

FREEDOM OF THE SEA TO FISHERY CONSERVATION:
AN EVOLVING OCEAN MANAGEMENT REGIME

CENTRE FOR NEWFOUNDLAND STUDIES

**TOTAL OF 10 PAGES ONLY
MAY BE XEROXED**

(Without Author's Permission)

CASSANDRA CROWDER



Freedom of the Sea to Fishery Conservation:
An Evolving Ocean Management Regime

by

Cassandra Crowder

A thesis submitted to the
School of Graduate Studies
in partial fulfilment of the
requirements for the degree of
Master of Arts

Department of Political Science/Faculty of Arts
Memorial University of Newfoundland

1998

St. John's

Newfoundland



National Library
of Canada

Acquisitions and
Bibliographic Services

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale
du Canada

Acquisitions et
services bibliographiques

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file / Votre référence

Our file / Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-36110-1

Acknowledgements

As this thesis nears completion, there are many people which I owe thanks to for their encouragement and support throughout this endeavour. My friends and family have been my source of strength and inspiration throughout my academic career. Without you this all would not have been possible. Thank you to Gunther Hartmann, my advisor, for all your wisdom and guidance throughout my time at Memorial University of Newfoundland. I would like to dedicate this work to the memory of mother, Marianne, who was not able to enjoy in my success.

Abstract

This thesis examines an important topic in international relations which has preoccupied diplomats for thousands of years and for the better part of this century -- the evolution of the law of the sea. Some recent changes can be linked to new technologies and the growing concern about fishery conservation. It is argued that changes in the law of the sea are essentially evolutionary in character, notwithstanding the recognition that crisis situations provide periodic stimuli towards some kind of action.

In this century, three distinct phases and events have shaped the development of the law of the sea, with regard to straddling stocks. The United Nations Convention on the Law of the Sea is the foundation for modern sea law and serves as the basis for discussion. Increased understanding of the oceans and expressions of heightened concern for protecting and sustaining the marine environment, including fisheries, were an important themes at the 1992 United Nations Conference on the Environment and Development. Thirdly, the New York Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks, and its resultant draft treaty, has provided a framework within which fisheries law can change and develop.

In light of the deteriorating state of the global environment and the rapidly declining fish stocks, it is argued that international law must respond more rapidly and effectively to meet environmentally destructive technological developments, if the international marine eco-system is to be preserved for future generations.

Table of Contents

Acknowledgements.....	i
Abstract.....	ii
<u>Chapter 1: Introduction</u>	
Introduction.....	1
1.1 Background.....	4
1.2 The Oceans: Changing Concepts and New Concerns.....	11
<u>Chapter 2: UNCLOS</u>	
2.1 Introduction.....	18
2.2 UNCLOS I.....	19
2.3 UNCLOS II.....	22
2.4 Introduction to UNCLOS III.....	25
2.4.1 Non-Fishery Issues.....	27
2.4.2 Fishery Issues.....	28
2.5 Introduction to Relevant Articles for Fishery Management.....	30
2.5.1 EEZ.....	31
2.5.2 High Seas.....	35
2.5.3 Straddling Stocks.....	39
2.5.4 Migratory Species.....	40
2.5.5 Anadromous Species.....	41
2.5.6 Catadromous Species.....	41
2.6 The Law of the Sea Convention.....	42
<u>Chapter 3: The Rio Process</u>	
3.1 Introduction to Rio.....	45
3.2 Ocean Topics at the Earth Summit.....	51
3.3 Agenda 21: Program Areas.....	52
3.4 Fisheries Conservation Issues.....	53
3.4.1 Integrated Management and Sustainable Development.....	53
3.4.2 Marine Environmental Protection.....	54
3.4.3 Sustainable Use and Conservation of Marine Resources of the High Seas.....	55
3.4.4 Sustainable Use and Conservation of Marine Resources	

	Under National Jurisdiction.....	56
3.4.5	Strengthening Regional Cooperation and Coordination.....	56
3.4.6	Addressing Critical Uncertainty for the Management of the Marine Environment and Climate Change.....	57
3.4.7	Strengthening International Cooperation.....	57
3.4.8	Sustainable Development of Small Islands.....	58
3.5	Summary.....	59

Chapter 4: Straddling Stocks and Highly Migratory Fish Stocks

4.1	Introductory Explanation of Issues Relating to Straddling and Migratory Fish Stocks.....	60
4.2	Conflict on the High Seas.....	63
4.3	Conference on Straddling Stocks and Highly Migratory Fish Stocks.....	65
	4.3.1 International Cooperation.....	69
	4.3.2 Compliance and Enforcement.....	70
	4.3.3 Precautionary Approach.....	73
	4.3.4 Compatibility.....	74
	4.3.5 Dispute Settlement.....	77
	4.3.6 Regional Organizations.....	80
4.4	Summary of Straddling Stocks and Highly Migratory Fish Stocks.....	81

Chapter 5: Regional Organizations - The NAFO Experience

5.1	Purpose of Regional Organizations.....	84
5.2	NAFO.....	85

Chapter 6: Conclusion.....

<u>Bibliography.....</u>	102
--------------------------	-----

Chapter 1 Introduction

international law constantly evolves and adapts to the changing circumstances of international relations. New legal norms come into existence when states recognize that their own interests can best be safeguarded through international legal cooperation.

One of the oldest international concerns has been the status of oceans. The international legal regime¹ of the oceans emerged and expanded as states recognized that the need for regulation is a function of the usage of ocean space and resources. The dramatic increase in the exploitation of the living resources of the seas over the last 50 years has globally decimated many fish stocks and has placed fisheries issues high on the international agenda. Governments, while recognizing that international cooperation is necessary for a globally sustainable fishery and while having some progress towards this end, still have a long way to go before this resource is managed on a viable, equitable, and sustainable basis.

During the years 1948-1952 the annual world total catch was 19.4 million tonnes; during the period 1958-1962 the annual world total catch was 34.8 million tonnes; and during 1968-1972 this increased again to 57.5 million tonnes.² World fishery production for human consumption has increased almost five fold over the last four decades, with over 90

¹ Regime "... implicit and explicit principles, norms, rules and decision-making procedures around which actors' expectations converge in a given area of international relations." Stephen Krasner, "Structural Causes and Regime Consequences: Regimes as Intervening Variables," International Regimes ed. Stephen Krasner, (Ithaca: Cornell University Press, 1982), 2.

