both "a loud, eager expression of support, an overwhelming affirmative vote" as well as disapproval, and fisheries management entered a decade of indecision. The 1960s saw a succession of minority federal governments that were reluctant to implement politically sensitive programs in the absence of industry consensus. With the election of a majority government and industry support mounting in 1968, the curtain was about to be raised on a new era.

## ENDNOTES

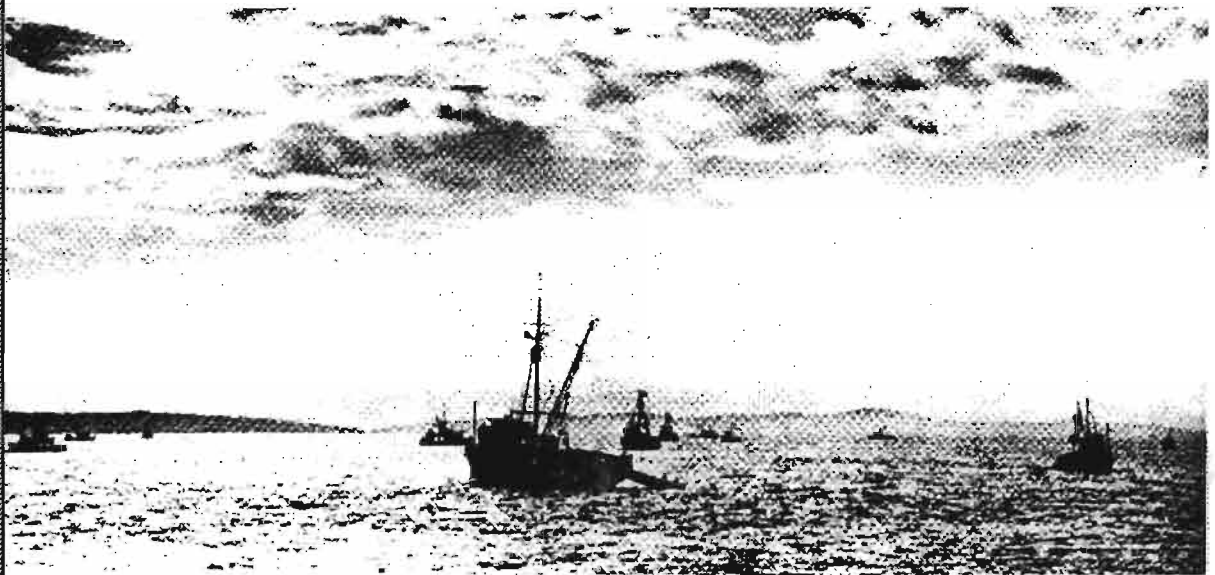
- <sup>1</sup> Lyons, 212.
- <sup>2</sup> Meggs, 137.
- <sup>3</sup> *Ibid.*, 153.
- <sup>4</sup> R.W. Crowley, B. McEachern and R. Jasperse, *A Review of Federal Assistance to the Fishing Industry Since 1945* (Ottawa: Economic and Special Services Report No. 71, 1990) 16.
- <sup>5</sup> Department of Fisheries, *Annual Report 1942/43*.
- <sup>6</sup> Forester *et. al.*, 163.
- <sup>7</sup> Crowley *et. al.*, 11.
- <sup>8</sup> Marvin Shaffer, *An Economic Study of the Structure of the British Columbia Salmon Industry* (Vancouver: Salmonid Enhancement Program, 1979) 135.
- <sup>9</sup> Marchak *et. al.*, 173.
- <sup>10</sup> Pearse, 122.
- <sup>11</sup> James A. Crutchfield, *The Public Regulation of Commercial Fisheries in Canada: The Pacific Halibut Fishery* (Ottawa: Economic Council of Canada Technical Report No. 17, Case Study No. 2, 1981) 18.
- <sup>12</sup> *Ibid.*
- <sup>13</sup> *Ib.*, 44.
- <sup>14</sup> Marchak *et. al.*, 157.
- <sup>15</sup> Forester *et. al.*, 205.
- <sup>16</sup> Parzival Copes, "The Evolution of Marine Fisheries Policy in Canada." In *Journal of Business Administration*, Vol. 11. 140.
- <sup>17</sup> Marchak *et. al.*, 159.
- <sup>18</sup> Copes, 141.
- <sup>19</sup> Derek V. Ellis (ed.), *Pacific Salmon Management for People* (Victoria: University of Victoria, 1977) 74.
- <sup>20</sup> Sol. Sinclair, *A Licensing and Fee System for the Coastal Fisheries of British Columbia* (Vancouver: Department of Fisheries and Oceans, 1978) 22.
- <sup>21</sup> *Ibid.*, 23.
- <sup>22</sup> J. Douglas MacDonald, *The Public Regulation of Commercial Fisheries in Canada: The Pacific Salmon Fishery* (Ottawa: Economic Council of Canada, Technical Report No. 19, Case Study No. 4, 1981) 5.
- <sup>23</sup> Meggs, 176.
- <sup>24</sup> Peter Larkin, "An Epitaph for the Concept of Maximum Sustainable Yield." In *Transactions of the American Fisheries Society*, Vol. 106, No. 1.
- <sup>25</sup> Michael Graham, *The Fish Gate* (London: Methuen, 1949).
- <sup>26</sup> Larkin.
- <sup>27</sup> Garrett Hardin, "The Tragedy of the Commons." In *Science*, Vol. 162, No. 3. 1243.
- <sup>28</sup> Marchak *et. al.*, 5.
- <sup>29</sup> Sol. Sinclair, *Licence Limitation - British Columbia: A Method of Economic Fisheries Management* (Ottawa: Department of Fisheries and Oceans, 1960). 17
- <sup>30</sup> Meggs, 180.
- <sup>31</sup> Sinclair 1960, 12.
- <sup>32</sup> *Ibid.*
- <sup>33</sup> Meggs, 183.
- <sup>34</sup> Sinclair 1978, 29.
- <sup>35</sup> Meggs, 183.
- <sup>36</sup> *Ibid.*, 186.
- <sup>37</sup> *Ib.*, 185.



# CHAPTER THREE:

## BRAVE NEW WORLD

*1969 - PRESENT*



"There is nothing more dangerous to manage than the creation of a new order of things ...the initiator has the enmity of all who would profit by the preservation of the old institution, and mere lukewarm defenders of those who would gain by the new ones."

*Niccolo Macchiavelli*

## THE DAVIS PLAN

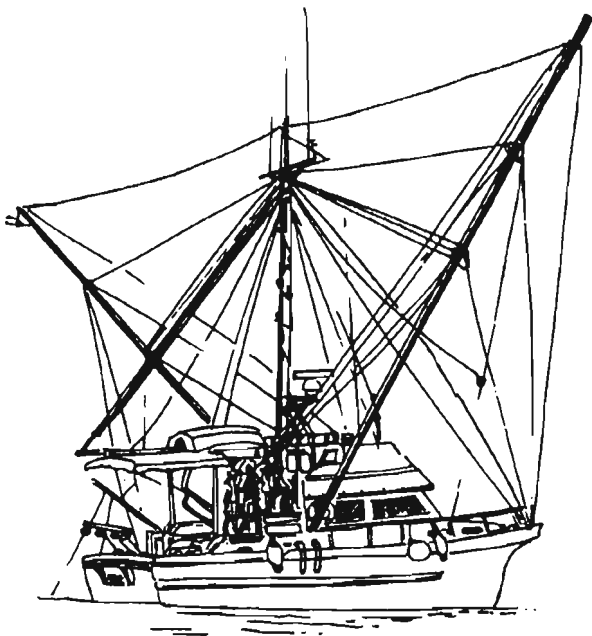
Historians generally concur that the appointment of Jack Davis, a B.C.-trained economist, as the Minister of Fisheries was one of the events that made possible a fundamental shift in government policy. Within a month of the federal election in 1968, Davis visited the west coast, where fishing industry organizations almost unanimously declared the need for some form of licence limitation.

Davis was encouraged about the prospects for limited entry. In December 1968, he announced a comprehensive plan "to increase the earning power of B.C. salmon fishermen and to permit more effective management of the salmon resource by controlling the entry of fishing vessels into the fishery."<sup>1</sup> Certainly, the notion of common property had been enunciated in government policy for the first time: the plan was designed to "reduce the costs of production and create an economic surplus,"<sup>2</sup> at the same time securing a lasting improvement in fish harvesters' incomes. A conservation imperative was still acknowledged by the need for 'more effective management.' Generally, then, it appears that the Davis Plan was fundamentally new both in practice and in its intentions. No longer would there be a public right to fish. Rather, those who were fishing would have a collective right to exclude others.

The plan itself involved four phases. The first was intended to freeze the fleet by licensing only those who could demonstrate a dependence on the salmon fishery. Phase two was intended to reduce fleet size gradually by buying out excess vessels. The third phase sought to improve vessel standards and product quality, while the goal of the final phase was to introduce economic regulations to improve fishing effort for the reduced fleet.

The UFAWU was largely alone in its opposition to the plan. It had long argued in favour of limited entry, but was opposed to the Davis Plan because it felt that "the licensing of vessels rather than individuals and the saleability of licences would lead to overcapitalization."<sup>3</sup> The Union also suspected that the real thrust of government policy was to "isolate the UFAWU and destroy its support in the fleet"<sup>4</sup> by vesting control of the resource in the hands of the processors.

On the other hand, small-vessel owners generally approved of the plan, as it offered attractive buy-back provisions and the possibility of reduced competition and increased returns. The Fisheries Association, representing processors, was another staunch supporter of the plan. Restrictions in the size of the fleet would theoretically prolong the longevity of the industry without depleting the processors' access to supplies for their existing markets.



## PHASE ONE OF THE DAVIS PLAN

By and large, Phase One stayed true to Sinclair's recommendations of eight years earlier. Fleet stability was to be achieved by creating a specific salmon licence instead of the general fishing licence that had previously been required. Vessels were licensed rather than fish harvesters, partly for reasons of administrative simplicity. Licences were conditional upon proof of participation in the salmon fishery: those harvesters with catches greater than 10,000 pounds received an 'A' licence, while others received a 'B' licence that was eventually to be phased out. Class 'A' vessels could be replaced if retired, and licence transfers upon vessel sale were permitted. Licence fees doubled, but remained nominal at \$10. One of Sinclair's recommendations that was *not* followed was that licences should initially be non-transferable, so that a sufficient reduction in the number of vessels could be achieved by attrition. This provision, reasoned Sinclair, would have removed the need for a buy-back program.

Phase One encountered a number of difficulties. For one thing, its implementation was sensitive to political pressure. In response to the UFAWU's fears about processor monopolies, Davis limited the number of boats each company could own. When accused of slashing jobs, he relaxed eligibility requirements by allowing *all* fishing vessels, not only salmon vessels, to qualify for a licence. With one stroke of the pen, the fleet increased by about 150 vessels. "In retrospect," writes G. Alex Fraser, "this modification caused serious problems for the licensing programme."<sup>5</sup> Don Cruikshank is less diplomatic about the relaxation of eligibility rules: "the Department condoned the present status through their omissions and commissions...they issued more licences than the resources can reasonably support."<sup>6</sup>

While many government policy-makers were rattled, Davis did not seem to be. He reiterated that the government's policy would not fluctuate with the claims of stakeholders: "if it happened at some point in time that two-thirds of the fishermen didn't think it was the best scheme in the world, I would still [put it in] because I think it is the best."<sup>7</sup>

At its inception, the Davis Plan also neglected to control for net tonnage increases when boats were replaced. As one critic noted, "The 'A' licence system is going to completely defeat your avowed purpose...the capital investment in the industry is going to increase instead of decrease, because every time a Class 'A' fishing vessel changes hands it will do so at a vastly inflated value."<sup>8</sup> In two years, 76 vessels with a carrying capacity of 186 tons and a value of \$174,000 were replaced by 76 vessels with a carrying capacity of 596 tons and a value of \$1,773,000. For this reason, a 'ton for ton' replacement rule was brought into effect in 1970. Naturally, this restriction brought with it administrative and measuring difficulties, and the race between the government regulators and the boat designers was on.

Limiting tonnage hadn't worked either. With a humph of frustration, the government now had to limit length. Consequently, the configuration of vessel technology became a direct result of the sequence of regulatory changes. As Rognvaldur Hannesson puts it, the government's futile attempts to restrict fishing effort were "like pressing a balloon in one place, it just expands in all directions."<sup>9</sup> It is clear that each successive restriction was necessitated by the failure of the previous restrictions to control an expanding fleet. This process of circumventing input controls has come to be known as 'capital stuffing,' which is essentially a new manifestation of the common property problem in the presence of limited entry.

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***'The government's futile attempts to limit effort were like pressing a balloon in one place: it just expands in other directions.'***

**Rognvaldur Hannesson**

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## PHASE TWO OF THE DAVIS PLAN

The second phase of the Davis Plan dealt with reducing the fleet by substantially increasing licence fees, phasing out the 'B' fleet, and funding a buy-back program. In response to luke-warm results in the first year of the plan, Davis also tightened the requirements for an 'A' licence, thereby increasing the size of the 'B' fleet.

Once again, an inattention to the details of implementation reduced the effectiveness of the plan. One such case was the government's decision to allow two or more 'A' licences to be converted into a single 'A' licence. It sounded like an efficient method of reducing capacity, but it fell short of success by encouraging the practice of 'pyramiding.' Hypo-

government would sell it at auction with the proviso that it was never to be used again in the B.C. commercial fishery.

For a brief time, the buy-back program enjoyed some success, although it sputtered to a halt in 1974. It had succeeded in removing from the fishery 361 boats, representing about 7% of the fleet. These boats were valued at about \$6 million, but indications are that the new investment in the salmon fishery was already many times that amount.

