

The Canadian Fisheries Industry: Retrospect and Prospect

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Introduction:

Five hundred years ago, the explorer John Cabot returned from the waters around what is now Newfoundland and reported that codfish ran so thick you could catch them by hanging wicker baskets over a ship's side. Cabot had discovered a resource that would change England forever, the basis of a maritime trade that would give that tiny island kingdom the wealth, skills and shipbuilding capacity which would transform it into a global empire. He had discovered the most fantastic fishing grounds the world had ever seen, waters so teeming with life that a vast swath of the new world was colonized just to harvest its seemingly limitless bounty (Woodward 2001, pp. 34-39).

The fishing industry is one of the oldest in Canada, initiating trade primarily with Britain when Europeans first came to Canadian shores. The fisheries played an important role in the development of Canada's economy being one of the first bulk staples products exported from Canadian shores. The Canadian fisheries have been an increasing concern in recent years, however, not so much for the contribution they now make to the Canadian economy (which is small), but for the environmental and conservation costs that have been paid within the fisheries industry and communities as exploitation of fish stocks using mechanized harvesting techniques has pushed many fish stocks, not only cod, to historically low levels. How to reverse these trends in a mature staples industry, and how to manage a sustainable fishery is an increasing concern and priority not only in Canada, but also in international fora.¹ While the impacts and costs of fisheries decline is felt domestically, in the modern era fisheries management has become much more of an international concern. Given the ability of harvesters from many countries to (over-)exploit many species either in international waters or as they migrate through domestic oceans, it is increasingly various international fora and organizations that provide the analyses that establish and illustrate the critical link between economic, environmental, cultural, political and social values and variables in fisheries policy.

All the natural resource sectors are subject to various notable influences, including trade liberalization, globalization and transnational organizations (Wellstead). Institutions such as the World Trade Organization (WTO), as "the only global organization dealing with the rules of trade between nations,"² hope to work in tandem with other NGOs and IGOs in the interest of securing sustainable and economically successful fisheries. The ways in which these influences impact fisheries is dependent upon the nature of the governmental structures and regimes that govern the fisheries within each state, and how the fisheries relate to these various institutions, as well as how natural resource sectors and governments relate to external institutions (such as trade liberalization institutions like the World Trade Organization). These relationships change over time, and are particularly relevant when examining the emergence of new economic sectors amongst the traditional sectors, or rather the shifts between traditional staples economies to new post-staples economies. It is the relationship between these influences,

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particularly the trade liberalization pursued by the Ricardian state in this sector of economic activity, that will be the focus of this article.

The Fisheries as Staples Industries

As Wellstead set out in his article, a staple is essentially a primary sector “building block” in natural resource based economies. It is a raw or unfinished commodity such as timber or fish which is sold on the market with little to no processing (Hessing and Howlett, 1997). Staples economy theory, developed by Harold A. Innis, is a theory based on the Canadian experience as a new settler society with a vast resource base. The theory argues that the development of Canada’s economy was strongly linked to its natural resources, driven by global demand for these resources, or rather, subject to the external pressures of global demand (ibid; Laxer, 1985). The pressures of external demand created a centre-periphery relationship, whereby the external forces represent the metropole or centre which determines the development of the periphery, in this case Canada’s, economy.

There has always, therefore been a major, international, focus to staples theory (Laxer, 1985). So much so, that staples theory has sometimes been interpreted so as to take Canada “off the hook”, so to speak, regarding its own responsibility for its economic development. As Marchak has argued:

“(When staples theory is) applied to Canada, underdevelopment was due not to entrepreneurial weakness, cultural deficiencies, or lack of aggregate demand, but to the combination of control of internal surplus by a national bourgeoisie unconcerned with national industrial development, and the market demands and constraints imposed by Britain and, subsequently, the United States” (Marchak, 1985: 676).

The development of the Canadian economy, however, as Gordon Laxer has argued, cannot be solely attributed to policy emanating from metropolitan countries. This echoes the view of Mel Watkins when he stated “Staple economies are often believed to be more at the mercy of destiny than they actually are” (Watkins, 1967: 63 in Laxer, 1985). That Canada has been heavily reliant upon its natural resources is not matter of dispute, but who has controlled the development of this resource-based economy is the centre of this debate. Has Canadian internal policy been responsible for the creation of this staples state, or has it been the power of external forces, or metropolitan countries such as Britain and the United States? The dynamics between internal and external forces on the Canadian economy is particularly relevant when looking at the fishery. Here, the relationships between Canadian and “metropolitan” policy come to the fore as international agreements concerning trade in general and fisheries management is specific, represent the negotiated settlements between states regarding what they will trade and under what conditions.