² R.R. Churchill and A.V. Lowe, The Law of the Sea (Manchester: Manchester University Press, 1988), 223.

million tonnes being consumed by 1996. The non food usage has increases from 3 to 31 million tonnes in the last forty seven years. According to FAO statistics ten countries catch 70% of the global fish take.³ Such increases in annual world total catch resulted from improvements in technology allowing fishers to catch more fish in the same amount of time. Some of the technological advances that influenced the increase included: sonar, deep-water nets, and factory freezer trawlers. The technological advances allowed the fishers to meet the increased demand for fish.⁴

As many countries increased their fleets in order to capitalize on the larger Exclusive Economic Zone (EEZ)⁵ that they controlled, they also increased the volume of their catch. The increased size of the EEZ led countries to shift their focus from the inshore fishery to the new, larger EEZ. Capacity and the storage volume of the fishing fleets increased as a result of technology. The large factory freezer trawlers were equipped with extensive refrigeration systems that allowed ships to stay at sea for long periods of time; thus, they were able to venture to fishing grounds further from port.⁶ The use of factory freezer trawlers

³ Food and Agriculture Organization, Fact Sheet-June 1998, <http://www.fao.org/WAICENT/FAOINFO/FISHERY/fifacts/newfact/htm>, August 2, 1998

⁴ Giulio Pontecorvo and Maurice Wilkinson, "From Cornucopia to Scarcity: The Current Status of Ocean Resource Use," Ocean Development and International Law 5 (1978): 284.

⁵ EEZ is an area of up to 200 miles extending from the shoreline within which the coastal states control the natural resources. This definition is taken from: Gerhard von Glahn, Law Among Nations 6th ed. (Toronto: Maxwell-Macmillan Canada, 1992), 471.

⁶ Mark W. Zacher and James G. McConnell, "Down to the Sea with the Stakes: The Evolving Law of the Sea and the Future of the Deep Seabed Regime," Ocean Development and International Law 21 (1990): 72.

permitted countries to head to the high seas and to take large catches without fear of the fish spoiling before processing.

The evolution of the law of the sea occurs through the refinement of established regulations and the making of new regulations to deal with new issues. The United Nations Agreement on Straddling Stocks⁷ and Highly Migratory Species⁸ is a recent example of this. In order to protect the world's oceans and their resources, both living and non-living, it is necessary for the international community to cooperate. However, one must be aware that most cooperation stems from the nations' self-interest. In recent years, an increased concern about resource management emerged, particularly the global fishery.

In order to address these concerns one needs to examine why attitudes on fishery conservation and ocean management have changed over time, what has been accomplished, and what still needs to be done in order to ensure the survival of the marine resources. The negotiation of the international fisheries regime has been a highly political process in which state self-interest led to compromise and lowest-common denominator agreements on contentious issues such as the regulation of straddling and highly migratory fish stocks. The

⁷ Straddling Stocks are fish stocks that migrate between Exclusive Economic Zones or go between the high seas and the Exclusive Economic Zone (EEZ) of a state. R.R. Churchill and A.V. Lowe, The Law of the Sea, 234.

⁸ Highly Migratory Species: Stocks that move great distances across the high seas and through different exclusive economic zones. Tuna is an example of a highly migratory species. Evelyne Meltzer, "Global Overview of Straddling and Highly Migratory Fish Stocks: The Nonsustainable Nature of Straddling Stocks," Ocean Development and International Law 20 (1994): 257.

gradual evolution of the ocean management regime has escalated since fisheries and marine problems have led to inefficiencies in the management of the stocks and has resulted in the global fisheries crisis.

1.1 Background

Historically, society has used the world's oceans for food, transportation and recreation. As ocean usage increased, there were changes in views on the regulation of the world's oceans and disagreements arose regarding the use of and jurisdiction over the seas. Many issues, such as open versus closed seas and the extent of national jurisdiction, have been repeatedly debated. The development of the international law of the sea has been an evolutionary process which continues to change.

Many people believe that binding rules did not exist before the development of the modern interstate system; however, even in the past, states complied with common practice and arrangements.⁹ Since the Phoenicians in 1500 B.C., there has existed some form of sea related-activity regulation.¹⁰ During the eleventh century there existed Rhodian Sea Law, which became the basis for many codes including the thirteenth-century Byzantine Law, or Basilica.¹¹ The formation of Rhodian Law and subsequent legal codes arose out of a desire

⁹ Mark Zacher and James McConnell. "Down to the Sea," 76.

¹⁰ William McFee, The Law of the Sea (Philadelphia: J.B. Lippincott Company, 1950), 37.

¹¹ *Ibid.*, 35.

to regulate sea commerce and, at times, to dominate the oceans. Throughout the centuries most sea law has focused primarily on commerce. Sea-faring powers emphasized the freedom of navigation because it was beneficial to have the ability to travel the seas freely.¹² Regulation of fishing in early legal codes was rarely addressed, as it was believed that this resource was plentiful and inexhaustible.

In the fifteenth and sixteenth centuries, Spain and Portugal promoted “the closed seas” concept. They were supported by the Papal Bulls of 1493 and 1506 which divided the seas between them.¹³ On May 4, 1493, Pope Alexander VI proclaimed the divisions of the oceans between Spain and Portugal in the Treaty of Tordesillas.¹⁴ However, since the pontiff lacked universal authority over all nations which used the seas, the closed seas concept failed.¹⁵ The superior naval power of both the United Kingdom and France which opposed Spanish and Portuguese claims, cannot be discounted as a major reason for the retention of the freedom of the sea principle.

Sovereignty of the seas¹⁶ dates to 1582 and the publication of Jean Bodin's treatise

¹² D.P. O'Connell and I.A. Shearer, The International Law of the Sea Vol. 1., ed., I.A. Shearer (Oxford: Clarendon Press, 1982), 1.

¹³ M.N. Shaw, International Law 3rd edition. (Cambridge: Grades Publications Limited, 1991), 363.

¹⁴ Robert L. Friedheim, Negotiating the New Ocean Regime (Columbia: University of South Carolina Press, 1993), 13-14.

¹⁵ *Ibid.*, 14.

¹⁶ Sovereignty of the seas implies that states can rule over a certain portion of the seas.

On Sovereignty, in which he supported Baldus' concepts of governmental shipping power. Bodin, a French barrister, serving as an advisor to King Charles IX,¹⁷ argued that states possessed jurisdiction over ships within sixty miles of the coast.¹⁸

Hugo Grotius, the father of international law, advocated the freedom of the high seas for the purpose of navigation¹⁹ except for a small territorial sea over which coastal states exercised jurisdiction.²⁰ For centuries, advocates of the freedom of the high seas cited his work, Mare Liberum (1608), which provided a legal opinion to the Dutch on the right to access trade in the Indies. His work criticized Spain and Portugal for their claims of exclusive right of commerce in the East Indies.²¹ Grotius argued that the seas were meant for commerce and which does not allow for ownership.²² During the era of marine empires, it was important for nations to be able to travel throughout the oceans without restriction. Although Grotius' prescription was challenged, it remained the dominant opinion until recent

¹⁷ Jean Bodin, On Sovereignty, ed. Julian H. Franklin. (Cambridge: Cambridge University Press, 1992), x.