What had gone wrong? One of the reasons the buy-back program didn't work was that licence values had escalated beyond the government's ability to pay for them. Licences had come to be seen as a form of property under the Davis Plan, and, with limita-

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***'The buy-back program succeeded in removing 7% of the fleet...but indications are that the new investment in the salmon fishery was already many times that amount.'***

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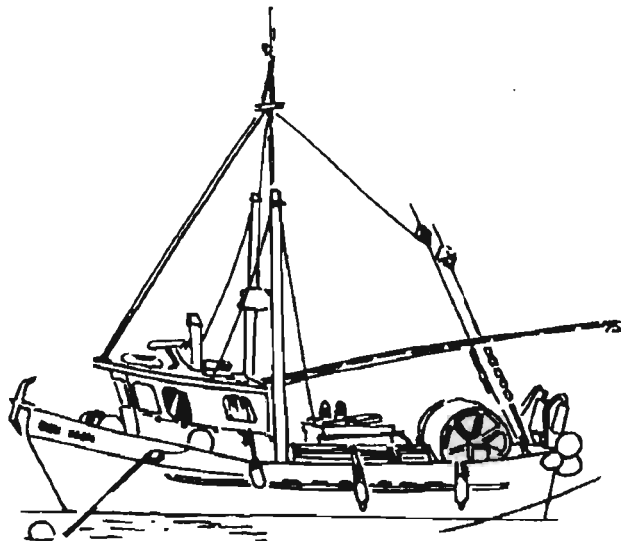
thetically, the licences of a few small gillnetters could be combined into a seine licence, enabling a much greater fishing capacity than that of the original gillnetters. Moreover, the move to seine vessels corresponded with increasing capacity – no restrictions were placed on allowable gear types until 1977.

The government-run buy-back program, too, was intended to retire fishing capacity. In theory, the proceeds of vessel sales and higher licence fees were to be used to buy out a portion of the 'A' fleet. Prices were to be negotiated and participation in the scheme would be voluntary. When a boat was purchased, the

tion on their numbers, steadily increased in market value. By the end of 1973, licences were selling for \$4,000 to \$5,000 per vessel ton. Parzival Copes calls this process an 'expectations trap,' writing that "the anticipation of higher returns led to an increase in licence values, which stopped the buy-back programme, and thus prevented fulfilment of the anticipated higher earnings."<sup>10</sup> It has also been suggested that values increased because licence fees remained minimal: in a sense, the increased profitability of the fleet was not 'captured' by the government. In addition, as the number of vessels in the fleet decreased, the earning potential of the remaining vessels grew accordingly.

Limited entry was not the only contributing factor to the escalation of licence values, however. Large salmon runs combined with increasingly high prices for salmon and herring during the 1970s to make the fishing industry a lucrative investment. Markets were expanding as well, as the Japanese sought new avenues of supply after their high-seas fishing had been curtailed. Sol Sinclair writes that "everything that was happening in 1973 explicitly or implicitly embodied an incentive for fishermen to stay in fishing."<sup>11</sup> In this sense, the partial failure of the buyback resulted not so much from a lack of foresight in government policy but from an untimely market development.

Buy-back also had adverse consequences for some isolated fishing communities. The buy-back program probably removed a disproportionate number of non-urban fish harvesters, since such vessels were earning less money and their debts had escalated most rapidly. It can be inferred from these effects that the government did not fully implement its policy of maintaining the economic viability of isolated fishing communities (the government of Canada had stated explicitly since 1970 that it would only 'rationalize' the industry as quickly as alternative opportunities were opened up for people affected by these changes).



## PHASES THREE AND FOUR OF THE DAVIS PLAN

The third phase of the Davis Plan was designed to improve vessel standards, safety and products. When its provisions were implemented in 1973, they stressed greater hold size, better insulation from heat, improved refrigeration, and so on. The effect of these standards upon fleet size was probably minimal, particularly since vessels could be upgraded if they failed inspection.

Davis informed the processors in late 1971 that he intended to press on with the final phase of his plan. One of the goals of this phase was to maximize fleet mobility and improve quality by reducing the number of river-caught salmon. With one-day openings, of course, this reliance on ocean fishing would necessitate a further investment in fleet mobility and transportation costs. The government's policy, it seems, had re-acquired a desire to assist in the delivery of the best quality fish.

In 1972, faced with a renewed economic crisis, Davis put decision-making authority for Phase Four in the hands of a West Coast Fleet Development Committee. Representatives of fish harvesters' organizations, the government, processing firms and Natives all sat on this ground-breaking board. The Committee's final report, drafted in part by an economist named Peter Pearse, "was to provide the framework for future industry development."<sup>12</sup> An endorsement of the Davis Plan, the report urged continued fleet reduction, buy-back programs, catch royalties, acceleration of enhancement programs, and elimination of fish harvesters' unemployment insurance. The Committee's recommendations proved too politically sensitive to be implemented, and they gradually fell by the wayside. An interesting aside: the Committee's minority report, prepared by the UFAWU, echoed the 1919 Sloan Report by advocating "public ownership and management of fisheries resources."<sup>13</sup>

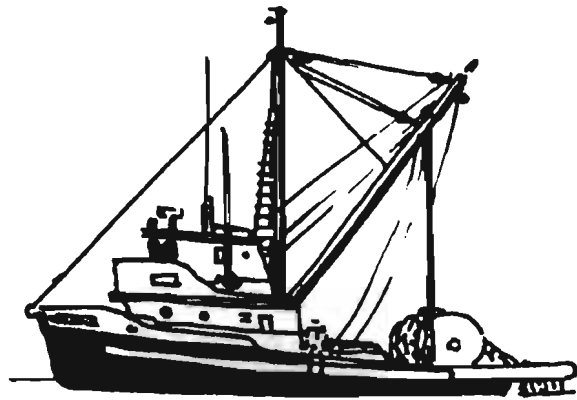
## A REPORT CARD FOR THE DAVIS PLAN

Most analysts agree that the Davis Plan succeeded in downsizing the fleet but not in removing excess capacity. As one group summarized:

"The Davis Plan was successful in providing one of the world's most efficient and modern small boat fleets. And therein lies the problem. The fleet has a tremendous increase in catching power at the cost of a near total dissipation of economic rents."<sup>14</sup>

G. Alex Fraser is somewhat more charitable, stating that "the programme was a reasonable success."<sup>15</sup> After fifteen years of restrictive licensing, already-excessive capacity had doubled or trebled by 1982. From 1969 to 1982, the capital value of vessels (including the trading value of their licences) escalated by almost 500% in real dollars, despite a reduction in fleet size of 1,500 vessels.

The government's licence limitation policy contained a fundamental error in its basic assumption that vessel numbers alone could be used to control the intensity of the fishing effort. It soon became apparent that vessel numbers were a very poor proxy for the amount of capital employed. While the Davis Plan *did* recognize that further rationalization was needed beyond the initial limitation of effort, the critical fourth phase proved too politically difficult to implement and the effectiveness of the entire scheme was undermined. In response, the government adopted a policy of placing additional restrictions on length, tonnage, gear, time and area, but these 'input controls' were limited in success. There are so many



dimensions to a vessel's fishing capacity, and they are so manipulable in the hands of a fish harvester, that each restriction was inevitably overcome. Consequently, fishing costs rose but catches did not. As the 1970s progressed, policy makers came to realize that "limited entry programs do little, if anything, to remove the *cause* of the problem, that is, the incentives that drive the overinvestment treadmill."<sup>16</sup>

Nonetheless, the failure of the licence limitation policy to effect radical improvement was not necessarily due to its imperfect design. It is highly likely that the capacity of the fleet rose by a lesser extent than it would have in the absence of the Davis Plan. In addition, the development of new markets and the boom period for salmon prices adversely affected the buy-back programme's chances for success.

While licensing fish harvesters and vessels to fish on the Pacific had been a recurring control method since the late 1880s, the adoption of a licence limitation program in 1968 represented a massive change to the continuing problems of the fishery. Earlier attempts had dealt with fishing effort strictly on a conservation basis, but the Davis Plan at least attempted to improve the economic conditions of the industry. James Wilen suggests that "it was only in the British Columbia salmon fishery that the prime motive was initially one of addressing the economic consequences of overcapacity."<sup>17</sup> In addition, the B.C. salmon fishery was the first major fishery in the world to pursue limited entry as a policy imperative, and that it was attempted in the most valuable fishery on the Pacific coast.

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***'The Davis Plan was successful in providing one of the world's most efficient and modern small boat fleets. And therein lies the problem.'***

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## **A POLICY FOR CANADA'S COMMERCIAL FISHERIES**

In 1976, the Department of Fisheries issued its *Policy for Canada's Commercial Fisheries*, the first comprehensive written statement of fisheries policy ever issued by a Canadian government. With over a century of pent-up policy waiting to be expressed, one can only suppose that the Department wanted to cover a lot of ground. It announced that its policy imperatives were:

"to maximize food production, preserve ecological balance, allocate access optimally, provide for economic viability and growth, optimize distribution and minimize instability in returns, ensure prior recognition of economic and social impact of technological change, minimize dependence on paternalistic industry and government and protect national security and sovereignty."<sup>18</sup>

Naturally, this exhaustive set of conditions could not be met simultaneously, and the *Policy* document came to be regarded as one of the more ambitious motherhood statements ever written.

Even so, the document provides valuable insight into the government policy imperatives of its time. For one thing, it clearly confirmed the economic analysis that had emerged over the previous fifteen years. It acknowledged the need to apply limited entry universally, to reduce significantly the excessive capacity of the inshore fishery, and to rationalize the fragmented processing industry. The policy set as its guiding principle not maximizing yield from the resource, but obtaining "the best use of society's

resources...defined by the sum of net social benefits (personal income, occupational mobility, consumer satisfaction and so on) derived from the fisheries and the industries linked to them."<sup>19</sup> Conscious of socio-economic problems, the policy went beyond the criterion of resource rent maximization by including a notion of consumer and producer surplus, leaving room for social considerations. Still, how was this best use to be attained? The document was silent on this question.

So was the Minister. Romeo LeBlanc later seemed unsure about the best use for the 'best use' concept. At one point, he suggested that "if fishermen get too rich, we can always issue additional licences to bring down the average earnings per boat."<sup>20</sup> This statement implies that the government's policy was to secure additional jobs at the expense of higher incomes, an approach that does not necessarily equate with the economists' notion of the long-run 'best use' in generating maximum benefits. Even so, LeBlanc felt that the government should not be the employer of last resort: "government regulation and policy [were] imposing a special social tax."<sup>21</sup> The document recognized that, in the past, "remedial action of an urgent nature may have been confused with real development of the fishery."<sup>22</sup> For example, processing facilities (to encourage production) and catch restrictions (to encourage conservation) had been introduced in the same place at the same time.

Perhaps more indicative of the government's priorities was its stated intention to increase its intervention in the fishery and to control "the use of fishery resources from the water to the table."<sup>23</sup> This statement provided open acknowledgement of the now-comprehensive nature of government involvement in the fishery.

## THE DEPARTMENT GROWS DURING THE 1970S

Coupled with the sudden surge in salmon and herring markets during this period, the government's 'water to table' policy required constant policing of the capture process as well as research to increase resource supplies. Consequently, the new policy heralded the creation of a substantial number of government employees with a vested interest in the continuation of the fisheries, even though the unusual market growth of the 1970s later disappeared. Patricia Marchak submits that "there is a symbiotic relationship between the fishers and the bureaucrats, but it is an essentially neurotic one."<sup>24</sup> On one hand, policy imperatives put bureaucrats in the position of monitoring the harvest, frustrating the fishing effort and causing fish harvesters a loss of income; on the other hand, the bureaucrats had to support fish harvesters in their attempts to salvage the industry. Bureaucracy was here to stay. As Marchak puts it,

"In the end, the great Canadian fish chase involved increasing numbers of experts, bureaucrats and enforcement officers apprehending, separating, processing and returning fish harvesters to the sea, newly tagged, ready to chase the appropriate fish in the required location, at the right time. The privilege to fish was radically refashioned as bureaucratic imperatives changed."<sup>25</sup>

## REGIONAL POLICY DURING THE 1970S

As far back as 1970, the government had explicitly stated that "while it is desirable to restructure the industry, rationalization could only proceed as quickly as acceptable alternative opportunities were opened up for people affected by these changes."<sup>26</sup> The basic principle of minimizing the disruptive impact of change has been a recurring tenet of government policy for years, but the *Policy for Canada's Commercial Fisheries* affirmed for the first time that "policies should not further impinge upon -- should even preserve -- isolated coastal communities."<sup>27</sup>

Critics argued that the government's dedication to this policy was somewhat less than single-minded. The buy-back program, as has already been noted, diminished the size of non-urban fleets substantially. Other restrictions in the troll fishery had a similar impact. Keith Warriner believes that "this is not to say there is no hope of government aid in this matter. The state's current program of salmonid enhancement may in time directly benefit certain isolated communities. A policy of area licensing could also provide some incentive for settlement."<sup>28</sup>

## THE LOW PRIORITY OF RESEARCH



New government policies also indicated the state of confusion surrounding research support for management functions. Internally, the state of research had been in some confusion, with two competing organizations providing technical support: the Fisheries Research Board in Nanaimo, and the Department's own technical support staff of biologists. There were a number of other problems to muddle through: successive waves of federal government austerity were interspersed with new infusions of funds; the new policy favoured contracting out research rather than developing in-house capabilities; and the Fisheries Research Board, which some felt had become increasingly remote from day-to-day management questions, was disbanded during the 1970s and its staff amalgamated with the Department's. In retrospect, argues Pearse, "These changes adversely affected the capability to respond at a time when some of the most profound developments in the history of the fishery were occurring."<sup>29</sup>



## CONTINUING GOVERNMENT ASSISTANCE POLICIES

During the 1970s, critics argued that the objectives of fisheries policy weren't particularly well coordinated. In particular, the limited success of limited entry was compounded by an unlimited set of government capital-assistance programs. In direct contrast to the aims of the Davis Plan, the federal government provided Pacific fish harvesters with \$133 million from 1974 to 1981, twice the amount that had been provided from 1955 to 1974. With government guarantees for loans and subsidies, chartered banks had a degree of protection in the event of defaults. A further \$100 million flowed into the industry from banks during the mid-1970s.