This article highlights the developments in the Canadian fisheries, examining some of the problems experienced by the Canadian fishing industry, and in what ways the Canadian fishing industry has been impacted by trade liberalization and trade agreements such as the NAFTA and the WTO. The purpose of this article is to discuss where, particularly, the Canadian fisheries stand in relation to the changing Canadian economy from a staples to a post-staples economy, and how this relationship in turn is affected by external factors such as international trade regimes and agreements.

The Status of the Current Canadian Fishery

As Hutton (1994) has discussed, Canada is arguably moving from a staples to a post-staples political economy, at least insofar as a number of the dominant provinces such as Quebec and Ontario have left natural resources behind as fundamental features of their economic development. Even provinces such as British Columbia that have been traditionally labeled as staples economies are demonstrating much more complex economies whereby manufacturing, particularly in electronics and communication, now by far outstrips growth in the natural resource sectors (Hutton, 1994). Nevertheless, the fisheries remain a feature of Canada's traditional, staples basis and a significant employer in many coastal communities and in the Atlantic, Pacific and Arctic regions. Even if fisheries harvests have declined, Canada's large extent of coastline and location on key migration routes of critical food species such as salmon and cod, ensure that it will have an active fisheries policy and will be a major player in international fisheries negotiations and accords.

As in the past (discussed in the following section), the leading export market for the Canadian fisheries today remains the United States, with the European Union coming in a distance second.³ Other markets include non-EU European countries, Central and South America, Japan (which comes rather close to EU numbers), as well as in Asia and Africa. The following charts illustrate the developments of these markets over the past 5 years (2000-2005), as well as provides a glimpse into earlier developments during the 1990s (with statistics for 1999, 1995, and 1990).⁴ The selected commodities referred to include seafish and freshwater fish (whole, dressed fresh, frozen, fillets, blocks), fish meat, smoked, salted, dried, pickled/cured, and canned fish. It also includes shellfish (fresh, frozen and canned), fish livers and roes, shellfish meal and fish oil.⁵

Domestic Imports of Selected Commodities by Major Market: USA (STATSCAN/DFO, 2006)

Time period	(tonnes)	Value (\$1000 CAD)	\$/KG
Jan-dec 2005	363,245	2,663,239	7,33
Jan-dec 2004	374,078	2,823,524	7,55
Jan-dec 2003	375,320	3,007,872	8,01
Jan-dec 2002	401,279	3,273,261	8,16
Jan-dec 2001	368,526	3,065,753	8,32
Jan-dec 2000	345,539	2,899,319	8,39
Jan-dec 1999	338,524	2,583,531	7,63
Jan-dec 1995	278,652	1,569,599	5,63
Jan-dec 1990	362,366	1,411,079	3,89

Domestic Imports of Selected Commodities by Major Market: European Union (STATSCAN/DFO, 2006)

Time period	(tonnes)	Value (\$1000 CAD)	\$/KG
Jan-dec 2005	79,148	458,611	5,79
Jan-dec 2004	79,442	474,388	5,97
Jan-dec 2003	70,649	455,983	6,45
Jan-dec 2002	56,426	369,772	6,55
Jan-dec 2001	59,255	366,169	6,18
Jan-dec 2000	50,904	329,957	6,48
Jan-dec 1999	57,432	361,686	6,30
Jan-dec 1995	43,537	310,233	7,13
Jan-dec 1990	99,095	509,846	5,15

The quantities of the export commodities were quite high in 1990; in the EU case the highest ever in the 15 years between 1990 and 2005. The quantities of fisheries-based export commodities dropped significantly after the moratorium on cod in the early 1990s, whereby both the US and EU quantities and value declined. However, we can see that both quantities and value (of course the value being also dependent upon the price per kilo) increased during the latter half of the 1990s and into the new millennium. However, these increases in quantity and value were not based on the same species being fished over time. Despite increases in groundfish quantities from 2000 to 2005, the cod fisheries show a significant decline while the hake, flounder and Greenland turbot show significant increases. Pelagic fish such as Atlantic salmon, mackerel and capelin also saw increases in catch quantities, thereby increasing the overall value of the fisheries. The shrimp fisheries more than doubled in annual quantity over this same 5 year period, with crab (including snow/queen and dungeness) also exhibiting discernable increases.⁶ The summary of Canadian commercial catches shows that the quantities fished from 2000 to 2004 have increased each year (the value of the catches differs somewhat, though not radically, based on the market value of the fished products).⁷ In other words, declining stocks have not significantly reduced the quantity fished and the value of the fisheries, as declining stocks are being replaced by other stocks.