¹⁸ D.P. O'Connell and I.A. Shearer, The International Law of the Sea, 2-3.

¹⁹ R.P. Anand, Origin and Development of the Law of the Sea (The Hague: Martinus Nijhoff Publishers, 1983), 2.

²⁰ Thomas A. Clingan, The Law of the Sea: Ocean Law and Policy (Bethesda: Austin and Winfield Publishers, 1994), p.ii. and Robert Friedheim, Negotiating the New Ocean Regime, p.12.

²¹ D.P. O'Connell and I.A. Shearer, The New International Law of the Sea, 124.

²² *Ibid.*, 9.

changes regarding the exploitation of the world's oceans.²³ Although Mare Liberum did not consider fisheries, this work has nonetheless been used to justify the unfettered exploitation of living resources.²⁴

The Scots and English set out to refute the Grotian principle of freedom of the seas. These two countries believed that Grotius' work aimed to limit their marine activities, because they were in competition with the Dutch for access to markets.²⁵ In 1618, Elizabeth I ordered John Selden, a jurist, to challenge the Grotian concept of freedom of the seas. In Mare Clausum, Selden advocated the enclosure of the seas whereby coastal states would have extended authority.²⁶ In an attempt to protect the British herring fishery in the North Sea, Selden argued that the North Sea as far as Holland could be claimed as British territory.²⁷

Those who advocated freedom of the seas expressed the view that states should have the freedom to navigate all waters and that the resources of the oceans were inexhaustible. Discussions on the exhaustability of marine resources commenced by the sixteenth century. The English jurist W. Welwood differentiated between exhaustible and inexhaustible

²³ Robert Friedheim, Negotiating the New Ocean Regime, 11.

²⁴ D.P. O'Connell and I.A. Shearer, The International Law of the Sea, 9.

²⁵ *Ibid.*, 10.

²⁶ *Ibid.*, 5.

²⁷ William McFee, The Law of the Sea, 137 and Robert Friedheim, Negotiating the New Ocean Regime, 122.

resources of the oceans while advocating fishing monopolies. He concluded that since fish were exhaustible, governments could establish exclusive fishery limits.²⁸

By 1702, the international fishery regime had evolved to give states jurisdiction to enforce fishery laws within the range of a cannon shot²⁹ – a principle pioneered by the Dutch jurist Cornelius Bynkershoek.³⁰ This practice was formally established in the work De Dominio Maris, which defined the extent of traditional jurisdiction.³¹ By the seventeenth century, diplomatic practice accepted the cannon shot rule whereby areas beyond the range of the cannon shot (three miles) would be common fishing grounds and all areas within the cannon shot range would be under the coastal state's jurisdiction.³² With the evolution of this practice, coastal states had sovereignty over the area inside the cannon shot range. This development is an example of the early formation of the territorial sea concept.³³

During the seventeenth century, the clash between exclusive fishing rights and traditional fishing interests became an issue off Newfoundland's coast. This was resolved partially by Article 13 of the Treaty of Utrecht (1713), which prohibited French subjects from

²⁸ D.P. O'Connell and I.A. Shearer, The International Law of the Sea, 511.

²⁹ Bynkershoek's cannon shot range concept was that the seas were common to all but states had sovereignty over adjacent area; three miles was accepted as the traditional cannon shot range. William McFee, The Law of the Sea, 140.

³⁰ D.P. O'Connell and I.A. Shearer, The International Law of the Sea, 126.

³¹ *Ibid.*, 127.

³² *Ibid.*, 60-61.

³³ *Ibid.*, 511 and Robert Friedheim, Negotiating the New Ocean Regime, 12.

fishing and curing their catch on the coast of Newfoundland, except in the area known as the French Shore.³⁴

During the second half of the nineteenth century, stability in the law of the sea existed, leading to a desire to codify rules. Different private groups including the Institut de Droit International (International Law Institute) formed to discuss the possibility of codifying sea law. During the 1880s and the 1890s, the Institut also discussed the establishment of geographical areas such as territorial waters.³⁵

A clear change in perspective on the exploitation of fishery resources occurred in 1887. Until the late nineteenth century, most fishing disputes revolved around the maintenance of traditional fishing rights. With changes in fishery technology, a need for conservation was recognized. Nuger argued for the conservation of resources, especially shallow water species such as shell fish, because the threat of over-exploitation.³⁶ This change in attitude and the development of the argument for fishery conservation was the result of the scarcity of fish in the shallow waters near France and Spain, caused by the high fish consumption rates in these two countries. Nuger proposed to the Institut de Droit International the extension of the territorial limits as the solution to this critical problem. By extending territorial limits, coastal states would have the right to control fishing and

³⁴ D.P. O'Connell and I.A. Shearer, The International Law of the Sea, 511.

³⁵ *Ibid.*, 20.

³⁶ *Ibid.*, 524.

implement conservation measures along their coastlines: states would have exclusive rights and would not be competing for the wealth of the oceans within their boundaries.³⁷ The movement to extend territorial limits commenced with discussions by various organizations. The Institut de Droit International felt that it was necessary to have a legal basis for fishery conservation in order to prevent the depletion of stocks. In 1898, the Fishery Congress recommended that the territorial sea be extended to ten miles; however, this proposal and other recommendations suggesting a limit of six miles were not accepted at this time as it was felt that such extensions were premature.³⁸

With the formation of the League of Nations, there was a movement to codify the law of the sea. In 1927, the Committee of Experts of the League of Nations submitted a provisional list of international law topics to be discussed, including the issue of territorial waters.³⁹ The Hague Conference of 1930 examined matters of the contiguous zones and the doctrine of the territorial waters. The League of Nations attempted to negotiate a convention.⁴⁰ The maritime countries argued that the territorial sea was part of the coastal state's territory, which resulted in the Hague Convention of 1930 allowing coastal states to

³⁷ *Ibid.*, 524.

³⁸ *Ibid.*, 524.

³⁹ C. John Colombos, International Law of the Sea (New York: David McKay Company Inc, 1967), 103.

⁴⁰ *Ibid.*, 103.

claim fishery jurisdiction inside their territorial sea.⁴¹ However, the League of Nations failed to codify the international law because of the vigorous debate and the inability to formulate a single proposal on the breadth of the territorial sea. It is obvious that fishery conservation had not become a priority for all states. This failure did not allow a proposal to be put forward for a vote.⁴² The Council of the League of Nations failed to codify the convention; however, through the presentation of the draft agreement, the Hague Convention was able to further influence the development of international law by forcing debate on this subject.⁴³

1.2 The Oceans: Changing Concepts and New Concerns

The hosting of the Hague Conferences of 1930 by the League of Nations revealed that states were concerned about the regulation of the seas. Since this conference, the international community has realized that inadequacies exist in recent fisheries law. These inadequacies arose with changes in fishery technology, including gear types and vessels. One area that has not evolved sufficiently to deal with present situations in ocean management is that of fisheries law on the high seas⁴⁴ High seas are common property where all nations

⁴¹ L.S. Parsons, Management of Marine Fisheries in Canada (Ottawa: National Research Council of Canada), 223.