The major purpose of these loans was to provide financial capital and guarantees for capital costs on vessel purchases and reconstruction, especially through the Fisheries Improvements Loans Act. Subsidies to Canadian shipyards, under the auspices of the Department of Industry, Trade and Commerce, continued to be a further incentive for increasing capitalization of vessels. Tax credits were still granted for new investments in fishing vessels, as were provisions for accelerated depreciation.

In addition, the federal and provincial governments continued to provide financial support for upgrading processing facilities. Upgrades were considered necessary because of the growing demand for roe-herring and higher quality salmon, coupled with the emergence of new firms catering solely to the Japanese market. The Fisheries Development Act was passed in 1967 with the intent of "subsidizing processing companies to build or expand processing and ice-making capacity and to improve fish handling capability."<sup>30</sup> In the course of the next decade, twenty financial assistance programs were geared to the processing industry, including: four for exports, marketing and new product development; two for manpower assistance; and one each for working capital and counselling assistance. It appears, then, that government assistance policy was partially motivated by the immediate interests of processors, whose dominance was threatened externally. As Patricia Marchak puts it, "The history of the 1970s is

filled with state interventions designed -- but unable -- to 'save' the traditional processors in the face of new competition created by state intervention at another level."<sup>31</sup>

## THE FIGHT FOR EXTENDED FISHING JURISDICTION

In the 1970s, it became increasingly apparent to Canadian negotiators that an extension of territorial control over fishing rights was necessary. This policy imperative was spurred on by a number of international developments. Long-standing complaints about foreign overfishing on both coasts resurfaced in the 1970s, with the eventual result that Russian ships were banned from Canadian ports. Mineral rights also played a role: advances in offshore drilling technology increased the depth at which drilling was possible, and many nations were interested in exploring for manganese nodules on the deep seabed. In addition, Canadian sovereignty was seen to be threatened by the passage of the *S.S. Manhattan*, a U.S. ship, through the Northwest Passage in 1969. Canadian worries were also aroused by the sinking of a Liberian oil tanker off Nova Scotia and the sinking of the *Torrey Canyon* in 1967, which raised public awareness about the potential for environmental catastrophes.

A changing climate in Ottawa facilitated the emergence of a strong position on ocean issues. The development of a Canadian oceans policy coincided with the inauguration of the Trudeau government in 1968. Trudeau initiated a broad review of foreign policy when he came to power, and ultimately rejected the tenets of Pearsonian diplomacy. Canadian foreign policy would henceforth be based on "sovereignty and independence, territorial integrity, constitutional authority, national identity, and freedom of action."<sup>32</sup>

Given this ripe climate for action, Canada was to become a leading representative of coastal state interests and make marked contributions to new concepts in international fishery relations. In 1974, an International Fisheries and Marine Directorate was established "to meet the increasing challenges facing Canada in the international fisheries and ma-

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***'The main economic implication of extended jurisdiction was that coastal states were presented with the opportunity for efficient economic management of fishery resources.'***

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rine environmental fields."<sup>33</sup> Canada passed the Arctic Waters Pollution Prevention Act in 1970; related legislation extended Canada's territorial seas from three to twelve miles, as we have already seen. At the 1971 Seabed Committee meetings, Canada argued in favour of coastal states having preferential rights over a 200-mile area. West coasters wanted even more than 200 miles, given the peculiar migratory patterns of salmon. 'Fishery closing lines' were drawn in the water from Queen Charlotte Sound to Dixon Entrance, but they were promptly ignored by the U.S.

Actually, the U.S. ignored most of Canada's efforts for extended jurisdiction. Spurred on by the mining industry and the military, the U.S. was the most vociferous proponent of open access to the high seas. Even so, international opinion was mounting in favour of extending fisheries jurisdiction beyond twelve miles.

Consequently, the United Nations Conferences on the Law of the Sea (UNCLOS) were convened to discuss, among other things, the extension of territorial jurisdiction in the high seas. A number of proposals went forward, one suggesting that each country would have control over its continental shelf. Naturally, the continental shelf varies in width from a few miles to a few hundred miles, and the proposal failed to sneak by. Another failed Canadian proposal suggested international management on a fish-specific basis.

A compromise was reached at the third UNCLOS in 1974, allowing for a 200-mile economic zone. Coastal states would have exclusive rights to resources within this zone, but freedom of navigation

would be assured for all nations. More specifically, the coastal state would have a legal obligation to determine the Total Allowable Catch (TAC) and its own capacity to harvest that TAC. The coastal state would be obliged to grant access to foreign fishing if it did not have sufficient capacity to harvest its TAC. Despite a few continuing reservations, the U.S. was largely in favour of this compromise. In 1975, Canada and the U.S. signed a treaty recognizing territorial control to the 200-mile limit. On the basis of this vital agreement, other countries followed suit, and Canada's 200-mile zone legislation went into effect in 1977.

The main economic implication of extended jurisdiction was that coastal states were presented with the opportunity for efficient economic management of fishery resources within their 200-mile zones. Before the extended jurisdiction, any state that restrained its catches of fish in the interests of stock conservation or industrial efficiency would be frustrated by the expanded fishing of other countries. Afterwards, most of the world's valuable stocks were enclosed within individual nations' control. Once again, this process considerably broadened the fisheries responsibilities of the coastal state governments.

Indirectly, extended fishing jurisdiction was a harbinger of difficulties with International Pacific Halibut Commission (IPHC) regulation of the halibut fishery. The U.S. and Canada began to find it very difficult, in the face of conflicting industry pressures, to maintain the pattern of reciprocal fishing that had developed over many years. Consequently, the U.S. announced its intention to phase Canadian halibut fishing out of its waters by 1980. Canada responded by prohibiting American fishing for halibut and restricting the U.S. catch of several other species. The

government took several steps through an Alaskan Halibut Relocation Plan to minimize the dislocation caused by this international bickering; halibut fish harvesters were encouraged to sell their gear and vessels to the government. Significantly, a temporary Protocol changed the program's objective from a biologically-based management system (Maximum Sustainable Yield) to an economic one (Optimum Economic Yield).

While the coastal states group, of which Canada was a leading member, was sometimes characterized as being greedy, Canadian negotiators received generally favourable press regarding the implementation of their oceans policy. As Parzival Copes puts it, "Canada's preparation for, and timing of, the move appears to have been excellent."<sup>34</sup> For the first time, "government departments concerned with maritime issues in general and fisheries in particular gained greater public attention than at any previous period, and fisheries issues necessarily became more important on government political priority lists."<sup>35</sup>

With so many other policies falling by the wayside, why did this one work? For one thing, Canada's policy regarding the Law of the Sea was remarkably consistent from 1970 to 1977. Policy had largely been formulated by 1970, so that the emphasis after that was on finding the best tactics to implement the chosen goals. Canadian Law of the Sea policy was single-minded in its determination to secure extended jurisdiction, with the very important qualification that it always stopped short of demands for full sovereignty. Canadian policy was generally unified and integrated as well. While Canada made a number of concessions, the most significant being on the marine environment, its position was generally firm.

It seems that Canadian negotiators did a commendable job of assessing what policy objectives would be acceptable to the international community. Many of the countries attending the Conference were developing nations who wanted coastal-state control over fishing and scientific research. Canada supported these claims, entering into an influential coalition that could block alternative proposals.

Copes suggests that the Canadian constitutional process also helped out. Because both foreign affairs and fisheries were under federal jurisdiction, "the government in Ottawa [was] able to integrate and co-ordinate fisheries policy within and between two important spheres."<sup>36</sup>

Canadian Law of the Sea goals appeared to be complementary rather than contradictory, in that Canada's negotiators put forth a strong effort to integrate policy formulation and implementation. Barbara Johnson suggests that "this accommodation occurred largely through informal bureaucratic channels rather than through formal channels."<sup>37</sup> Internal differences were few, as the Law of the Sea issue was generally a non-partisan one within Canada. When there were differing interests, there was a tendency to resolve conflict internally rather than to seek outside support. It is also worth noting that the Department of External Affairs played a lead role in UNCLOS III, along with the Department of Fisheries.

Perhaps more importantly for our purposes, it should be noted that it was possible to *detect* a clear oceans policy for Canada. That is, the mere *existence* of a coherent, consistent policy that did not enshrine 'motherhood' statements probably contributed to Canada's success in extending fisheries jurisdiction.

## FISH WARS

During the 1970s, Canada participated in a wide range of bilateral fisheries agreements. Most of these established reciprocal fishing rights and, in the case of shared coastal stocks such as halibut and salmon, took action to allocate and manage these fisheries. The U.S. and Canada established a short-term reciprocal fishing agreement in 1973 and a separate agreement for Pacific salmon in 1971. Canada and the U.S.'s eventual cooperation regarding the extension of fishing rights appeared to solidify relations between the two countries, but bilateral negotiations were complicated in the mid-1970s by the Boldt decision, and by continuing friction over the Fraser River catch.

In 1974, Justice Boldt of the U.S. Federal District Court ruled that Washington State was obliged to cede half of its salmon fishery to Native inshore fish harvesters. In the ensuing shuffle, Canadian fish harvesters in U.S. waters were squeezed by lower quotas. As a retaliatory measure, the Canadian government closed the Vancouver Island shrimp fishery, thereby prohibiting Canadian as well as American shrimp fishing. Thus began a period that has been dubbed 'the fish wars.' Conflicts over Dixon Entrance, Swiftsure Bank, the Fraser River salmon fishery, and export duties were among the more hair-raising confrontations. As an aside, it is worth noting that during this period, "provincial governments became more actively involved in fisheries policy because countervailing duties, federal subsidies, and the impacts of these on the processing sector necessarily brought them into the debates."<sup>38</sup>

Canada was also vocal in multilateral fishery commissions such as the International North Pacific Fisheries Commission (INPFC). One of this commission's significant decisions was the further restriction of Japanese high-seas fishing. In 1978, Fisheries Minister Romeo LeBlanc proudly declared, "this means there will be virtually no salmon of B.C. origin available to the Japanese fishery."<sup>39</sup>

## THE SALMONID ENHANCEMENT PROGRAM

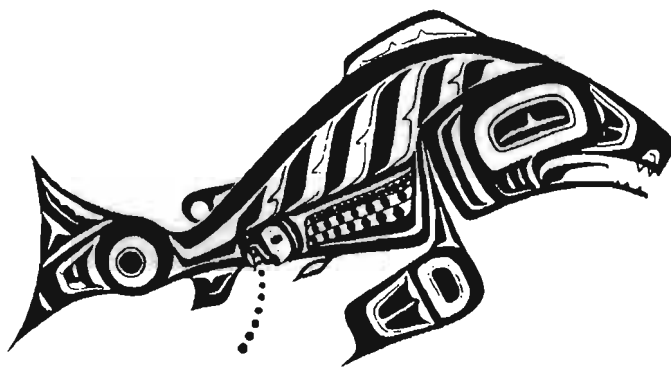
Since 1882, conservation ideas had been a persistent theme in fisheries ideology. The 1950s had seen the construction of major fishways and spawning channels on several important salmon rivers, but interest in new enhancement projects had subsided again until the 1970s, when Fisheries Minister Jack Davis approved construction of B.C.'s first modern large-scale hatchery in his own riding of Capilano.

New studies of the province's streams indicated that salmon runs could potentially be doubled to about fifty million fish. Not only was the biological and economic logic compelling, but the program proved politically saleable as well. Faced with the alternatives of reducing fishing effort or increasing the number of fish, the government would find that the latter involved much less hardship for all parties. Many members of the public felt that the government's primary role was to conserve the resource anyway, so salmon enhancement seemed to be a logical extension of this policy. Even so, skeptics feared that people were looking to enhancement with unrealistic expectations about the degree and speed with which it could solve their problems.

A series of informal meetings in 1974 confirmed that the public was fully supportive of renewed enhancement. As one observer at the public hearings glowingly testified, "What's at stake is our chance to demonstrate that we are able to reject the easy way, the quick way, in favour of what we know in our hearts to be the right way."<sup>40</sup> In keeping with this sentiment, people were willing to pay for enhancement in the form of catch royalties. Cost recovery was not a new concept -- in fact, it had been a driving force behind the buy-back programme of 1972 -- but it was becoming increasingly attractive to a cash-starved government.

And so it was. Fisheries minister Romeo LeBlanc announced in 1977 that he was committing \$150 million over five years to the first phase of a new Salmonid Enhancement Program (SEP). With two years and \$6 million to think about SEP, its planners had done an admirable job of strategic policy formulation. Goals were clearly laid out, operational, and largely non-conflicting. The ultimate goal of the project was to double runs of salmon and anadromous trout, but the program was not strictly a biological one. Its objectives included the augmentation of national wealth, the creation of employment opportunities, the improvement of Native incomes, the development of economically disadvantaged areas, and the improvement of recreational opportunities. SEP also made an attempt to integrate the Department's policy objectives: it specified that the two governments would restrict further investment in the fisheries to ensure that the potential gains from increased production were not dissipated.

A considerable amount of public involvement probably contributed to the effective implementation of SEP policy, as did the financial and administrative support of the provincial government. In fact, the first-ever fisheries Memorandum of Understanding (MOU) between the federal and provincial governments was signed for SEP. As well, most government departments were now acutely aware of the need for program evaluation and public accountability, and SEP became perhaps the most-reviewed program in the Department's history.



The logo of the Salmonid Enhancement Program. SEP was introduced in 1977 in hopes of doubling B.C.'s salmon runs. Despite budget cuts and ongoing problems elsewhere in the fishery, SEP came remarkably close to its target production.