Alternatives are being sought, such as through aquaculture. The increase in fish production since the mid-1980s has been enormous. Finfish such as Atlantic, Chinook, and Coho salmon, and trout, and shellfish such as clams, oysters, mussels, and scallops are all a part of the aquaculture industry. In 1986, the aquaculture industry produced almost 10,500 tonnes of product; by 2004 it was almost 146,000 tonnes.⁸ It nevertheless accounts for less than half of the total quantity of fish produced each year. We are still heavily dependent upon wild freshwater and seafood in the fisheries. But for how long can this be sustained? Is (over)fishing other stocks the answer? It seems to be the acceptable solution so far – but the solution does not appear to have the health of the oceans, and its contents upon which the fisheries depend, in mind.

The current state of the global fisheries is tenuous. A recent article published in *Science* examines biodiversity loss due to various human impacts on the oceans, including exploitation, pollution and habitat destruction.⁹ Global fisheries collapses have been increasing over time, with 29% of the fisheries considered collapsed as of 2003.¹⁰ It additionally claims that at the rate of eroding diversity, a total fisheries collapse can be expected by 2048.¹¹ In species rich ecosystems, the chances of species collapse are reduced, and the chances of species recovery are greater, in large part because of the diversity of product. In this respect, switching to other stocks can assist the overfished stocks to recover. Insofar as this article, which is not the first of its kind (see, for example, Pauly, 2003) has been able to demonstrate a crisis in our oceans, it does seek to offer solutions, by suggesting that sustainable fisheries management, pollution control, the creation of marine reserves, and so forth (in other words, restraining overfishing) can assist in re-building biodiversity in the oceans ecosystems. To better understand what is needed, we need to understand what have been some of the critical factors leading towards this impending fisheries collapse.

A History of the Canadian Fishery: Trade Policy, Staples Production , and Fisheries Industry Development

The fisheries have experienced a myriad of trade relationships, including the truck and barter system (the exchange of commodities) or in forms of exchange through money or credit. The truck system, in which fishers exchanged their fish directly for goods, usually at company stores, for a long time benefited the merchants who bought the fish from the fishers, in that no money exchanged hands and profit margins on traded goods in captive markets were very high. The fishers exchanged fish for foodstuffs and supplies from the merchant, but the merchant controlled the prices for both, ensuring that the fishers were constantly in their debt (Apostle, 1998; Innis 1935).

This system was kept in place both by the isolated nature of fisheries, but also by mercantile policies followed in leading colonial countries, notably Great Britain, which insured merchant monopolies by prohibiting competing international players from entering colonial markets. Great Britain actively pursued a free trade agenda in the later 1800s, however, and this agenda was imposed upon its colonies. This, in conjunction with the fact that this policy toward the colonies forced the likes of Canada to pursue broader trade possibilities (such as the US), set Canada's course toward a predominantly, if not controversial and rocky, free trade direction, beginning with reciprocity.

The notion of reciprocity or free trade, in British North America was intricately linked to the fisheries. Debates as to whether or not Canada should enter a reciprocity treaty with the United States in the 1850s centred around, in part, the interests of the fisheries. New Brunswick advocated reciprocity, for example, while other colonies, like Nova Scotia wished to pursue alternatives to reciprocity which would enhance fish monopolies (Innis 1935). Reciprocity entailed a reduction of tariffs between the cooperating nations, and although considered a measure of free trade between the contracting parties (a first step towards free trade for Canada and the US), it did not mean free trade in and of itself since it raised differential duties against outside trading partners (Masters 1963). Although the system of trade was still mercantilist, Canada was now broadening its trade parameters and reaching out to new markets in the fisheries and other sectors. Although not consistent with a unilateral free trade approach, reciprocity featured aspects of a liberal free trade regime which, it was hoped, would manifest itself into a broader free trade agreement in the future (Masters 1963).¹² In the meantime, however, it was the fisheries that ensured that a reciprocity agreement would be signed – the threat of eliminating American fishing rights and privileges in Canadian waters was decisive in instituting a long term relationship between the two neighbouring countries in relation to their successful and unsuccessful pursuits for freer trade.