⁴² Arthur Deans, "The Geneva Conference on the Law of the Sea: What Was Accomplished," American Journal of International Law 52 (1958): 613.

⁴³ C. John Colombos, International Law of the Sea, 103.

⁴⁴ High Seas are all areas outside the jurisdiction of coastal states. Gerald von Glahn, Law Among Nations, 478.

can exploit and extract resources. In the international system a degree of competence has been distributed among all states.⁴⁵ Any regulations that states implemented, in the absence of treaties, applied only to their own vessels under the international legal regime. The failure to develop common regulations on the high seas has led to disagreement on fishery conservation practices.⁴⁶

Following the end of World War II and the subsequent failure of the Geneva Conferences, many states recognized the requirement for fishery conservation. States became aware that fish are not an infinite resource and that there exists a need for conservation.⁴⁷ With this realization, the fishery question has at times evolved into a debate between the north and the south; land-locked⁴⁸/geographically disadvantaged states versus coastal states; and, high seas fishing rights versus coastal state rights.

The fisheries developed into a north/south issue during the 1960s.⁴⁹ The north/south divisions emphasized the New International Economic Order (NIEO) which called for

⁴⁵ René-Jean Dupuy and Daniel Vignes, A Handbook of the New Law of the Sea (Dordrecht: Martinus Nijhoff Publishers, 1991), 997.

⁴⁶ *Ibid.*, 998.

⁴⁷ D.P. O'Connell and I.A. Shearer, The International Law of the Sea, 527.

⁴⁸ A land locked state is a state that has no coastline. This can also be referred to as a geographically disadvantaged state. Barbara Kwiatkowska, The 200 Mile Exclusive Economic Zone in the New Law of the Sea (Dordrecht: Martinus Nijhoff Publishers, 1989), 22.

⁴⁹ Robert Friedheim, Negotiating the New Ocean Regime, 213.

changes and increased political influence and economic power for developing countries.⁵⁰ The developing countries sought an equal distribution of the oceans' resources.⁵¹ Fisheries became an issue not only for management purposes but also for developing countries as a method to feed their people as fish is the primary source of protein in their diet.⁵² Developing countries argue that they did not cause the depletion through their fishing practices but rather it has been the industrialized, first world, fishery that has led to the current situation. Over half the total global catch is caught by six of the 156 nations that have fishing interests.⁵³ A conflict exists between fishery conservation and the desire to feed the world's people.⁵⁴

In recent years, conflicts in the international community over fishing rights have increased. Tensions exist not only between the North and South but also between European nations and North American countries. Disputes which have emerged in recent years occurred in areas where straddling and highly migratory stocks prevail. Within the last ten to fifteen years the number of conflicts have increased dramatically, particularly on the Grand

⁵⁰ Lawrence Juda, International Law and Ocean Use Management (London: Routledge, 1996), 210. Since there are many variation amongst these states it is recognized that dichotomizing the issue as only a north/south one would over simplify a complex matter. Robert Friedheim, Negotiating the New Ocean Regime, 210.

⁵¹ *Ibid.*, 210.

⁵² R.P. Anand, "The Politics of a New Legal Order for Fisheries," Ocean Development and International Law 11 (1982): 267.

⁵³ *Ibid.*, 265. The six nations that count for over half the total global catch are: Japan, Soviet Union, Norway, United States, Peru and China.

⁵⁴ Mark W. Zacher and James G. McConnell, "Down to the Sea," 80.

Banks off the coast of Newfoundland and the Bering Sea.⁵⁵ The increase in conflicts is caused partially by the extension of the exclusive economic zone, and more efficient technology, but primarily by scarcity of the resource. The conflicts focus on transboundary species whose natural migratory patterns pass through various zones.⁵⁶

Northern Cod, traditionally an abundant and valuable stock, has been fished by many states. During the 1950s, factory freezer trawlers came from both eastern and western Europe to participate in the fishery. In 1958, the U.S.S.R., France and Poland commenced fishing Northern Cod, and by 1965 Iceland, Norway, and the United Kingdom participated annually.⁵⁷

Before the Spanish factory freezer trawlers arrived off the coast of Newfoundland in the late 1980s only the traditional Spanish cod fleet fished in the North Atlantic. The Spanish factory freezer trawlers came to the Northwest Atlantic when they were excluded from European Union waters under the 1986 agreement whereby Spain became a member of the European Union.⁵⁸

Management of straddling and highly migratory stocks turned into a difficult task.

⁵⁵ Biliana Cicin-Sain, "Earth Summit Implementation: Progress Since Rio," Marine Policy 20 (1996): 127.

⁵⁶ Karl M. Sullivan, "Conflict in the Management of a Northwest Atlantic Transboundary Cod Stocks," Marine Policy 13 (1989): 118.

⁵⁷ *Ibid.*, 120-121.

⁵⁸ Government of Canada, Department of Fisheries and Oceans, "European Union Over fishing in the Northwest Atlantic," Backgrounder B-HQ-95-4E, March 1995.

By 1985, Canada had become party to bilateral agreements which dealt with fishing on the Flemish Cap and in the Northwest Atlantic Fisheries Organization (NAFO) regulation area 3N0.⁵⁹ Bilateral and multilateral agreements for fishery management can be nullified if one party decides to expand their interests ⁶⁰

The issue of straddling stocks led to increased tensions between Canada and the European Union. The Spanish ship the Estai was caught fishing straddling stocks in contravention of conservation and fisheries management measures. In addition, the vessel failed to stop and allow observers to board. It was also believed that the crew of the Estai released their fishing gear prior to the boarding of Canadian authorities.⁶¹ On April 28, 1995 the Spanish Mayi Cuatro released an illegal liner when boarded by the Canadian Department of Fisheries and Oceans officers which was later found and identified by its markings.⁶²

With continued harvesting of fish stocks on the Grand Banks, Canada felt unilateral action was necessary in 1994 to prevent the depletion of Greenland Halibut (turbot),⁶³ which

⁵⁹ Karl M. Sullivan, "Conflict in the Management of a Northwest Atlantic Transboundary Cod Stocks," 127.

⁶⁰ *Ibid.*, 127.