Unfortunately, the euphoria surrounding the implementation of SEP didn't last forever, and critics were beginning to feel that a good policy was being subverted by imperfect implementation. By 1981, the Salmonid Enhancement Task Group estimated that inflation, budget cuts and the extension of phase one had gobbled up \$100 million of the \$150 million pledged at the program's inception. The task group was also frustrated by a perceived emphasis on costly hatcheries instead of small-scale stream clearing and natural production. The major waterways had not seen many enhancement projects, nor had cost recovery been fully pursued. Others felt that the species mix of enhancement was skewed in favour of the major processing firms, who could exert a greater dominance over raw salmon purchases. As John McMullan writes, "More state capital = more fish = more capacity = more concentration seems to be the leitmotif of SEP."<sup>41</sup>

In spite of these perceived shortcomings, the program reached the admirable level of 87% of its target production by 1981 (assuming that ocean survival rates were not overestimated) and it was estimated that SEP returned \$1.30 to the economy for every dollar spent. General support for the principle of enhancement remained unflagging. In a 1981 report to the Minister, Peter Pearse and Fernand Doucet recommended that "the commitment to salmon enhancement should preface all other new policy measures regarding the salmon fishery."<sup>42</sup>

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***'The roe herring fishery became probably the most difficult of fisheries to manage due to chronic overcapacity, the unpredictability of stocks, and the desirability of limiting fishing to the moment when fish are about to spawn.'***

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### **AREA LICENSING IN THE ROE HERRING FISHERY**

The roe-herring industry expanded significantly in 1972, after herring stocks had partially collapsed in the 1960s and the Japanese market for roe became accessible to Canadian producers. This new, lucrative fishery developed with startling rapidity, attracting large numbers of vessels.

The Department's initial response, in 1974, was to extend the concept of limited entry to the roe-herring fishery. Licences were automatically granted only to those who had obtained licences in the previous year. Anyone else could apply for a licence, but they would have to pay an unprecedented fee of \$200 for a gillnet licence and \$2,000 for a seine licence. Interestingly, licence fees were now being used as a deterrent to entry rather than merely a user fee or a statistical reporting mechanism. The Department continued with input restrictions, such as halving the allowable length for gillnets, until 1981.

The roe-herring fishery became "probably the most difficult of fisheries to manage"<sup>43</sup> due to chronic overcapacity, the unpredictability of stocks, and the desirability of limiting fishing to the moment when fish are about to spawn. Openings were limited to a few minutes in some cases. For one thing, fleet expansion was facilitated by generous licence eligibility criteria. Over 1,700 licences were issued, instead of the 550 the Department originally had in mind.

Another interesting aspect of the roe-herring fishery was that roe-herring licences were non-transferable and were issued to individuals, not vessels. The UFAWU had been asking for years for licences that were personal, non-transferable, and granted only to the vessel's owner-operator. These provisions finally came into being for the roe-herring fishery, the intent being to reduce the fleet to a desirable level through attrition, at which time changes in licence holdings would be permitted. This attrition did not occur for a number of reasons: the owner-operator clause, for one, could not be enforced with any degree of effectiveness (e.g. some licences were company-owned), and it was removed in 1979; non-transferability was eventually circumvented through such means as long-term leases, which posed additional costs in the way of legal, enforcement and administrative activities.

Up until 1980, then, the roe-herring fishery had gone through what James Wilen calls "a classic pattern of overcapitalization, limited entry, and gradual erosion of management control."<sup>44</sup> Openings were still extremely short (one set of fifteen minutes) and the entire fleet was converging on each opening like pigeons mobbing about a discarded sandwich. At wit's end, managers were finally ready for something different.

Area licensing made its debut in the roe-herring fishery in 1981, signalling a radical shift in the concept of fishing rights. Theorizing that controlled harvesting was preferable to a frenzied race for fish, the government was taking one step towards a 'pri-

vativized' fishery. The coast was divided into three areas (North, Inside and Outside of Vancouver Island) and each licensee was required to choose one area in which to fish. The intent of this policy was to spread the fishing power of the fleet and limit the number of vessels that could converge on a single opening. It became possible for vessel owners to purchase someone else's right to fish in another area, effecting a gradual reduction in fleet size.

So how did it work? According to Wilen, "by nearly all standards this program [was] very successful."<sup>45</sup> Proponents of the regime cited lower operating costs, improvements in stock utilization, and greater manageability of the resource. Fish harvesters liked it too: in 1983, a survey revealed that over 80% of licence holders wished to keep the program.

One nagging issue, though, was the non-transferability of licences, a proviso that had been included in anticipation of complaints that transferable licences would end up in the hands of a few wealthy players (presumably processing firms). The notion of non-transferability was anathema to economists in particular, as it contravened the conditions necessary for market efficiency. After managers had gained years of experience with area management, and transferability requirements continued to be circumvented through 99-year leases, the policy was changed in 1990 to allow individual licence holders to retire from the fishery and nominate a new licence holder.

## THE GOVERNMENT INCREASES NATIVE INVOLVEMENT

"In one century, we have been dispossessed of the ability to provide for ourselves...We have a sole economy, that of fishing, and have managed to continue participation in this resource industry as commercial fishers, but each year the ability to participate has lessened."<sup>46</sup>

By 1970, increasing concern was being expressed by Natives about their declining participation in the commercial fishery. From 1964 to 1971 alone, the number of Native vessels in the salmon fleet declined by more than 700, or 50% of its previous level. Relatively speaking, the number of Natives declined from 19% of total fish harvesters to 12% in the same period. Geoff Meggs calls the staggering decline in Native participation a "final and crushing repudiation of the policy proposed by A.C. Anderson some ninety years before, which had sought to ensure Native participation in the commercial fishery."<sup>47</sup> The magnitude of this displacement drove the Department of Indian and Northern Affairs and the Department of Fisheries and Oceans to adopt a policy "to protect and, if possible, to increase the participation of Indians in the commercial fisheries."<sup>48</sup>

The Davis Plan, for one thing, was expected to accelerate the long-term decline in Native participation. Desiring to maintain Native participation, the Department created a special Native licence (the 'AI')



that carried a minimal fee of \$10. Natives opting for an 'A' licence could not sell their vessels through the buy-back program, nor did they pay for the buy-back program. Later regulations ensured that Natives with time-limited 'B' licences could convert them to 'A's. In other fisheries, the government pursued similar policies of fee exemptions and limited regulation: no restrictions were placed on Natives in the roe-herring fishery until 1977, three years after other fish harvesters had been restricted; roe-herring licences cost \$10 instead of the usual \$200 or \$2,000; and a small number of Natives who had participated in the fishery on processor-owned vessels received special halibut licences.

More significantly, the Indian Fishermen's Assistance Program (IFAP) was launched in 1968 as the flagship of the government's Native assistance policy. Its objectives were to reverse the decline in Native participation, to improve the earnings of Native fish harvesters, and to improve the versatility of the Native fleet. Jointly funded by the Department of Fisheries and Oceans and the Department of Indian and Northern Affairs, this program granted \$17 million during its tenuous ten-year tenure. Its policy objective was a sound one, as it addressed the all-important question of access to capital.

Did all this activity reverse the decline in Native participation? Yes, somewhat. Native composition of the salmon fleet increased from 15% in 1969 to 16% by 1977. When B.C. Packers and the Canadian Fishing Company absorbed ABC Packing's assets in 1969, the government purchased ABC's rental fleet in order to support a Native presence in the fishery.

Did it improve the earnings of Native fish harvesters? Yes. Average gross earnings increased from a low of 61% of the salmon fleet average to a high of 109% in 1973, averaging 84% during the last five years of the program.

Did it improve the versatility of the Native fleet? Yes, under the assumption that total tonnage is an indicator of versatility (i.e. more tonnage correlates with greater capacity and a larger potential fishing area). The total tonnage of Native vessels increased by one-third during the 1970s, and their average value increased from 66% to 87% of the average for the whole fleet.

The main criticism of the IFAP was that it benefited primarily those Natives who were already successful fish harvesters. Those who could not afford to upgrade their vessels to pass inspection saw their licences re-cir-



culated to larger, newer vessels. The benefactors tended to be relatively well-off fish harvesters who could afford the 12-20% qualifying downpayment. As one successful Native boat owner put it, "Most Indians can't even get into the economic system, because the bottom two rungs of the ladder are missing."<sup>49</sup> The IFAP thereby increased the disparity of earnings across the Native fleet, and made it extremely difficult for young Natives who had not inherited a boat to enter the fishery. Like many other financial assistance programs, it also contributed to the overcapacity of the fleet.

When an emergency arises, common sense dictates -- as does historical hindsight -- that an emergency program is not far away. Conspicuously poor seasons in 1980 and 1981, coupled with high interest rates and vessel prices, provided bleak prospects of advancement for Natives. The Indian Fishermen's Emergency Assistance Program was introduced in 1981 as a temporary program to assist with debt payments and start-up costs. This successor to the IFAP could provide very little in the way of loan guarantees, nor could it help out with loans previously made under the IFAP (for the logical reason that federal funds cannot be used to pay off federal debts).

Another emergency measure was enacted in 1982. Following a round of corporate consolidation in which B.C. Packers sold off assets "like a doctor lops off a gangrenous arm,"<sup>50</sup> the government provided \$12 million to the Northern Native Fishing Corporation for its purchase of BC Packers' northern gillnet fleet.

The Salmonid Enhancement Program contained provisions for Native assistance as well. Critics of SEP have pointed out that most enhancement projects were taking place in the south coast, where

Natives were already relatively prosperous. Small-stream projects, generally believed to provide greater benefits to Natives, were said to receive less emphasis. In response to these criticisms, the Department initiated a formal Community Development Program in order to benefit Native communities.

The 1986 establishment of the Native Fishing Association Program is also noteworthy. With \$11 million in funding, it provided loans and business management training to Native fish harvesters. Its stated goal was to ease the debt load of Native vessel owners and to enable Natives to purchase their own fishing boats. Whatever the merits of this proposal, argues Marchak, it was not consistent with conservation of the resource through limitation of access. Like most government assistance packages following World War II, it ensured that banks were relieved of outstanding debts and that more participants would enter the fishery. To make sense of such an inconsistency, we must suppose that concern with Native claims took precedence over concern with resource conservation, and that, at that moment in history, the Department of Indian and Northern Affairs took precedence over the Department of Fisheries and Oceans.

While Native assistance programs achieved their intended goals, they also reinforced Natives' perception of themselves "as a special interest group that could expect their situation to become better primarily through lobbying as Indians."<sup>51</sup> In addition, status and wealth differences within the Native fleet were accentuated. Conservation-oriented policies that led to a substitution of capital for fishing time mitigated against the competitive advantages of Native fish harvesters. An end result of this saga is that the twin policy objectives of rationalization and Native assistance could not be pursued in isolation, as their effects were potentially contradictory.

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***"Most Indians can't even get into the economic system, because the bottom two rungs of the ladder are missing."***

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## THE PEARSE COMMISSION

The onset of a new decade brought with it all of the requisite ingredients for a Royal Commission: one part new majority government, one part industry-wide demand for change, and one part bad economy. As the 1980s began, the fishing industry was in the midst of another financial crisis. The processing sector was undergoing a series of mergers and consolidations, a thousand shoreworkers had lost their jobs, a dozen fish plants had closed, interest rates were rising, unemployment insurance was being reduced, and fisheries research and enforcement budgets were getting slashed. With the election of another majority Trudeau government, the besieged industry was granted an outlet for its frustrations.

His name was Peter Pearse. His enormous mandate: to conduct the most comprehensive review ever on Pacific fisheries issues. The mandate specifically excluded international treaties, Native rights and the processing sector, but it did cover everything else, including habitat issues, Native fisheries, sportfishing, federal-provincial relations, policy mechanisms, and regulation of the minor fisheries. Marchak notes that the management objectives which Pearse had to satisfy were mutually exclusive. For example, "the full development of opportunities demanded by Indian fishers...excludes either better returns to the public or flexibility of policy. Conserving the resource is not compatible with improving fishers' incomes."<sup>52</sup>



Peter Pearse, a noted resource economist, was chosen to sit on the hot seat during a massive 1982 inquiry into Pacific fisheries policy issues.

## THE COMMISSION EXAMINES POLICY...

Pearse was to hear almost 200 submissions in 67 days of public hearings, the transcripts of which filled 14,000 pages. Even given the massive scope of the Commission, some groups were unprepared for Pearse's revolutionary policy recommendations. One such group was the Department of Fisheries and Oceans itself. In his final report, *Turning the Tide: A New Policy for Canada's Pacific Fisheries*, Pearse pulled no punches when discussing the weaknesses of government policy. "My inquiry pointed inescapably to deficiencies of government policy: uncertain objectives, weak and outdated legislation, bad organization, contradictory programs and confusion."<sup>53</sup>

Pearse cited three reasons for the shortcomings of government policy. The first was a long history of governmental responses to 'crisis situations,' which generated policies to address the issue at hand but did not lead to a coordinated effort to solve the long-term problems of the fishery. The second was the inability of federal authorities to adapt national fisheries policy to suit regional conditions -- in some cases, Pacific fisheries problems weren't of sufficient magnitude to command national attention. The third reason was the tendency of fisheries policy, as in all bureaucracies, to lag behind the forces of change. Particularly in the tumultuous environment of the 1970s, policy was overtaken by events. Pearse called this process 'the cut, chop and change approach,' implying that policies were often changed in light of facts that were not taken into account during policy formulation. Testimony during the public hearings reiterated that fisheries policy, if there was one, was poorly documented and reactive:

"the present fisheries management system  
...functions primarily without a planning

philosophy and is subject to the planning strategies of other resource sectors and fishing interests."

"at present, who amongst us can truthfully say what is the objective of the fisheries?"<sup>54</sup>

"what has been lacking is a comprehensive long-term plan that specifies particular goals..."

"the myriad of special problems that are facing the Pacific fisheries today...have arisen from a lack of policy..."<sup>55</sup>

By and large, these criticisms hit home. After all, the Department had issued very few documented policy statements. The few policy statements that did exist were given limited internal circulation (with the notable exception of the 1976 *Policy* document), and were eventually buried in the Department's filing cabinets like unlucky Sherpas in an avalanche.

Finally, the hearings revealed an attitude of skepticism and disbelief towards the government's policy announcements. A number of decisions had never been enacted, including the elimination of subsidies on vessel construction, cost-recovery for SEP, the devotion of licence fees to fleet reduction, and the levy of catch royalties on salmon.