After 1866 Canada's National Policy was to increase foreign (particularly the US) capital in the creation of 'branch plants', forcing even greater reliance on staple resources for export earnings (Clement 1999). The fisheries were engaged in a "Fordist" program of industrialization as modern factories (canneries) using indigenous and imported labour began to flourish on both the Atlantic and Pacific coasts, as well as upon the Great lakes and the large freshwater lakes of the interior of the country. As in other industries, "capital began to displace labour in importance and large-scale to succeed individual production" (Innis 1935 p. 282). The Fordist model demanded a stabilized supply of fish to canneries, and therefore encouraged a constant and continuous flow of fish to market, replacing or augmenting previously seasonal fisheries with new or expanded ones. This, in turn, led to the development of greater and greater technological reliance, particularly in the development of mechanized steam and oil-driven trawlers (Apostle 1998).

This new large-scale, permanent, capital intensive fishery required secure, permanent access to international markets and in 1911 Canada negotiated another free trade agreement with the US, which covered a variety of natural resource products, including fish. Although the negotiating Canadian government lost the 1911 election and the treaty was never proclaimed, exports to the US continued to rise as that country's population increased dramatically during the pre- and post WWI period (Innis 1935).

When faced with protectionist pressures and punitive import tariffs in the US in the 1930s, Canada pursued a tariff reduction direction, both multilaterally or bilaterally, with the US (Clement 1999). Newfoundland, prior to its entry into Confederation in 1949, also attempted various measures to offset foreign control of its fisheries and its reliance on protected foreign markets. The cooperative program developed in 1947 through the Newfoundland Associated Fish Exports Limited (NAFEL), for example, complemented the work of the Newfoundland Fisheries board in attempting to control the export of salt fish (cod) through a monopoly or marketing cooperative. 13

In the 1950s, the branch plant form of industrial organization, linking Canada to larger, foreign-owned companies (predominantly in the USA), took hold in Newfoundland, and in the Canadian fisheries industry overall.¹⁴ The Canadian government encouraged Fordist development through private enterprise, focused on the expanding frozen (as opposed to salted) fish market. It did not recognize a conflict with stabilizing supply, requiring extensive and continuous fishing with trawler technology, which although employing less than 10% of fishers could match and increase current catches, as "there was room for expansion in the fisheries, as the potential of groundfish stocks was not fully utilized, and, in any case, Canadian fisherman took less than 7 percent of total codfish catches off the eastern shores" (Apostle 1998 p. 76) The industrialization program employed by the Canadian government continuously called for "a longer fishing season and more fishing effort."

Ultimately Canada and the United States, Canada's largest trading partner, have to date engaged in 7 fisheries agreements (see Table 1 below):

TABLE 1 – Canada-US Fishing Agreements

Agreement between the UK and the USA respecting the North Atlantic Fisheries (Signed July 20, 1912, In Force Nov. 15, 1912). CUS 456.
Convention for the extension of Port Privileges to Halibut Fishing Vessels on the Pacific Coasts of the USA and Canada (Signed March 24, 1950, In Force July 13, 1950). CTS 1950/5.
Convention on Great Lakes Fisheries (Signed Sept. 10, 1954, In Force Oct. 11, 1955). CTS 1955/19. Amended May 19, 1967. CTS 1967/10.
Convention for Preservation of the Halibut Fishery of the Northern Pacific Ocean and Bering Sea (Signed March 2, 1953, In Force Oct. 28, 1953). CTS 1953/14. Amended March 29, 1979 and October 15, 1980. CTS 1979/27 and 1980/44
Treaty on Pacific Coast Albacore Tuna Vessels and Port Privileges (Signed May 26, 1981, In Force July 29, 1981). CTS 1981/19.
Pacific Salmon Treaty (Signed Jan. 28, 1985, Amended by Exchange of Notes May 5 and June 12, 1986, and In Force March 27, 1987). CTS 1985/7. Amended by Exchange of Notes Oct. 18, 1989. CTS 1989/41. Exchange of Notes constituting an Agreement amending Annexes I and IV of the Treaty concerning the Pacific Salmon, signed in Ottawa on January 28, 1985, as amended (with annexes). (Signed and In Force February 3, 1995). CTS 1995/39. Agreement on the Establishment of a Mediation Procedure regarding the Pacific Salmon Treaty. (Signed and In Force September 11, 1995). CTS 1995/13.
Agreement on Fisheries Enforcement (Signed Sept. 26, 1990, In Force Dec. 16, 1991). CTS 1991/36.
Source: Canadian Embassy, Washington, D.C., <i>Treaties and Agreements in Force between Canada and the United States</i> , Government of Canada, internet. Available at: http://www.canadianembassy.org/government/treaties-en.asp#21