⁶¹ Government of Canada, Department of Fisheries and Oceans, "Canada Seizes Spanish Trawler," News Release NR-HQ-95-29E, March 9, 1995 and Government of Canada, Department of Fisheries and Oceans. "Spanish Captain Released on Bail," News Release NR-HQ-95-22E, March 12, 1995.

⁶² Government of Canada, Department of Fisheries and Oceans, "Tobin Says Net With Illegal Liner Recovered," News Release NR-HQ-95-45E, May 5, 1995.

⁶³ Greenland Halibut or Turbot is a deep water flatfish which can be found on the continental shelf of eastern North America. Government of Canada, Department of

after the collapse of cod stocks, became the largest ground fishery.⁶⁴ Canada decided that it was necessary to express its concerns about the regulation of turbot to NAFO by asking the organization to adopt strict conservation measures for the species.⁶⁵

In 1994, Canada put forward the Coastal Fisheries Protection Act (C-29) as a measure to reduce excessive catches off Newfoundland's coast. This Bill stemmed from the urgency of the situation and the requirement to permit the rebuilding of fish stocks which would not be possible with the continued fishing practices of foreign fleets.⁶⁶ This amended Bill makes it an offence for the Spanish and Portuguese vessels to fish Greenland Halibut on the Grand Banks.⁶⁷ Bill C-29 is the enabling legislation which gives Canadian authorities the power to take action against any vessel which committed infractions.

International fisheries and related concerns have changed throughout history. By examining the historical background it is evident that there is a strong linkage in today's fishery policies to the past. Freedom of the seas has been the foundation of ocean

Fisheries and Oceans, "Canada Moves to Conserve Turbot Stocks," News Release, NR-HQ-94-60E, June 29, 1994.

⁶⁴ Government of Canada, Department of Fisheries and Oceans, "Greenland Halibut (Turbot) in the Northwest Atlantic," Backgrounder, B-HQ-94-26E, September 1994.

⁶⁵ Government of Canada, Department of Fisheries and Oceans, "Tobin Takes Further Action to Protect Turbot Stocks," News Release NR-HQ-94-72E, July 20, 1994.

⁶⁶ Government of Canada, Commons Debate May 11/94 - Government Orders .

⁶⁷ Government of Canada, Department of Fisheries and Oceans, "Canada Extends Authority to Protect Stocks on the High Seas to Include Spanish and Portuguese Vessels," News Release NR-HQ-95-27E, March 3, 1995 .

management for centuries but in recent years its validity has been questioned due to the decimation of fish stocks and the increased conflict.

Chapter 2 UNCLOS

2.1 Introduction

Upon the formation of the United Nations, the International Law Commission (ILC) was requested to codify and develop the law of the sea.⁶⁸ Prior to this attempt to codify sea law there were previous unilateral efforts, including the Truman Proclamation on Fisheries of September 28, 1945. This proclamation recognized the special rights and concerns of coastal states and states with an established interest in an area.⁶⁹ The result of ILC work led to two United Nations Conferences on the Law of the Sea, in 1958 (UNCLOS I) and 1960 (UNCLOS II).⁷⁰ These two Conferences became the foundation for the development of modern international law regarding the world's oceans.

Discussions at the UNCLOS III Conferences (1973-1982) were broad while attempting to build on the two previous conferences, which provided a foundation for the

⁶⁸ Mark W. Zacher and James G. McConnell, "Down to the Sea," 78.

⁶⁹ Lawrence Juda, International Law and Ocean Use Management, 110-111. According to von Glahn the Declaration did not intend to imply a claim of sovereignty rather its aim was to establish "conservation zones" whereby the United States would exercise unilateral jurisdiction in areas where its nationals fished exclusively, and joint through agreements, would be established where the fishery was shared with other states. Gerhard von Glahn, Law Among Nations 5th ed. (New York: Collier MacMillan, 1986), 395.

⁷⁰ Mark W. Zacher and James G. McConnell, "Down to the Sea," 80.

agreement.⁷¹ The first United Nations Conference on the Law of the Sea supplied the codification of customary law, and UNCLOS II addressed the issue of the territorial sea.⁷²

The international lawmakers proposed three principles in the Convention on the Law of the Sea which are intertwined and interdependent. The first principle is sovereign right to a portion of the sea contiguous to their coastline. This is limited by the second which notes that portions of the sea and sea-bed are all nations because they are part of the common heritage of mankind. The third enunciates that all states have an obligation to preserve the marine environment and to take into consideration the needs of other countries.⁷³

2.2 UNCLOS I

The 1958 United Nations Conference on the Law of the Sea dealt with four distinct areas and produced four conventions: the Convention on the Territorial Sea and the Contiguous Zone; the Convention on the Continental Shelf; the Convention on the High Seas; and the Convention on Fishing and Conservation of the Living Resources of the High Seas, which essentially codified customary international law.⁷⁴

⁷¹ David Larson, "Conventional, Customary, and Consensual Law in the United Nations Convention on the Law of the Sea," Ocean Development and International Law 25 (1994): 288.

⁷² *Ibid.*, 288.

⁷³ Eric LeGresley, The Law of the Sea Convention (Ottawa: Library of Parliament: 1993), 4.

⁷⁴ E. D. Brown, The International Law of the Sea: Volume 1 Introductory Manual (Vermont: Dartmouth Publishing, 1994), 9. and R.R. Churchill and A.V. Lowe, The

At the Geneva Conference (UNCLOS I), the two principles discussed, in relation to living resources, were abstention and preference. The former arose out of the realization that the global fishery needed to be stabilized at a maximum sustainable yield level. This principle advocated (a) that those states which had not fished in certain areas should abstain from taking fish from those areas, and (b) that only species which needed to be conserved should be subjected to conservation measures.⁷⁵ The principle of preference established that states which traditionally exploited certain species in an area and were dependent on these fish stocks be given the priority to exploit those resources.⁷⁶

Prior to the 1958 Conference, different approaches existed to the territorial sea and the contiguous zone. Although many states agreed with the principle of a territorial sea, they disagreed over the desirability of creating a contiguous zone for the purposes of customs, security, immigration and sanitary regulation. Countries like the United Kingdom opposed such a zone.⁷⁷ Since these two zones are contiguous, the issue of their potential breadths arose, especially if only one or both zones were to be codified.⁷⁸ A wider territorial sea, for example, would provide coastal states with a larger zone in which they would have

Law of the Sea, 13.

⁷⁵ D.P. O'Connell and L.A. Shearer, The International Law of the Sea, 528-529.

⁷⁶ *Ibid.*, 529.

⁷⁷ R.R. Churchill and A.V. Lowe, The Law of the Sea, 115-116.