A resource economist who firmly believed in the theories of Scott Gordon and James Crutchfield, Pearse was to come down on the side of economic efficiency and fleet rationalization. The implicit intent of his recommendations was "to integrate fisheries management into the national economic agenda."<sup>56</sup> His recommendations were based upon the assumption that overfishing, not habitat destruction, was the primary cause of declining stocks. In order to correct this situation, reasoned Pearse, the goal of fisheries

policy should be to ensure that "resources are allocated to those who can make the most valuable use of them and that whoever used the resources does use them in the most beneficial way."<sup>57</sup>

It has been suggested that one of the keys to Pearse's policy recommendations was a commitment to privatize fishing rights. Initially, a massive buyback program, financed by catch royalties, would reduce the fleet to the maximum extent possible. Within ten years, transferable fixed term licences and a complex licence auction would enable fish harvesters to buy up each others' licences, thereby reducing the fleet by half. By 1993, a form of area licensing would take effect, whereby any person or corporation could purchase fishing rights for one of three coastal regions. Ultimately, hinted Pearse, salmon harvesters might not need boats at all as fishing switched to traditional methods like fish traps and weirs. In a move that heralded the arrival in policy-making circles of new conceptions of property rights, Pearse urged that all fisheries except salmon and roe-herring be managed using individual transferable quotas (variously called IQs or ITQs) specifying individual shares of the Total Allowable Catch.

From a policy perspective, another of the Commission's most significant recommendations was the creation of a 'policy and planning group,' to consist of senior officers, who would have specific responsibility for long-term planning. A recent Royal Commission on Financial Management and Accountability recognized a similar need, stating that "sound management must begin with the establishment of goals and the assignment of relative priorities to them."<sup>58</sup> Pearse was of the belief that "any deliberate forward planning process now appears to be overwhelmed by more immediate pressures...so it does not permeate the administration in any significant way."<sup>59</sup>

## ...AND ALLOCATION...

Pearse also had interesting things to say about the Department's allocation policies. While it has no explicit legislative authority to allocate catch among user groups, the Department had essentially been doing so for years. The courts have determined that the Minister of Fisheries *does* have the authority under the Fisheries Act to allocate for social and economic purposes. Allocation is an inevitable consequence of regulating openings and closures and restricting gear. Since 1974, DFO even had a target for dividing the roe-herring catch among the seine and gillnet fleets. Pearse's recommendation was to test the waters, so to speak, by developing a similar formula for salmon. He considered allocation formulas to be justifiable, given that the Department's broad legislative mandate was to conserve the resource using whatever means necessary. Pearse suggested that, because the Department historically had a policy commitment to 'the orderly development of the resource,' it was indirectly responsible for economic management, of which fleet allocation (and reduction) are integral parts.



## ...AND SPORTFISHING...

Sportfishing policy, or the lack thereof, was also a target of the Commission. While sportfishing for salmon was strongly curtailed in fresh water fisheries over time, few regulations had been imposed on the remainder of the sport fishery since the 1960s, when daily limits and size restrictions were the rage. With the expansion of this segment of the industry, a need was generated for a coherent sportfishing policy. The Department's policy, in its own words, became "to accommodate as far as possible the needs of the growing recreational fishery without major negative impacts on the other user groups."<sup>60</sup> In other words, compromise. In 1981, a tidal water sportfishing licence was introduced. The purpose of this licensing system was to provide information about sportfishing for resource managers and to raise revenue from the sport fishery for enhancement. Controversial sportfishing closures for chinook salmon in the Strait of Georgia and the Fraser River were discussed in the same year.

Pearse felt that these measures were awkwardly integrated with overall fisheries policy. He was also concerned that economic considerations were not involved in the regulation of the sport fishery, as they now were for the commercial sector. The Amalgamated Conservation Society minced no words when it stated, "It is quite obvious that the Department does not have a recreational fishery policy."<sup>61</sup> When one considers that the Department of Fisheries, in its various incarnations, never had a sportfishing branch before this time, that only two or three staff were concerned mainly with recreational fishing, and that the statistical series on sportfishing had been completely abandoned in the mid-1970s, this observation seems reasonable.

By the 1980s, sportfishing was a major component of the Pacific fisheries, drawing thousands of visitors and millions of dollars annually into the economy. Pearse recommended the formulation of a Departmental sportfishing policy to deal with the burgeoning industry.

## ...AND INEFFECTIVE REORGANIZATION...

Pearse's report was skeptical of the government's past efforts at reorganization, particularly during the 1970s. Responsibility for fisheries management had shifted from the Department of the Environment to a separate Department of Fisheries and Oceans in 1978, effectively reversing the decision of seven years earlier to consolidate fisheries with other areas of federal responsibility.

This change was not isolated, nor was it inconsequential. As Pearse puts it, "Successive waves of structural change have led to an apparent preoccupation with internal administrative matters both in Ottawa and in the region."<sup>62</sup> Three different Director Generals headed the Pacific Region during the 1970s, and each made significant organizational changes. The result was increasing turnover, which may have temporarily impeded the policy development needed to cope with rapidly changing circumstances. In retrospect, the frequent organizational changes of the 1970s were *ad hoc*, with insufficient attention paid to their effects upon the region as a whole. Pearse cited as examples the separate structure for SEP, the movement of the Assistant Deputy Minister from Ottawa to Vancouver, and the shifting of research responsibilities from branch to branch.

## ...AND CONSULTATION...

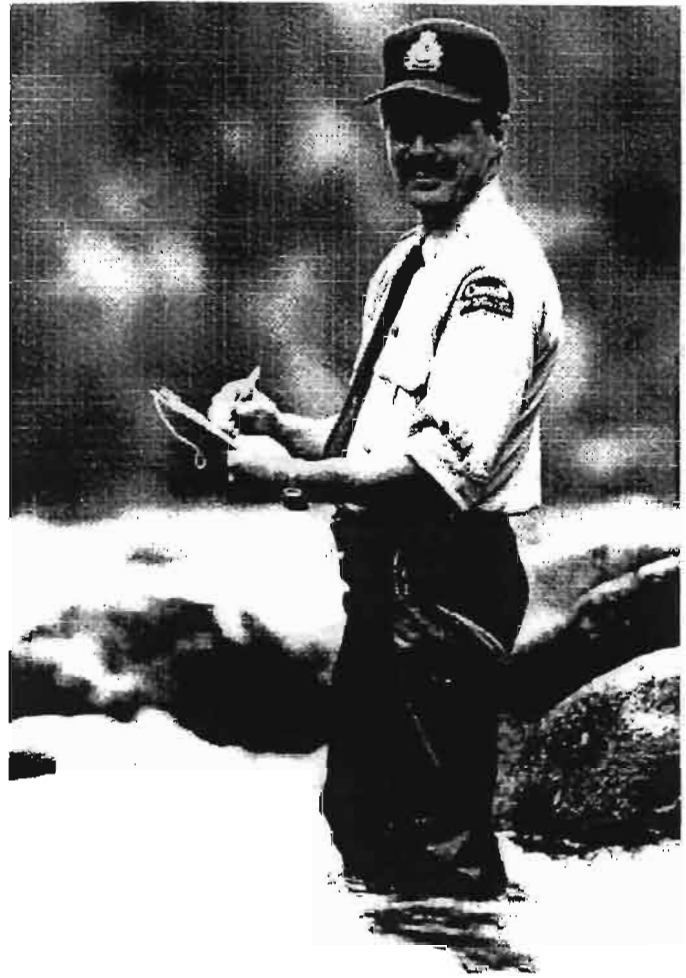
The Pearse Commission also rejuvenated discussion about the consultative mechanisms that were being employed by the Department. During the 1970s, the government had responded to the need for public feedback by creating a host of consultative committees, advisory boards, task groups and other channels for liaising with the public. Prominent among these were the Minister's Advisory Council, regional committees of the Field Services Branch, and the Sport Fish Advisory Board. Conspicuously absent were organizations representing Native or habitat interests. Few of the twenty consultative bodies received hearty votes of confidence from their participants. Pearse's recommendation was straightforward: "The first requirement for improving the consultative system is a coherent policy on the subject."<sup>63</sup> He proposed formal consultative bodies for Native and habitat interests, and well as the replacement of the huge Minister's Advisory Council with a smaller Pacific Fisheries Council.

## ...AND ENFORCEMENT...

Next on the Commission's hit list was enforcement policy. The Department's policy at the time of the Pearse Commission was labelled 'credible voluntary deterrence.' As a policy brief stated,

"Present policy calls for the controlling features of the management plan to be developed with the fisherman/user whenever practical. In this way a set of credible voluntary deterrents will be the first line of control. When ignored or when these deterrents fail to produce the desired results, the plan will of necessity fall back on statutory controls. The application of these controls becomes the responsibility of the department through its enforcement staff."<sup>64</sup>

Pearse saw the Department's reliance on this policy as misplaced, overly optimistic and premature. He also concluded that the Department's 125 fishery officers were overworked and that their approach to enforcement was to put out the biggest fires. Others would say that this process was entirely logical, given the Department's limited resources for enforcement activities. In this sense, credible voluntary deterrence was a common-sense way of supplementing the existing enforcement personnel. The underlying assumption behind the government's enforcement policy was that, because resource management and enforcement shared the same goal of resource protection, they required the same sort of skills and personnel. Pearse disagreed, recommending that enforcement be accorded a greater priority within the Department and that resource management and enforcement be delegated to two separate groups.



## ...AND HABITAT...

The Commission also called for a renewed policy emphasis on the protection of habitat. Pearse was one of the first to spell out formally to policy-makers the 'no net loss' concept, meaning that "harm to fish habitat should be tolerated for any particular development only if the damage is fully compensated through expanded fish production capacity elsewhere."<sup>65</sup> The Commission was also highly supportive of two other policy imperatives: SEP, which was now granting management responsibilities to private contractors; and aquaculture, which promised additional production in private hands. One aquaculturist stated the implicit change in government policy quite succinctly: "What we're looking at here is a classic transition of public policy away from a hunting gathering philosophy to more of a farming philosophy."<sup>66</sup> What is equally interesting is that Pearse was advocating the assistance of private enterprise in this process, a radical shift from the 'water to table' government control proposed in 1976.

## ...AND THE FISHERIES ACT.

One of the Commission's more sweeping recommendations was the replacement of the Fisheries Act with a more comprehensive policy statement. Pearse took issue with the Act's archaic requirements, like the one that required every boat to have "a dory with a compass, two quarts of drinking water and two pounds of food for each crew member, and a fog-horn or trumpet."<sup>67</sup> At the time of the Pearse Commission, parts of the Fisheries Act still prescribed hard labour as a punishment for fisheries violations, and the Act contradicted itself in other areas. Crucially important features of *policy*, such as commercial licensing and fleet development arrangements, were glossed over in the Act. Instead, it listed *regulations* in painstaking detail (e.g. the minimum required distance between salmon nets). Pearse was particularly concerned that the Act was "silent about the management and planning responsibilities of the Department and the social and economic objectives it [was] to meet."<sup>68</sup> In fact, at the time of Pearse's report, licensing policy was contained in fisheries regulation. In 1983, licensing policy was removed from regulation and replaced with skeletal regulations combined with the Minister's policy. The Act was also amended in about 1990 so that it no longer included archaic provisions or fines.

## THE AFTERMATH OF THE PEARSE COMMISSION

The response to Pearse's report was polarized, to say the least. The UFAWU was particularly opposed to the proposed licensing system, arguing that it would lead to competition for licences and the devastation of fishing communities. Pearse's support for aquaculture also met with opposition from fish harvesters' groups. They, after all, were the 'hunters and gatherers' whose role would presumably be subsumed by 'farmers.' The one large organization that officially endorsed the idea of aquaculture, the Native Brotherhood, refused to side with Pearse because his report had not officially recognized aboriginal title (Native *rights* were not in the Commission's terms of reference, but Native *fisheries* were). It should be noted that opposition to the Pearse Report was well-founded on rational, if intui-

Minister LeBlanc was faced with the kind of controversy that is not typically conducive to political action. When he was replaced in his portfolio by Pierre De Bane, however, the situation was to change. De Bane vowed to push ahead with Pearse's recommendations as quickly as possible, but was quickly brought down to earth by his new Minister's Advisory Council and publicly declared that "the Pearse report is behind us."<sup>69</sup>

On his own, though, De Bane continued to push for policy change. A top-level policy review committee -- accused by critics of 'knee-capping' the Minister's Advisory Council before it got off the ground -- called for area and gear licensing, quota fisheries, substantial catch royalties, and development of the sport fishery. In 1984, De Bane unveiled the Pacific Fisheries Restructuring Act, warning that it had to be passed in ten days or it would die in

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***"Elimination of the symptoms of the common property problem  
could be accomplished in three to five years."***

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tive, self-interest. After all, the proposed licence auction would divert profits (or 'resource rent') to the government, leaving nothing to improve fish harvesters' incomes. Moreover, Copes suggests that those fish harvesters who performed better than average would see a large share of their intramarginal profits be eliminated by rationalization, leaving them worse off than before. Consequently, a three-day industry conference in 1983 condemned the Pearse Report.

Parliament. De Bane's proposals were sweeping, to say the least: the Act called for a 45% fleet reduction within one year, a new buy-back corporation, catch royalties, the elimination of combination-gear boats, and further reductions in fishing time. Transferable quotas would exist in virtually all fisheries, including the salmon fishery within three years.



Not surprisingly, the Act was a tough sell. With a tight time frame for implementation, ongoing cabinet shuffles, and the election of a Conservative government in 1984, the Liberals' reforms were never enacted. In this sense, political events were as critical to the demise of the Act as was the opposition mounted in some corners of the industry.

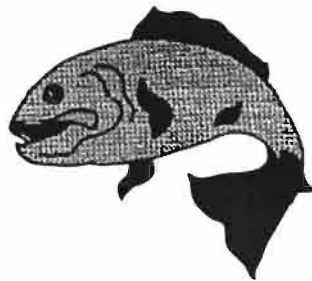
As the Conservative government took power, "the entire process haltingly began yet again, with a new minister, new research, new advisory committees, and renewed struggles between gear-types and organizations."<sup>70</sup> The new administration had its critics, among them the UFAWU: "where the Liberals had attempted legislation, the Conservatives proceeded by regulation. Where the Liberals had used lengthy public consultations and royal commissions to divide and rule, the Conservatives performed internal reviews and announced the results."<sup>71</sup> Upon one thing there was general agreement: the Conservative government did pursue an active policy of reducing government intervention in fisheries management. Budgets for enforcement, research and habitat protection were lessened, the underlying assumption being that fleet overcapitalization wasn't the only symptom of economic waste -- government management practices were inefficient as well.