Conflict Between Sustainability and Markets in A Mature Staples Industry

The supply-demand relationship which was a continuing feature of Canada's staple fisheries industries had particular significance with regard to the phenomenon of the overexploitation of the fisheries, or overfishing in the mature fisheries industry in the last quarter of the 20th century. ¹⁵ Demand for fish continues to exceed supply, and thus the incentive to extract as much resource as possible, or to overfish, does not cease. Overexploitation is further exacerbated by over capacity in the harvesting sector, or too many fishing boats chasing too few fish which in turn was exacerbated by government subsidization of the fisheries industry in the 1950s and 1960s (Delgado). Subsidies, meaning the internal, national policies of fishing nations, have become a significant part of international fisheries discussions, as they are blamed in large part for the problems of overfishing and depleted stocks.

Subsidies occur 'when the government through its actions enables producers of goods and services to avoid full payment for the factors of production and/or to behave differently in the marketplace than they would otherwise.' (Schrack and Keithly 1999, p. 153) Subsidies are not necessarily evil in their own right, as many exist with the purpose of promoting "the pre-eminent social goal of improving human safety." (p. 1554) However, some subsidies no longer promote this goal, or even detract from it, especially with regard to the fishing industry whereby subsidization during earlier eras of undercapacity in harvesting technology may have served a greater social purpose, but now contributes to overcapacity and to the destruction of the fish stocks ,therefore reducing social, economic, and ecological security.¹⁶ Accordingly, most current proposals and actions that attempt to promote fish stock recovery and prevent further ecosystem damage, both of which are critical to a sustainable fishery, involve the elimination of all kinds of government subsidies to fishers and fish companies and the implementation of conservation policies such as boat buybacks, quotas, seasonal limits on catches and outright fishing moratoriums.

Although Canada has managed to sustain, and even increase, its overall fish/seafood volumes (exports in 1998 were at their highest value thus far), this has been entirely dependent upon new sources of product, rather than from the traditional stocks that previously defined the Canadian fisheries market. Cod stocks continue to be dangerously low, with Pacific salmon stocks, Coho in particular, following close on the heels of the cod if not surpassing it with regard to high risk of extinction. Overcapacity in the processing sector has equally placed undue pressure on the fish stocks, with the result that the government of Canada is presently pursuing initiatives to re-orient the focus of the processing sector, including value-added secondary processing, aquaculture, and 'rationalization' of the industry. However, pressure to export fish products continues to mount, as Canada is the number one supplier of seafood to the US market: "[t]he United States is the second largest importer of fish products in the world, after Japan," (Anania 1994, p. 518) and the European Union opened its tariff rate quotas on cooked and peeled shrimp from Canada, allowing greater export potential. Dire though the Canadian fishing industry is, it remains the largest foreign supplier of seafood to the US, accounting for 67% of total Canadian fish exports. It additionally supplies over 100 countries around the world. What Canada imports, largely from the US, is turned around into value-added product and re-exported primarily to the US market.

An assessment of the overall situation of the fishery in this new era based on financial or trade figures alone, however, can be misleading. As new fish stocks replace the old exhausted ones this gives the impression of a financially healthy, fisheries industry while it is not, in fact, biologically sustainable. Thus, for example, the reports issued by the Organization for Economic Cooperation and Development (OECD) in 2001 showed Canada's fisheries to be in financially good stead due to an increased focus on high-valued crustaceans such as crab and lobster. The review however acknowledged the low volume of landings in most other species for the Canadian fishing industry as a whole in relation to historical levels (increased crustacean landings and an improvement in aquaculture secured Canada a record overall volume in 1999 of 1.1 million tonnes, or CAD 1.9 billion in value (OECD 2001) It praised the Canadian government efforts to increase conservation through bilateral and multilateral fishing agreements such as the Pacific Salmon Treaty and the International Plan of Action (IPOA) adopted by the UN Food and Agriculture Organization (FAO), but Canada nonetheless appears to be invigorating these efforts from a deficit position. Historically low levels of Canada's significant fish stocks such as cod and salmon make the conservational efforts appear too little too late, as the industry shifts its reliance onto currently thriving stocks such as crustaceans.