⁷⁸ *Ibid.*, 115.

exclusive fishing and continental shelf rights. Conversely some states felt that the codification of the contiguous zone should be a narrower territorial sea. The distance issues were not resolved and the Convention on the Territorial Sea and the Contiguous Zone was silent in this area. If zonal limits had been agreed to, subsequent conservation measures may have proven more effective.⁷⁹ An agreement on the territorial sea and contiguous zone was vital for the overall well being of the four conventions.

The 1958 United Nations Conference on the Law of the Sea failed to meet its objective of codifying sea law. One major difficulty with the four Conventions of 1958 was the states' inability to agree on the breadth of the territorial sea.⁸⁰ Also, important was that maritime states failed to ratify the Convention on Fishing and Conservation of the Living Resources of the High Seas.⁸¹ By not agreeing to sign the four Conventions states demonstrated that self-interest took precedence over cooperation.

Although the Convention on Fishing Conservation of the Living Resources of the High Seas came into force on March 20, 1966, most major fishing states failed to ratify it.⁸²

⁷⁹ Shigeru Oda, International Law of the Resources of the Sea (Germantown: Nitjhoff & Noordhoff, 1979), 8.

⁸⁰ John King and Maria Frankowska, "The Significance of Signature to the 1982 Convention on the Law of the Sea," Ocean Development and International Law.19 (1984): 122.

⁸¹ Saroj Mohan, "Fisheries Jurisdiction," Law of the Sea Caracas and Beyond ed. R.P. Anand (New Delhi: Radiant Publishers, 1980), 225.

⁸² *Ibid.*, 225.

More importantly, it has been argued that the Convention could not meet its conservation objectives because the law-makers failed to recognize the biological nature of fish stocks.⁸³ In terms of biology, law makers must recognize that fish are mobile and require constant regulation, not just in an EEZ. This is a renewable resource provided it is managed properly through conservation measures.⁸⁴ Management and conservation are a challenge because states do not hold jurisdiction beyond their territorial seas; they are unable to enforce regulations in areas adjacent to their territorial seas.⁸⁵

2.3 UNCLOS II

The second Law of the Sea Conference was held at Geneva from March 16 to April 26, 1960, in accordance with Resolution 1307 (XIII), which authorized the United Nations Secretary General to hold a conference.⁸⁶ Five hundred delegates from eighty-eight countries attended.⁸⁷ This conference endeavored to resolve disagreements related to the breadth of the territorial sea and the contiguous fishing zone, which remained unresolved at UNCLOS I or had subsequently arisen.⁸⁸

⁸³ Ibid., 225.

⁸⁴ Ibid., 226.

⁸⁵ R.R. Churchill and A.V. Lowe, The Law of the Sea, 115.

⁸⁶ United Nations, Yearbook of the United Nations - 1960 (New York: Columbus University Press, 1961), 542.

⁸⁷ Ibid., 542.

⁸⁸ L.S. Parsons, Management of Marine Fisheries, 226.

Different proposals were put forward on the breadth of the territorial sea. The United States proposed that states could claim a six-mile territorial sea plus a six-mile exclusive fishing zone. The U.S.S.R. proposed that each state be entitled to a twelve-mile limit and if the breadth of the territorial sea was less than twelve-miles, states could establish adjoining fishing zones. This would only apply if the breadth of the territorial sea combined with the fishing zone did not exceed twelve miles.⁸⁹

Peru advanced the proposal that coastal states would have preferential rights for the purpose of exploiting fish stocks.⁹⁰ A Mexican proposal allotted each state a fixed breadth of territorial sea that could be extended up to (a) eighteen miles from the baseline if the breadth of the territorial seas was between three and six miles; (b) fifteen miles if breadth of the territorial seas was between seven and nine miles; or, (c) twelve miles if breadth of the territorial sea was between ten and eleven miles.⁹¹

Another proposal put forward by sixteen Asian and African nations as well as Venezuela was for a twelve-mile territorial sea.⁹² The Mexican proposal and the African/Asian proposal were combined for a contiguous fishing zone up to twelve miles. If the breadth of the territorial sea or contiguous zone were less than twelve miles, states would be allowed a wider delimitation to allow sovereign rights up to the fixed limit. This

⁸⁹ United Nations, Yearbook of the United Nations - 1960, 542.

⁹⁰ *Ibid.*, 544.

⁹¹ *Ibid.*, 542.

⁹² *Ibid.*, 542.

combined proposal received support from eighteen sponsors.⁹³ Canada and the United States proposed a six-mile territorial sea and a twelve-mile exclusive fishing zone.⁹⁴ An alternative proposal put forward by Indonesia, Iraq, Lebanon, Mexico, Morocco, Saudi Arabia, Sudan, the United Arab Republic, Venezuela and Yemen failed to be accepted during the voting process. This group proposed that (1) at the twentieth session (1965) the General Assembly would consider the advisability of convening another conference on the breadth of the territorial sea; (2) all states which declared independence prior to 1945 could extend their territorial sea while the General Assembly considered this matter; and (3) recognized that all coastal states are entitled to a twelve mile exclusive fishing zone. When voted on, 32 states supported the agreement, 38 opposed it and 18 abstained.⁹⁵

The failure to agree on distance limits demonstrated rising tensions over the ownership of ocean resources.⁹⁶ Many proposals were presented but none were accepted by the majority, as states' self-interest prevailed. However, the conference allowed countries to state their positions as a basis for further negotiations.

⁹³ *Ibid.*, 542. The eighteen sponsors included: Ethiopia, Ghana, Guinea, Indonesia, Iran, Iraq, Jordan, Lebanon, Libya, Mexico, Morocco, the Philippines, Saudi Arabia, Sudan, Tunisia, the United Arab Republic, Venezuela and Yemen.

⁹⁴ *Ibid.*, 542.

⁹⁵ *Ibid.*, 544.

⁹⁶ Giulio Pontecorvo and Maurice Wilkinson, "From Cornucopia to Scarcity: The Current Status of Ocean Resource Use," *Ocean Development and International Law* 5 (1978): 385.

2.4 Introduction to UNCLOS III

The Third United Nations Conference on the Law of the Sea commenced in 1973 and was not finalized until 1982. The necessity to convene another round of negotiations arose because of coastal states' dissatisfaction with the terms of the previous agreements. Coastal states pushed for the new series of meetings as a means to deal with the growing depletion of the fish stocks and increased size of the distant-water fishing fleets.⁹⁷ Negotiations at UNCLOS III centered around a continuously revised negotiating text which accommodated the demands of different states. An attempt was made to develop a consensus by negotiating an all encompassing document that dealt with a wide variety of complex elements.⁹⁸

Two preliminary tasks faced participants and negotiators at the conference. First, delegates needed to develop rules for interaction and decision-making. The formation of rules was necessary since the agreement would be negotiated and allowed for various points of view put forth by the delegates. Once the rules were set, delegates needed to develop a formula that would be at the root of the treaty -- the single negotiating text.⁹⁹ Throughout

⁹⁷ Parzival Copes, "The Impact of UNCLOS III on Management of the Worlds' Fisheries," Marine Policy 5 (1981): 217.