Ministerial change, as in the past, was to have a profound effect upon the direction of fisheries policy. John Fraser, the new Minister of Fisheries, made his policy objectives clear by pledging that there would be "no tampering with the concept of the resource as common property."<sup>72</sup> SEP was to receive full funding for its second phase, and a \$100 million fleet buy-back program was to be launched.

It should be clear by now that policy and practice are two distinctly different entities. Some of Pearse's less controversial recommendations were progressing according to schedule while Ottawa waxed eloquent. Deputy minister Art May publicly differed with Fraser, stating that "common property is the root cause of the problems."<sup>73</sup> Pacific Director General Wayne Shinnars added that elimination of the symptoms of the common property problem could be accomplished in three to five years.

It turns out that May and Shinnars' differences of opinion with the Minister didn't land them in hot water after all. Fraser left office in a stink over rotten tuna and was replaced by Erik Neilsen. Neilsen, scant months later, cleaned out his office for Tom Siddon. Siddon reaffirmed his support for aquaculture, and cut funding for the second phase of SEP.

Meanwhile, elsewhere in Ottawa, Neilsen was keeping busy. His Task Force on Program Review was established in order to harmonize the actions of government departments with the Tories' forthcoming free trade policy. The Task Force recommended a further shift in government policy towards privatization and deregulation. It also sanctioned the elimination of the common property problem, which was seen to increase the cost of fishing and drain public resources. Auditor-General Kenneth Dye made similar recommendations in his 1986 report. The Task Force advised heavy cuts in research spending, a 50% reduction in quality inspection, and a major expansion of 'enterprise allocations' or privatized fisheries. Enhancement would be run by private contractors who would recover their costs by direct harvest of stocks. In a final endorsement of market efficiency, the Task Force hinted that the fishing industry could



become profitable if it were not burdened with the objective of maximizing social welfare.

The Task Force's policy recommendations were implemented to some extent. The Department of Fisheries and Oceans went through a period of 'downsizing,' in which \$25 million was cut from costs and the number of employees was reduced by 200. The government's role as a provider of marketing assistance was reduced considerably.

The need for better consultation was also pursued in the wake of the Pearse Commission. Frustration with the Minister's Advisory Council led most industry representatives to want a permanent consultative process that would make the Department accountable to fish harvesters and give a small group the power to form policy. The end result of this process was the formation of the Pacific Regional Council (PARC), which was intended to be a non-representative, balanced 'council of wise people.' PARC ended up including members of the commercial fisheries, processors, Natives, sportfishing interests, and coastal communities.

The Pearse Report also signalled a new orientation away from government subsidization of industry. To no-one's surprise, Pearse had found that some government assistance programs encouraged expansion of fishing capacity and were a waste of the taxpayers' money. Neilsen's Task Force concurred, stating that "a labyrinth of government assistance programs and regulations [have] arrested the ability of Canadian fisheries to adapt to market forces and undermined its competitiveness."<sup>74</sup> The Task Force cited the astonishing fact that, since 1977, the government had spent \$1 billion on an industry that generated a value of \$2 billion. Consequently, the Department of Fisheries and Oceans stated that its assistance programs in the 1980s were not to incorporate

the philosophy of the 1960s and 1970s. Rather than emphasizing 'recovery,' government assistance was to focus on 'development' programs that were in keeping with the buzzwords of competitiveness, efficiency, productivity and value-added. For example, investment tax credits for most areas of the fishing industry were phased out by 1990. The Shipbuilders Industry Assistance Program was terminated in 1985, as was the Fishermen's Vessel Assistance Plan in the following year. But were these programs eliminated for the reasons Pearse had envisioned? The Department's 1986 Annual Report stated that the FVAP was "no longer necessary because fishermen can avail themselves of credit from lending institutions."<sup>75</sup> This explanation contained no recognition of the cause and effect relationship between credit availability and overcapitalization.

Another significant change was the introduction of a formal policy group within the Department's organizational structure. In the past, this function had been served by two relatively autonomous bodies: a SEP planning group and a regional economics group. During the downsizing that occurred in 1984, these groups were amalgamated into the Program Planning and Economics Branch. One of the expressed objectives of the group was to act as an advocate for new management regimes.

Thus far, has the Pearse Commission achieved its intended purpose? Without the benefit of years of historical hindsight, the answer is a definite maybe. It certainly provided a formal mechanism to discuss problems that had been spreading for years. In the end, some of these problems were addressed, and others fell by the wayside in a storm of controversy. There can be little doubt that the most recent Royal Commission introduced many in industry and government to emerging theoretical concepts of fisheries regulation that are still being discussed today.

## STOCK AND FLEET MANAGEMENT DURING THE 1980S

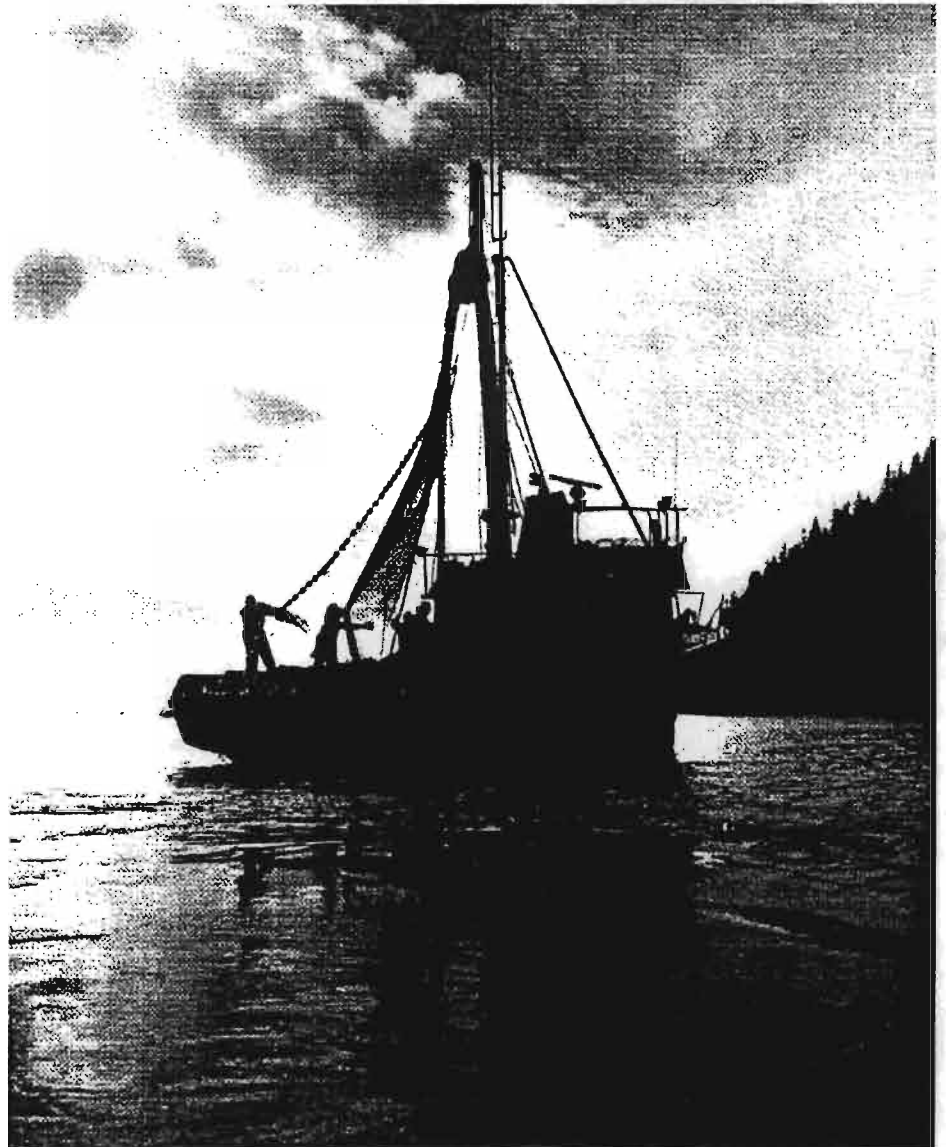
In the aftermath of the Pearse Commission, new initiatives were also undertaken for improved stock and fleet management. A 1986 discussion document on the Salmon Stock Management Plan (SSMP) asserted that a number of factors had prompted the Department of Fisheries and Oceans to develop a long-term strategic plan for Pacific salmon fisheries. It traced the genesis of the SSMP to the first page of *Turning the Tide*, where Pearse wrote that the Department was plagued by "the lack of cohesive, consistent and forward-looking policies and programs with respect to fisheries management, enhancement and environmental protection."<sup>76</sup> The Salmonid Enhancement Program also provided an impetus for the SSMPs, which were to provide an overall strategy for developing a SEP continuation proposal. In addition, the demise of the Pacific Fisheries Restructuring Act suggested that, whatever steps might or might not be taken to rationalize the salmon fleet, a rigorous and scientific approach was still needed to manage Pacific salmon stocks.

The SSMP was officially unveiled in 1986, pledging to avoid "the confusion and inaction that often accompany motherhood statements of objectives that are not developed or further refined."<sup>77</sup> Consequently, the SSMP set the following goals: harvest salmon to achieve maximum escapement; enhance salmon stocks; and protect salmon habitat.

While stock management was receiving increasing attention, fleet management continued to

be a difficult process. The basic concept of licensing had changed somewhat by 1983, in that fisheries would no longer be open until closed, but closed until open. However, this change didn't imply a fundamental shift in policy. Rather, it signalled the fact that input restrictions were necessarily becoming increasingly stringent across the board in order to keep the fishing effort within tolerable limits.

In response, the Department set about developing a proactive fleet management policy. Extensive consultation was involved in a 1989 licensing policy review process, which attempted to address licensing issues in an operational context. A long-term salmon allocation plan issued in 1991 stressed the paramount importance of conservation, the need for fair and equitable allocations, and the need for a long-term plan to minimize uncertainty and conflict.



## THE SPREAD OF LICENCE LIMITATION

"There now exists an array of licences which is administratively most vexatious."<sup>78</sup>

It's a wordy way of expressing confusion, but the above quotation is probably true of the extent to which limited entry had permeated the regulatory framework by the 1980s. The Department's basic policy, or lack thereof, was to respond to rapidly changing events with innovations in licensing as they appeared to be needed. Since the introduction of limited entry for salmon in 1968 and roe-herring in 1974, one fishery after another expanded, over-expanded and was belatedly subjected to a flurry of restrictions on additional entrants through a limited entry program.

We have already seen how International Pacific Halibut Commission regulation of the halibut fishery was in jeopardy after the declaration of 200-mile fishing limits in 1977. In 1979, when the division of the catch from the remaining international stocks was agreed to once again, individual nations had an incentive to control their halibut fleets. Limited entry seemed to be a natural solution. Again, though, it failed to address the *cause* of the overcapacity problem, and its success was incomplete. As had happened in the aftermath of the Davis Plan, entry restrictions for halibut were gradually relaxed and generous grounds for appeal were provided. Before limited entry, there had been fewer than 100 vessels fishing for halibut. Afterwards, there were more than 400.

A similar pattern emerged in the sablefish fishery. Limited entry was contemplated in 1978, but a year later the Japanese market expanded dramatically and a swarm of vessels began fishing for sablefish. When limited entry was introduced in 1979, it was too late. Again, restrictions were relaxed to allow a larger fleet.

## THE ERA OF PUBLISHED POLICIES

In his final report, *Turning the Tide*, Pearse had argued quite convincingly that the poor documentation of government policy was one of its critical shortcomings. In apparent response to this criticism, the Department set about issuing various planning and policy statements. This trend has been especially prevalent since about 1986, when the Department issued *Canada's Policy for Recreational Fisheries* and its *Policy for the Management of Fish Habitat*.

In some cases, it took an additional kick-start to motivate the government to write down its policy. A directive from the Prime Minister in 1985 called for the promotion of recreational fisheries. The resultant policy was, by and large, an inoffensive document. It recognized the legitimacy of recreational fishing, the shared responsibility of the federal and provincial governments, the responsibility of the fishing community, and other universally acknowledged truths. The document's most adventurous declaration was the primacy of conservation rather than the maximization of social benefits. Specifically, the Department's priority would be to "conserve, restore, and enhance our recreational fisheries and the habitat on which they depend."<sup>79</sup> Despite this potentially significant admission, the recreational policy was sufficiently vague and replete with 'motherhood' statements that it has thus far failed to make much of an impact in directing managers or quelling stakeholders' criticisms.

The habitat management policy was generally considered to be a more ambitious statement of policy. The Department set as its long-term objective the achievement of an overall 'net gain' in the productive capacity of fish habitats. The guiding principle behind this objective was 'no net loss,' which Pearse had advocated in his report. The document even went so far as to outline procedural steps to achieve 'no net loss.'

It is difficult to dispute that the Department had finally announced a clear, operational policy without resorting to motherhood statements. The policy was broad enough to be labelled a *policy* (that is, it did not specify *regulations* governing fish habitat), yet it went into sufficient detail that its operational meaning was clearly discernable to its audience. For example, it stated that "compensation-in-kind is not a feasible option in cases involving liquid waste discharges," it called for "planning for multiple land and water use in a number of west coast estuaries and in the Nicola River Basin in B.C.," and it declared that "the costs to government of activities undertaken to clean up spills of oil and other pollutants will be recovered."<sup>80</sup> These statements could easily have been so watered down as to be completely impractical for fishery managers and unclear to the public at large. Reassuringly, they were not.

many 'policy' and 'priority' documents were issued that it became difficult to tell which were the real ones.