Overfishing, Conservation Efforts and International Agreements in the Modern Era

In general it can be said that the Canadian fishing industry was subject to market forces, without much in the way of government protection or substantial policy outside of trade agreements, to the greater extent of its history until government subsidies promoted overcapacity and overharvesting in the era following WWII. After 1975, however, new 'buffering' strategies were employed in the interest of conserving fish resources through fisheries management strategies, which became increasingly relevant, although recognized far too late where the cod fishery was concerned, as the fight against over-fishing had begun.

Trade agreements, and in some general respects the NAFTA, apply to the fisheries primarily with regard to the maintenance of international fisheries laws such as the 200 mile Extended Economic Zone, and in later agreements, conservation efforts.¹⁷ Their impacts, both in earlier agreements as well as more recent, have had a significant effect on the development of the fisheries industry. These agreements attempt to balance the needs of trade and economic security with the needs of conservation and environmental security. The NAFTA and WTO (and their predecessors the CUSFTA and GATT) have had a substantial impacts on the directions the fisheries have taken. ¹⁸ By 1998, the United States had 83% of Canada's merchandise exports, including primary products.¹⁹ Primary products, in addition, still accounted for almost one third of Canada's merchandise exports, illustrating yet again its heavy dependency upon natural resources.²⁰ Due primarily to the NAFTA, Canada's tariffs have all but been eliminated between it and the US. However, Canada has continued to impose high tariffs towards other countries, particularly those in the developing world which would be considered to have a 'comparative advantage' over Canada, especially in the area of food products.²¹

Due to this very close relationship with the United States, fostered by CUSFTA and NAFTA, some tension is developing with regard to Canada's additional commitments to other international treaty regimes. With 90% of its trade taking place within the NAFTA, Canada's commitments are not global but regional And many Canadian trade actions are motivated by conditions in the United States. As much as US trade policy dictates the moves of Canadian trade activities, regional trade agreements

such as CUSFTA and NAFTA rely upon already established regulations in the GATT and WTO.

The GATT Article XX has been used often as the basis for in decisions pertaining to conservation actions taken on either behalf of the Canadian or American fisheries. Although not specifically mentioning the environment, this article has been most often relevant to these decisions is the trade versus conservation arguments, in particular 'relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption.'²² Insofar as the environment would be relevant, the GATT Article XX states that:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:

. . .(b) necessary to protect human, animal or plant life or health;
 . . .(g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption; . . .

Although Article XX can apply to fish products, they are not specifically dealt with in the GATT, and were not addressed during the Uruguay Round Agreement on Agriculture. Fish products, although having the highest share of international trade for food, are treated as non-agricultural and are considered in kind with industrial products.²³

Under the GATT and WTO numerous cases have been heard which try to justify the necessity of raising barriers to trade on the basis of environmental concerns, the vast majority of which were ruled to be inapplicable and therefore the measures could not be maintained (Swenarchuk 2000). John Kirton, Alan Rugman and Julie Soloway review a number of fisheries-related disputes between Canada and the United States to illustrate the impact of trade agreements upon the fisheries industry (Rugman and Kirton 1999). For example, in 1979 Canada was subject to a US embargo preventing the export of tuna and tuna products from Canada, and the GATT ruling concluded that although the US action could be understood as a measure of conservation of an exhaustible resource, it did not apply the same restrictions to domestic producers and therefore the US embargo was impermissible. Resource conservation was again raised in 1988 when Canada claimed it needed to restrict the export of unprocessed herring and sockeye salmon – the GATT ruled against Canada under Article XX as the restriction was not applied to both foreign and domestic producers and therefore only penalized the US. Shortly thereafter, Canadian fisheries authorities complied with the GATT ruling and lifted the restrictions on herring and sockeye salmon, but instead imposed a mandatory Canadian landing requirement on five species of salmon for the purpose of conservation, allowing for biological samples as each catch was landed. The US complained, stating that forced Canadian landings restricted exports and forced fish to be processed in Canada as the wait was too long for the fish to enter the US. As the CUSFTA was recently negotiated, the US chose to mediate this dispute using the FTA (although the same regulations would apply given the fact that the FTA incorporated these provisions of the GATT). On two counts the Canadian measure was deemed illegal – first that the measure was not just a domestic measure but instead negatively affected and restricted trade with the US, and second that this could not be construed as a conservation measure as '[t]he panel concluded that this was not the case, since it was highly unlikely that Canada would have

imposed the same requirements “if its own nationals had to bear the actual costs of the measure”