⁹⁸ Bernard Oxman, "The Third United Nations Conference on the Law of the Sea: The Tenth Session," American Journal of International Law 76 (1982): 4.

⁹⁹ Robert Friedheim, Negotiating the New Ocean Regime, 31.

this conference, an attempt was made to gain consensus on this package, which had many disparate and complex details.¹⁰⁰

As with any form of negotiation, countries needed to be conciliatory at times in order to gain consensus on important issue areas. The maritime powers, including the United States and the Soviet Union, realized that with the consensus rule being used a package deal would be necessary. An example of a trade off was that the United States and the USSR accepted the 200-mile EEZ conditional on a 12-mile territorial sea and a right for transit through straits.¹⁰¹

Seven areas discussed at the conference included: the territorial sea, straits, the exclusive economic zone, deep seabed mining, ocean science, and pollution.¹⁰² These areas became the foundation topics for the Conference negotiations and for the final Convention.

With new concerns arising from the development of technology, there existed a need to adapt the legal regime to accommodate new issues not previously discussed. State leaders realized that unless the international community took action, there could be disastrous results for the marine ecosystem and for peace within the state system.

¹⁰⁰ Bernard H. Oxman, "The Third United Nations Conference on the Law of the Sea: The Tenth Session," 4.

¹⁰¹ Robert Friedheim, Negotiating the New Ocean Regime, 33.

¹⁰² *Ibid.*, 33.

2.4.1 Non-fishery Issues

Fishery questions were not the only topics discussed at UNCLOS III; rather negotiations proceeded slowly through many sessions on various marine related topics.¹⁰³ Three key issues concentrated on during the negotiation process were near-shore ocean resources, preservation of movement rights, and access to deep-ocean resources.¹⁰⁴ A major stumbling block to the ratification of the 1982 Law of the Sea Convention was the deep seabed mining issue.¹⁰⁵ Disagreements on the non-fishery issues caused coastal states to fear that the conservation measures, which they desired, would not be accepted.¹⁰⁶

UNCLOS III negotiations witnessed an attempt by newly empowered nations (African-Asian) and anti-imperialists (Latin-American) to push the north (developed countries) into accepting enclosure decrees. These nations wished to keep foreign vessels further from their shorelines. Their underlying motive was to push the developed nations to accept the New International Economic Order.¹⁰⁷

¹⁰³ Parzival Copes, "The Impact of UNCLOS III," 217.

¹⁰⁴ Robert Friedheim, Negotiating the New Ocean Regime, 74.

¹⁰⁵ John R. Stevenson and Bernard H. Oxman, "The Future of the United Nations Convention on the Law of the Sea," American Journal of International Law 88 (1994): 488.

¹⁰⁶ Parzival Copes, "The Impact of UNCLOS III," 218.

¹⁰⁷ Robert Friedheim, Negotiating the New Ocean Regime, 28.

2.4.2 Fishery Issues

Much of the debate at the Conference revolved around whose interests should prevail, the national interest of individual states or the international community's common interest.¹⁰⁸ Since formal international fisheries regulations did not exist, individual states made their own decision on whether or not to cooperate in the ocean management regime. One topic related to fisheries on the high seas and within EEZs was that of highly migratory species and straddling stocks. The framers of UNCLOS III wished not to give coastal states sole jurisdiction over the determination of quotas and who could catch the species within the EEZ, let alone outside the 200-mile limit. Negotiators felt that migratory species should be managed as a unit but at the same time be exempt from coastal state management, even when the species are present in their EEZ.¹⁰⁹

Land-locked and geographically disadvantaged states propelled their own agenda, arguing that they should be compensated for the loss of access to fisheries or smaller coastlines caused by the extension of the EEZ.¹¹⁰ These countries would be dependent on the other countries' EEZs for exploitation of living resources because they would not have the same level of access. Many of these states required access to these resources in order to

¹⁰⁸ René-Jean Dupuy and Daniel Vignes, A Handbook of the New Law of the Sea, 1015.

¹⁰⁹ Robert Friedheim, Negotiating the New Ocean Regime, 167.

¹¹⁰ William T. Burke, The New International Law of Fisheries (Oxford: Clarendon Press, 1994), 70.

meet the nutritional requirements of their people.¹¹¹

Smaller countries, from Latin America, Africa, and Asia also came to the negotiations with an agenda. Some wanted to convince the nations of the world to accept a true *res communis*¹¹² and accord international organizations the responsibility of managing the oceans for all the people of the world.¹¹³

The framers of the 1982 Law of the Sea Convention combined principles of common heritage and the freedom of the seas to build an agreement which would be beneficial to the world's oceans.¹¹⁴ During negotiations there was relatively little disagreement on the fisheries aspects in comparison to other topics.

An area of disagreement in the fisheries section was the question of highly migratory and straddling stocks. A difficulty with these stocks was that the expanded EEZ did not account for mobility of fish stocks or the fact that the catch in one area influences the fish stocks in other zones.¹¹⁵ Questions related to straddling stocks and highly migratory species were also an area of debate after the extension of the EEZ. One area of disagreement that

¹¹¹ *Ibid.*, 71.

¹¹² *Res Communis* - common to all, used and enjoyed by everyone. Henry Campbell Black, *Blacks Law Dictionary*, (St. Paul, Minnesota: West Publishing Company, 1968), "RES COMMUNIS," p.1469.

¹¹³ Robert Friedheim, *Negotiating the New Ocean Regime*, 28.

¹¹⁴ Mark W. Zacher and James G. McConnell, "Down to the Sea," 73.

¹¹⁵ William T. Burke, "Highly Migratory Species in the New Law of the Sea," *Ocean Development and International Law* 14 (1984): 275.

many states felt was not dealt with adequately was straddling stocks and highly migratory species. This led to a Canadian proposal supported by a coalition of states including Australia, Cape Verde, Iceland, Philippines, Sao Tome, Principe, Senegal and Sierra Leone which would have required compulsory dispute settlement in case of disagreements on proposed conservation measures between states.¹¹⁶ Many coastal states abandoned the thought of having an agreement before the depletion of the world's fish stocks.¹¹⁷

2.5 Introduction to Relevant Articles for Fishery Management

In designing UNCLOS, negotiators attempted to accommodate the interests of the nations involved. The principle of freedom of the high seas continued to be an integral part of the Convention; however, restrictions and guidelines were made for the protection of the marine ecosystem. The 1982 Convention was divided into different areas of jurisdiction and interest. Some of the important topics related to fisheries included the Exclusive Economic Zone, the High Seas, and the Conservation and Management of Living Resources.