One such example was the *Strategic Priorities 1990* pamphlet, which was intended to give the Department's employees a comprehensive overview of the priorities for the year ahead. This document arose out of an annual work planning process, in an attempt to integrate the Minister's policy objectives with the workplans of civil servants. While this linkage may seem like a window of opportunity to implement policy in an efficient manner, the results of this process have only been published once. *Strategic Priorities 1990* named fiscal restraint, consultative processes, the development of a Canada Oceans Act and environmental problems as the pressing issues in fisheries management. Even in comprehen-

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***'The poor documentation of government policy was one of its critical shortcomings.'***

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The First Ministers, unwilling to buck a trend, envisioned further policies at their 1985 conference. The discussions at this meeting paved the way for an announcement by Fisheries Minister Tom Siddon in 1986: surveillance and enforcement capabilities would be strengthened by increasing fines, providing full observer coverage on foreign vessels, arming patrol vessels, and so on. Siddon also described a new foreign fisheries relations policy: non-surplus allocations would no longer be made except for existing treaty commitments, and allocation of surplus resources would be based on foreign nations' cooperation in conservation rather than their trade performance.

Pearse had not only criticized the absence of documented policy, he was also skeptical of the large number of policies that were introduced in a hodge-podge fashion, only to change in light of facts that weren't considered at the time of their implementation. It could be argued that the Department was somewhat successful in countering the first criticism, but much less successful in countering the second. So

sive documents such as this one, though, we can see that new conceptions of management had crept into the popular consciousness. Significantly, the document pledged "the greater use of area licensing and limited entry systems in specific Pacific fisheries"<sup>81</sup> (area licensing for crabs was implemented in that year).

A policy document that didn't pass from sight so quickly was *Vision 2000*, which had been written in 1989 by staff in the Program Planning and Economics Branch. Industry members feared that the paper represented government policy, despite its stated purpose of being for discussion. *Vision 2000* envisioned the widespread use of individual quotas and area licensing, a 50% reduction in fishing costs, greater use of terminal fishing, quadrupled earnings for fish harvesters and sport fisheries, complete cost recovery by the Department, and a province-wide framework for Native rights, to name but a few. Given these radically different methods of management, we can suppose that *Vision 2000* could only have been intended to provoke thought, rather than to express the direction of government policy.

## THE RISE OF AQUACULTURE

The emergence of aquaculture as an economic force illustrated that fisheries management does move quickly when market forces push hard enough. While aquaculture had existed for some time, the 1980s witnessed a biological and economic breakthrough in the hatching and rearing of salmon. The secret was fish farming, the rearing of Atlantic salmon in the fjords of Norway.

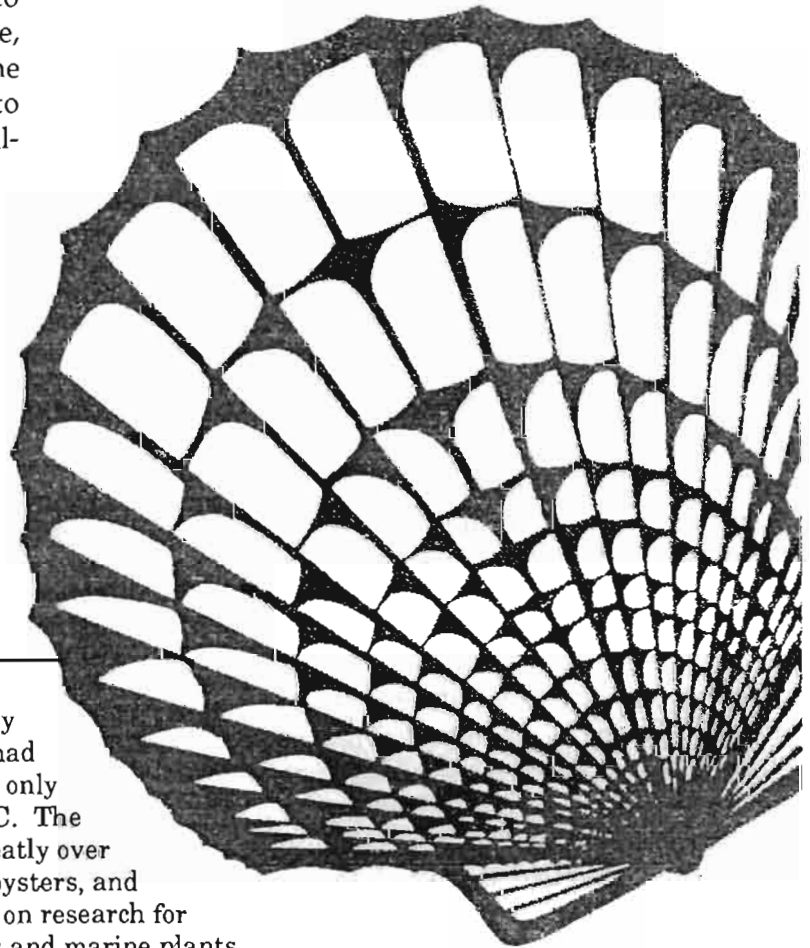
Significantly, it was government initiative that spurred on industry growth in Canada. The Science Council of Canada sponsored a major conference in New Brunswick in 1983, coming down firmly on the side of aquaculture development. The conference came to a consensus that aquaculture had the potential to provide a perfect private-sector solution to the twin problems of overcapitalization and pollution:

"The days of common property fishing are over. Given the finite nature of the ocean to produce fish, especially in its polluted state, and the steadily rising costs of hunting the wild schools, as well as the urgent need to restructure our fishing industry, aquaculture is a compelling alternative."<sup>82</sup>

Within a week of the Science Council report, the government pledged support for a \$2.5 million aquaculture research facility at the Pacific Biological Station. A Science Council policy statement in 1985 urged "the production of farmed fish to supply markets while commercial fisheries are closed to enhance the runs."<sup>83</sup> At that point in time, then, aquaculture seems to have been more of a policy imperative than commercial fleet development.

In the 1980s, aquaculture was big business. By 1987, the annual value of the industry had skyrocketed from \$7 million to \$62 million in only three years, providing over 1,000 jobs in B.C. The species mix of aquaculture has diversified greatly over time, and now includes salmon, mussels, oysters, and trout. Government initiatives have spurred on research for new species such as clams and marine plants.

The provincial government, which maintains jurisdiction over private property and corresponding control over aquaculture, was supportive of the project as well. A federal-provincial agreement was signed in 1985, granting the B.C. government virtual autonomy to regulate the fledgling industry. In keeping with the current trends in public policy, B.C. took a hands-off approach, limiting involvement to research and the allotment of foreshore leases. Provincial lands branch spokesperson Tom Cockburn summed it up as follows: "the aquaculture industry will be industry-driven...they will tell us where they wish to go rather than us tell them where they should or should not go."<sup>84</sup> Geoff Meggs is even more succinct, writing that "the chief subsidy Ottawa and Victoria offered the aquaculture industry was lack of regulation."<sup>85</sup>



## INTERNATIONAL ISSUES DURING THE 1980S

Naturally, aquaculture management contained its share of disagreements. Critics (commercial fish harvesters among them) cited the risk of disease, the perceived threat to the genetic diversity of wild runs, and environmental damage as drawbacks of the salmon farming industry. The federal government's authorization of the transfer of Atlantic salmon eggs to B.C. came under particular scrutiny. The UFAWU reasoned that "it is hard to imagine food production more contrary to the concept of sustainable development or global responsibility."<sup>86</sup> Or the perception that aquaculture threatened fish harvesters' livelihoods, for that matter.

In any event, federal and provincial authorities gradually heeded public requests for greater regulation of the aquaculture industry. A provincial moratorium on fish farm construction was issued in 1986, pending the outcome of the Gillespie Inquiry into aquaculture development. The government commissioned a number of studies into the effects of aquaculture on other resource users, and even resurrected the old practice of marketing assistance by supporting the industry's promotional campaign for aquaculture investment opportunities. Other regulations specified that farmers were required to report outbreaks of disease on their own, and would lose their permits if they were found guilty of poor management. Still, a leaked Department of Fisheries and Oceans memorandum suggested that the honour system of regulation was not working, and it documented gross violations of fish farm regulations.

One of the Department's responses was to define its overall aquaculture strategy. In its *Aquaculture Strategy for the 1990s* publication, which was developed with industry assistance, the Department laid out a clear position on its involvement with aquaculture. It pledged continued support in biological research (particularly for species other than salmon), protection of the aquatic environment, an extensive inspection system, and provision of market analysis. The Department also stressed its position as an advocate for industry interests.

In the 1980s, bilateral negotiations between Canada and the U.S. were the same as always, only more so. They focussed increasingly on interceptions of fish that spawned in the waters of one nation and migrated through the waters of another. Negotiations were frustrated by the numerous levels of government through which U.S. legislation had to pass, and bilateral negotiations were strained to the point that diplomatic notes were exchanged between the two governments. Peter Larkin suggests that the attempts of each nation to maximize their allocation were entirely natural, but unfortunate:

"We're arguing about how to cut the pie while we're foregoing an opportunity to make the pie twice as big...for the last twenty years the Canadian government has said there will be no salmon enhancement on the Fraser River because the Americans would get half the fish."<sup>87</sup>

In 1983, Pacific region Director General Wayne Shinnars said that, because the changes desired by the United States were unacceptable, fishery management plans outside the International Pacific Salmon Fisheries Commission framework would be implemented for west coast fish harvesters. These measures would allow Canadian vessels to catch the fish before they entered convention waters, thereby pre-empting much of the American catch. Among the results would be an increase in allowable trollers from 1,000 to 1,500 vessels.

Tough talk like that finally paved the way for the two governments to reach an agreement. After a series of long and difficult negotiations, the Pacific Salmon Treaty between Canada and the United States was signed in 1985 at the Reagan/Mulroney 'Shamrock Summit.' The Treaty called for each country to manage the salmon stocks originating in its own rivers. Among its provisions were the restriction of

## NATIVE CLAIMS ON THE HORIZON

Canadian trollers off Vancouver Island and northern B.C., harvesting limitations for Georgia Strait chinook salmon, and a catch quota to the U.S. for Fraser River spawners (incidentally, this quota was much less than the 50% to which the U.S. had been entitled under the original salmon treaty). In a *faux pas* that critics suggested was symbolic of the treaty's stateside bias, Fisheries Minister John Fraser accidentally signed his name on the American side of the treaty. Although Canada experienced some significant gains from the Treaty arrangements, critics argued that these benefits were not distributed evenly among all fish harvesters. Alaskan interception fisheries, for instance, have proved difficult to control. Consequently, relations within the Pacific Salmon Commission have been strained at times and industry support for the Treaty has eroded somewhat.

Interesting developments were also taking place in the management of the International Pacific Halibut Commission, which faced continuing declines in the recruitment of juvenile halibut. This problem was exacerbated by escalating American bycatch of halibut, which doubled from nine to eighteen million pounds during the 1985 to 1990 period. The U.S. eventually agreed to reduce its bycatch by 25%, while Canada has committed to an expanded observer program.

Other noteworthy international issues include contentious allocations of Pacific hake, continuing boundary disputes, and interesting developments regarding tariffs and cross-border duties. The year 1989 saw the reversal of the Department's century-old policy of protectionism for the fish processing industry. After a series of bitter debates, the GATT/FTA panel forced Canada to remove regulations that prohibited the export of unprocessed salmon.

On the multilateral front, relations have been progressing more smoothly. A new scientific organization for the North Pacific, called PISCES, was agreed upon in 1990. The International North Pacific Fisheries Commission has continued to seek solutions to high-seas driftnet fishing; in the meantime, a North Pacific Anadromous Species Convention may replace the INPFC, with the intent of eliminating directed fishing for anadromous fish on the high seas.

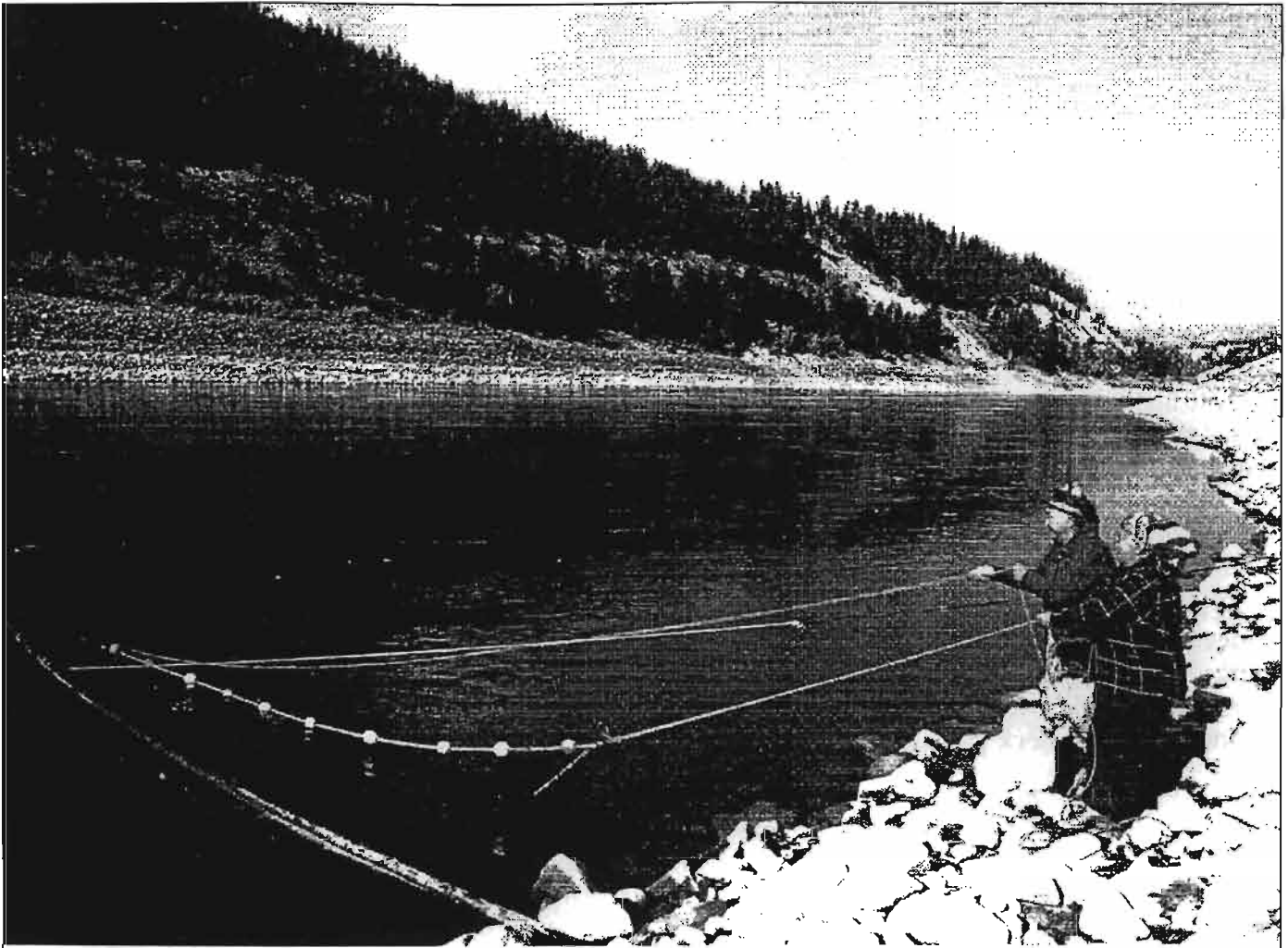
A full century after the commercial fishing industry in B.C. had been regulated by European descendants, policy-makers were still coming to grips with the unresolved issue of Native rights. It was generally acknowledged by the 1980s that Natives had *some* kind of right to fish, but what did that mean? The right to eat fish, sell them, or both? More to the point, how *many* fish?