In 1990 it was Canada’s turn to wage a complaint against US fisheries practices when the US restricted lobster exports from Canada on the basis of size. This measure was instituted on the basis of conservation in that it would allow US lobster to mature to a greater size before being caught. Canada argued that this discriminated against Canada since lobster in the colder Canadian waters mature at a smaller size than those in US waters. The US countered that lobster was treated the same regardless of origin (domestic and foreign lobster had to meet the same standards), and the FTA panel, split on the decision (3-2), upheld the US action stating that it was “‘primarily aimed’ at the conservation of US lobsters.”

Kirton et. Al. concluded that:

One of the most striking findings is how the outcome of issues over environmental regulatory protectionism have benefited the United States and its firms. Of the 50 cases effectively resolved, the United States has won 29, Canada 8, and Mexico 7, while 8 have been resolved to the mutual benefit of two or three of the North American partners. Such a pattern, with the United States prevailing in 58 per cent of the cases, would appear to be a further testament to the realist presupposition that in this bargaining domain as in so many others, the United States with its overwhelmingly superior power, is bound to prevail (Rugman and Kirton p. 229).

Conclusion: Canadian Fisheries as a Declining Mature Staples Industry

Without question, Canadian domestic policy has had an influence on the development of the fisheries staple industry – from its National Policy to its subsidization of both fishers and, more recently its effort to conserve fish stocks. In this respect Laxer is correct in allocating “blame” for the current dire status of the fisheries industry where it is, in part, due: on the Canadian government itself. However, it is also the case that trade liberalization, from the pressures exerted early on by the colonizing country of Britain, to the current dependency upon the US market for fish exports, has played an enormous role on the development, if not devastation of the industry.

In this respect the Canadian government could have done much more in the way of first recognizing the severity of fish stock depletion as well as fostering a sustainable fisheries industry that met the needs of conservation and fisher communities. However, the Canadian fisheries have been exposed to a long-term and extensive process of liberalization since the decline of mercantilism in the fishing industry in the 1840s. Fisheries and Free trade agreements, manifested currently through the likes of the FTA, NAFTA and WTO have institutionalized a mature staples industry and limit its ability to change. Fisheries management in Canada has largely reflected a mature staples view of increased and enhanced commodity production over most of the period of the fisheries history, only beginning to take a more scientific approach to fisheries management in the late 20th century when it became more than apparent that the fisheries were in trouble due to rapidly declining stocks. .

The present relationship between the Canadian fishing industry and community, and trade liberalization as exemplified by the NAFTA and WTO reflects the antagonisms and contradictions apparent in a too-late recognition that largely unfettered trade in the fishing sector leads to depleted stocks and threatened ecosystems. The Canadian government has turned to a more conservationist fisheries management practice, but must now fight for the right to do so within the confines of NAFTA and the WTO. The Canadian government, and the Department of Fisheries and Oceans in particular, will more than likely defer to science as their guide in determining fisheries policy, rather

than trade agreements. When science, however, has been and continues to be as imperfect as it is in providing accurate measures of fish stocks and environmental conditions, it becomes clear that trade agreements play a greater role than DFO might want to anticipate. Unless it can be 'scientifically' substantiated that a DFO measure which has the appearance of limiting or restricting trade is sincerely a measure intended for conservation, the trade agreements entered into by Canada will prevail and curtail such 'protective' measures. It goes without saying that some such measures are in fact disguised (sometimes well, sometimes less so) tactics to protect domestic fishers and fisheries, and, as the examples of FTA and GATT rulings illustrate, under existing trade agreements a panel has to 'judge' on the basis of impressions whether conservation or protectionism dominates the nature of the measure taken and tend to err on the side of the industry.

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ENDNOTES

¹ This is evidenced by the attention garnered at the March 2002 *UNEP Workshop on the Impacts of Trade-Related Policies on Fisheries and Measures Required for their Sustainable Management*, the November 2001 *WTO Ministerial Conference* held in Doha, the *OECD Review of Fisheries* published every two years, as well as the continuing efforts of the Food and Agriculture Organization of the United Nations (FAO) to bring fisheries issues to light.

² World Trade Organization, available at: http://www.wto.org/english/thewto_e/whatis_e/whatis_e.htm, internet.

³ It is possible to argue that the category “other countries”, which combines 54 nations from Africa, Asia and the Pacific region, is the next largest “major market” as its numbers sometimes exceeds that of the EU – however, the EU can be interpreted as a single unit to a certain degree, and on that basis it’s significance outweighs that of the catch-all category of “other countries”. See: http://www.dfo-mpo.gc.ca/communic/statistics/trade/canadian_trade/export_data/xmkt06_e.htm

⁴ These tables are based on data from the Department of Fisheries and Oceans, available at: http://www.dfo-mpo.gc.ca/communic/statistics/trade/canadian_trade/export_data/index_e.htm

⁵ See the list of product groups: http://www.dfo-mpo.gc.ca/communic/statistics/trade/canadian_trade/export_data/xprd05_e.htm

⁶ See the following DFO website for statistics on species group and species: http://www.dfo-mpo.gc.ca/communic/statistics/trade/canadian_trade/export_data/xsps06_e.htm

⁷ See: http://www.dfo-mpo.gc.ca/communic/statistics/commercial/landings/sum_e.htm

⁸ See the statistics on aquaculture at DFO: http://www.dfo-mpo.gc.ca/communic/statistics/aqua/index_e.htm

⁹ Worm, Boris, et.al (November 2006). “Impacts of Biodiversity Loss on Ocean Ecosystem Services” *Science*, vol.314: 787-790.

¹⁰ Ibid.

¹¹ Ibid.

¹² Establishing a ‘most favoured nation’ principle to be extended to other trading partners was one such hope.

¹³ The initiative failed in the 1950s, not long after its creation, in large part due to lack of “support in the political establishment.” Apostle 1998, 75.

¹⁴ Note that Newfoundland joined the Canadian Confederation in 1949, and was therefore subject to Canadian political interests as opposed to just Newfoundland interests.

¹⁵ The U.S. National Research Council defines overfishing as: “fishing at an intensity great enough to reduce fish populations below the size at which they would provide the maximum long term sustainable yield or great enough to prevent their returning to that size (Pauly and MacLean 2003)127n.

¹⁶ Perhaps one of the most controversial moves by the Canadian government in the fishing sector was the implementation of the Unemployment Insurance program in the fishing industry, allowing fishers to collect stamps toward UI benefit entitlement. This program had the effect of reducing the fishing season as fishers stopped as soon as they

had enough stamps, extended the salted fish production (as this work was counted towards the accumulation of stamps),

17 . NAFTA does not include specifics about the fisheries, and therefore is only applicable in indirect ways such that the fisheries are an integral part of Canada's exports. According to the FAO, the NAFTA does not pay any specific attention to fish and fish products, and additionally does not cooperate with the FAO on fisheries matters. As well, [a]t this time, there are no provisions in the GATT or NAFTA to equalize foreign access to coastal fishing.' (Wathen, 1996: 83). However, NAFTA cannot be ignored due to its pre-eminence in the Canada-US trade relationship. As noted by Christopher L. Delgado et.al, institutional developments that apply to sectors outside of the fisheries have great implications for the fisheries nevertheless.

18 *North American Free Trade Agreement*, Art.103. The NAFTA, a trade agreement established between Canada, the United States and Mexico, was implemented in 1994, integrating and expanding the 1989 CUSFTA (Canada-United States Free Trade Agreement) with a new agreement with Mexico. The NAFTA affirmed the rights and obligations all parties held to the General Agreement on Tarrifs and Trade (GATT) by 1994, but stated that any inconsistency between other agreements and the NAFTA would defer to the NAFTA unless otherwise specified in the NAFTA.

19 *Trade Policy Review: Canada, November 1998*, internet. Available at: http://www.wto.org/english/tratop_e/tpr_e/tp98rev1_e.htm

20 Ibid.

21 ibid.

22 World Trade Organization, Legal Texts: *General Agreement on Tariffs and Trade*, internet. Available at: http://www.wto.org/english/docs_e/legal_e/gatt47_02_e.htm

23 *Multilateral Trade Negotiations on Agriculture: A Resource Manual. Agreement on Agriculture* Rome: FAO, 2000), internet. Available at: <http://www.fao.org/docrep/003/x7353e/X7353e11.htm>.