Clearly, the Native land claims movement was gathering steam as the 1980s progressed. The Boldt decision in the United States had awarded half of the catch in west coast fisheries to Native bands, which undoubtedly increased expectations north of the border. Proposals to grant half or more of all fishing rights to Natives were entertained in the wake of the Pearse Commission, but the government appeared to want to leave the tough decisions to the law courts.

The Supreme Court reached a critical verdict on Native rights with the *R.v. Sparrow* case in 1990. While the Constitution Act of 1982 had explicitly recognized aboriginal rights, the *Sparrow* decision took it one step further by affirming that the aboriginal right to fish for food, social and ceremonial purposes was constitutionally protected. As a result, Natives would be granted priority over all other users, after the public policy requirement of conservation had been met. The Court also found a fiduciary obligation on the Crown to ensure aboriginal access to fishing opportunities. While the Department could continue to regulate aboriginal food fisheries, its infringement would be limited to valid legislative objectives, subject to meaningful consultation, and representative of the least possible encroachment. The Supreme Court was silent about the question of commercial fishing rights for Natives.

The *Sparrow* decision and the growing pressure to settle aboriginal claims following the Oka crisis have had a significant impact on recent Departmental policy. In June 1992, the Department unveiled its \$140 million Aboriginal Fisheries Strategy (AFS), aiming to increase economic opportunities for aboriginal people. Negotiated agreements are hence-





At present, Aboriginal fisheries agreements are breaking new ground in fisheries management. Aboriginal communities are negotiating comprehensive, cooperative management agreements with the Department of Fisheries and Oceans, partly as a result of the 1989 *R.v. Sparrow* verdict, which affirmed the Native right to catch fish for food, social and ceremonial purposes.

forth to include fixed, numerical harvest levels, enhanced self-management, habitat improvement projects, and fisheries-related economic development programs. The Strategy also contains provisions to buy back \$7 million of the commercial fleet's licences. Pilot projects are also to test the commercial sale of Native catches.

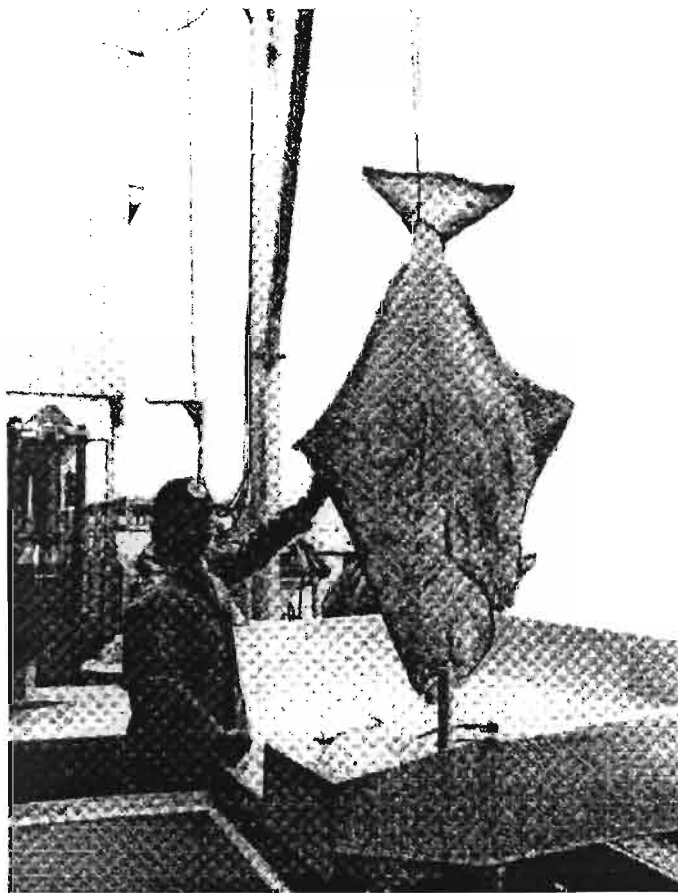
In the first year of implementation, a "crisis" emerged when under the confusion of the new approach to Aboriginal fisheries, there was significant overfishing of the Stuart sockeye run in the Fraser River. Commercial and recreational interests cried foul and the Department once again responded with an independent inquiry. Familiar faces, Drs. Peter Pearse and Peter Larkin, were pressed into service as expert economist and expert biologist (respectively).

Larkin's technical analysis concluded that much of the 482,000 missing fish were indeed taken in illegal fishing in-river (or died as a result of the intense fishing). Pearse advised, however, that this event represented "not so much a crisis in resource management as a crisis in policy."<sup>88</sup>

The implications of these agreements are potentially far-reaching, and to assess them in a historical context would be overly presumptuous. We can say with relative certainty that the Department has "maintained the longstanding policy of first allocative priority to aboriginal food fisheries"<sup>89</sup> and intends to provide greatly expanded funding for cooperative management regimes.

## INDIVIDUAL QUOTAS

While they appeared to herald a revolution in fisheries management, notions of 'dividing the pie' in resource management were not entirely new. Even the medieval commons had been 'stinted,' in that the total amount of livestock pasturage on the village



common was carefully apportioned among the villagers. Moreover, quotas were a well-established approach in allocating rights to other resources (e.g. water, timber, rangelands) in North America. Area licensing for fisheries had been enacted in some form as far back as the 1940s, and fisheries economists had been talking about individual quotas (IQs) for some time. It wasn't until the 1980s, though, that these concepts gained momentum in policy-making circles.

Within a relatively short time, IQs had been introduced in some form in Canada, New Zealand, Australia, Iceland and Britain. The idea behind these quantitatively-defined rights was to divide up the total allowable catch among licensed fish harvesters. Essentially, IQs were 'output controls' rather than the unsuccessful 'input controls' that had been used to date. The theory was that granting individual harvesters their own quota would eliminate the competitive race for undefined shares of the catch, thereby eliminating the incentive to invest in unnecessary fishing capacity. With each fish harvester's share of the catch defined by a quota, closed seasons and other restrictions could be abolished, and fish harvesters could organize their fishing activities to harvest their quotas at the lowest possible cost. Moreover, if quotas were transferable, fish harvesters could adjust the scale of their operations for maximum efficiency. However, not everyone is convinced of the efficacy of IQs, and even advocates such as Peter Pearse acknowledge that circumstances in the salmon and roe-herring fisheries are not conducive to this form of regulation.

Even so, an impetus to introduce IQs was coming from industry members in the late 1980s, some of whom felt that the proliferation of input controls was grinding them into unsafe and unprofitable conditions. By the end of 1990, the halibut, geoduck, abalone and sablefish fisheries were managed with IQs. In the case of halibut, the IPHC's role was reduced to establishing the quota for the Canadian fishery.

Unloading halibut during the last two-day opening. In 1989, the introduction of Individual Quotas made possible year-round fishing for halibut.

## SUMMARY

It has been said that it is impossible to write history about events that have taken place in one's own lifetime. Admittedly, it is extremely difficult to write a 'history' of the last twenty years without the benefit of 20/20 hindsight. Obtaining consensus about the 'facts' is difficult enough, much less attempting to interpret them. The participants remain so personally connected to the events that it is extremely difficult to divorce oneself from them and look at them in an objective historical context. At the same time, it is clearly easier to obtain information, opinions and records for recent events.

The most recent phase in fisheries management commenced in 1969, with the long-awaited introduction of limited entry. The apparent bankruptcy of more traditional regulatory measures heralded the unveiling of the Davis Plan, which placed a limit on the number of vessels that were permitted to fish for salmon. The program represented a significant shift in traditional management orientation, encompassing not only resource conservation but also socio-economic rationalization.

The success of this program was mixed. Licence limitation did have some constraining effect on fleet capitalization, and it did keep harvesting costs below the level that would have prevailed in an open access fishery. Unfortunately, this constraining effect was not as significant as originally envisaged (e.g. it was estimated during the mid-1970s that 98% of the salmon run could still be harvested in six days). In many people's eyes, the attempt of government

policy to frustrate fishing effort with increasingly stringent input controls had failed, in many people's eyes. Still, economic considerations had been added to the biological base and an active policy of improving the performance of the fishery was being pursued.

While the Department of Fisheries was grappling with its redefinition of the right to fish, the 1970s were becoming increasingly chaotic for fisheries managers. Their first documented policy statement was published in 1976, calling for 'water to table' regulation of the fisheries and attention to socio-economic objectives. The latest policy phase was invigorated in 1977 with the proclamation of a 200-mile limit, removing one of the fundamental constraints to effective fisheries management. At the same time, 'fish wars' between Canada and the U.S. were heating up, with a number of squabbles over export duties, salmon interception, and federal subsidies. The Department of Fisheries and Oceans announced a bold commitment to enhancement with the Salmonid Enhancement Program, and took new strides in policy by introducing area licensing in the expanding roe-herring fishery. Limited entry was extended to a variety of other fisheries. Finally, an active policy of government support for Native involvement in commercial fishing was pursued after years of neglect.

Crisis never stays away for long, and the financial hardships and recession of the early 1980s precipitated a new Royal Commission headed by Peter Pearse. Pearse advocated a radical reform of fisheries management, reasoning that the government was acting like a scarecrow: it was successful at targeting,

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***"Where occupants can rely on the permanence of their holdings, and enjoy in successive years the benefit of their own moderation in each preceding season, the Department finds very little difficulty in controlling the pursuit."***

**J.E. Whitcher, 1870**

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declaring and warning, but weak in practical enforcement, statistical information, the consulting process, and policy documentation. Pearse's recommendations for salmon and herring licensing, quota fisheries and cost recovery were the subject of intense debate over the next few years.

One of Pearse's recommendations that was arguably followed a little *too* diligently was the need for documented policy statements. The mid-1980s saw a plethora of published policies swamp the desks of regulators, with mixed success. The Department's habitat management policy was a good first step in addressing fundamental policy issues in an operational context, while its published sportfishing policy resorted to motherhood statements. By and large, policy statements were issued for the 'easy cases' in which they would generate little controversy. Detractors of government initiatives have typically found it convenient to argue that "the Department has no policy," but events of the last decade suggest that plenty of policies exist -- some of them merely exist in diluted form. Other policies are simply not implemented, followed or reviewed.

There's no history like the present, though, and the 1990s have brought about a whole new set of developments. Prominent among them are the rags to riches to rags (to riches?) saga of aquaculture, continuing bilateral negotiations over fish interception, emerging Native claims, and a renewed interest in the definition of fishing rights. The introduction of individual quota fisheries and the emerging discussion of area licensing hint that fisheries management may be entering uncharted waters yet again.

In historical perspective, the last two decades have seen an astonishingly rapid evolution in fishing rights. It is apparent that a quasi-property approach,

in which harvesters have increased rights and responsibilities over fisheries management -- while it is by no means universally accepted -- is taking over in some people's minds from limited entry and open access as a governing ideology. Advocates of individual quotas and area licensing hope that fish harvesters will treat fish as their own property, thereby having an incentive to build up stock abundance while cutting fishing costs. It all amounts to a rediscovery of Whitcher, who wrote this prescient passage in the 1870s:

"Where the fishery is carried on in a desultory and improvident manner, under such incitements to excess as are created by contentious rivalry and the prospect of mere temporary gain, it is extremely difficult to control fishing operations within reasonable bounds. But, on the other hand, where occupants can rely on the permanence of their holdings, and enjoy in successive years the benefit of their own moderation in each preceding season, the Department finds very little difficulty in controlling the pursuit."<sup>90</sup>

In the end, our fixation with the ins and outs of fisheries management can divert attention from the real reasons why we care so much about fishing on the Pacific coast. We have an industry that is rich in tradition and a system of management that is envied around the world. We will always have fish, and we will always have dedicated people to manage that harvest. Policy may seem critically important to our lives and livelihoods day in and day out, but ultimately policy is as transient as the waters it governs. When asked to comment on how he had been affected by fisheries policy, one fish harvester simply replied, "I've no idea -- I gave up, I'm going fishing." Amen.





**"I gave up, I'm going fishing."**

## ENDNOTES

- <sup>1</sup> Meggs, 190.
- <sup>2</sup> Fraser, 24.
- <sup>3</sup> Marchak *et. al.*, 353.
- <sup>4</sup> Meggs, 192.
- <sup>5</sup> Fraser, 27.
- <sup>6</sup> *Final Report of the Fleet Rationalization Committee* (Vancouver: Department of Fisheries and Oceans, 1982) 18.
- <sup>7</sup> Meggs, 194.
- <sup>8</sup> *Ibid.*, 191.
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"History is more or less bunk."

*Henry Ford*

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