¹¹⁶ Edward L. Miles and William T. Burke, "Pressures on the United Nations Convention on the Law of the Sea of 1982 Arising from the New Fisheries Conflicts: The Problem of Straddling Stocks," Ocean Development and International Law 20 (1989): 344.

¹¹⁷ Parzival Copes, "The Impact of UNCLOS III," 218.

2.5.1 Exclusive Economic Zone

The concept of the exclusive economic zone was a central element in the contemporary development of the law of the sea. In the debate on the exclusive economic zone the biggest controversy was between coastal and distant-water fishing states. Coastal states wanted a larger exclusive economic zone in order to control what took place in the seas near their coastline, whereas the distant-water states felt this infringed on their rights under the freedom of the seas.

During the negotiation process, states expressed a diverse range of opinions on the issue of the exclusive economic zone. Canada, Ireland and Italy were of the view that the EEZ was a compromise in which concessions were made to various states, while reconciling the interests of all states.¹¹⁸ One opponent to the EEZ was Somalia which was against the internationalization of the exclusive economic zone.¹¹⁹ Iraq also opposed the provisions on the EEZ;¹²⁰ while, Thailand's delegates abstained from voting on the EEZ provisions because they believed that the EEZ would have an adverse affect on their population.¹²¹ Iceland advocated the EEZ provisions, along with Canada, arguing it was necessary for coastal states to have control over living resources within the 200-mile EEZ. Trinidad and Tobago took

¹¹⁸ United Nations, Yearbook of the United Nations - 1982, (New York: Columbus University Press, 1983) 196.

¹¹⁹ *Ibid.*, 196.

¹²⁰ *Ibid.*, 196.

¹²¹ *Ibid.*, 199.

the position that the Convention did not deal sufficiently with land-locked and geographically disadvantaged states, and raised concerns about their access to resources and the sharing of benefits among all states.¹²²

Articles 55 through 75 of the Convention are especially relevant to the EEZ. In Article 55, the exclusive economic zone is defined as including all areas adjacent and beyond the territorial sea extending up to 200 nautical miles.¹²³ Coastal states are given rights, jurisdiction and duties within the EEZ by Article 56. A coastal state holds a sovereign right to explore, exploit, conserve, and manage both the living and non-living resources of the water, the seabed and the subsoil according to Article 56 (1)(a) of the Convention. States hold jurisdiction over artificial islands, installations and structures, scientific research, and protection and preservation of the marine environment as specified in Article 56 (1)(b).¹²⁴

Although coastal states possess jurisdiction and privileges in the EEZ, they also have duties toward other states and must act according to the Convention. Particularly, coastal states are required to adopt conservation measures for the exclusive economic zone.¹²⁵

¹²² *Ibid.*, 199.

¹²³ United Nations, United Nations Convention on the Law of the Sea, A/Conf.62/122, 7 October 1982, Hereafter referred to as UNCLOS Article 55.

¹²⁴ Hugh Kindred, International Law: Chiefly As Interpreted and Applied in Canada 4th edition, (Canada: Edmond Montgomery Publications Limited, 1987) 740 and United Nations, UNCLOS, Article 56.

¹²⁵ United Nations, UNCLOS, Article 56 (2) and Barbara Kwiatkowska, The 200 Mile Exclusive Economic Zone in the New Law of the Sea (Dordrecht: Martinus Nijhoff Publishers, 1989), 204.

Non-coastal states also possess rights and jurisdiction in the exclusive economic zone, as outlined in Article 58. Within the EEZ of coastal states, all states possess freedom of navigation and overflight. Notwithstanding this, Article 58(3) specifies that all states must comply with the laws and regulations of coastal states that are adopted in accordance with the Convention and existing international law.¹²⁶

Article 59 discusses dispute resolution regarding jurisdiction in the EEZ. When a conflict arises between coastal and other states interests, the dispute should be resolved on the basis of equity and consider the relevant circumstances and interests of all countries.¹²⁷

Conservation of living resources is dealt with in Article 61. This section gives coastal states the right to determine the allowable catch in their exclusive economic zone. When making decisions on the allowable catch, states need to consult the best scientific data in order to ensure conservation and the management of the resources by not over-exploiting the stocks within the EEZ. Specifically, Article 61(2) makes mention that coastal states and international organizations, including regional and sub-regional organizations, should cooperate in the collecting of scientific data. This article suggests that states should utilize the information to determine the maximum sustainable yield while considering fishing patterns and interdependence of stocks. When states are formulating management policy

¹²⁶ United Nations, UNCLOS, Article 58.

¹²⁷ *Ibid.*, Article 59.

they must consider the effect their policies may have on associated and interdependent species.¹²⁸

Although coastal states are asked to promote optimum utilization of living resources, they still have the right to regulate fishing in their EEZ. Article 62 of the Convention discussed optimum utilization of living resources. According to UNCLOS III, coastal states determine their own capacity to harvest the catch within their EEZ. When determining catch capacities, it is necessary to keep in mind that maximum sustainable yield (MSY) does not mean full usage of the resource.¹²⁹ If coastal states do not have the capacity to harvest the MSY, they can arrange to let other states catch the surplus.¹³⁰ Article 62(3) specifies that in making such arrangements coastal states must consider all relevant factors, including the requirements of developing nations when allocating surplus quotas. Also, coastal states must avoid dislocation of states which have traditionally fished in that zone when extending their EEZ. According to Article 62 (4), once there is an arrangement nationals that are fishing in the EEZ must comply with conservation measures as specified by the coastal state.¹³¹

¹²⁸ *Ibid.*, Article 61.

¹²⁹ William T. Burke, "Highly Migratory Species in the New Law of the Sea," 277.

¹³⁰ Hugh Kindred, International Law, 792-793.

¹³¹ United Nations, UNCLOS, Article 62 (4).

2.5.2 High Seas

Freedom of fishing the high seas was guaranteed to both coastal and landlocked states by Article 87.¹³² Freedom of the high seas as an activity must be carried out with reasonable regard for the other users.¹³³

Even though all states have the right and privilege to fish on the high seas, no state, according to Article 89, can make claims of sovereignty over the high seas. This guarantees that states cannot make unilateral claims of jurisdiction over the high seas and is consistent with the Groatian principle of freedom of the high seas.¹³⁴

High seas fishing freedoms are limited by treaty obligations, rights, and duties of coastal states. Restrictions placed on fishing states' freedom of the high seas are found in Article 63(2), Articles 64 through 67 and with provisions of Articles 116 through 120.¹³⁵

The 1982 Convention places a duty on states to cooperate in managing and conserving the resources on the high seas, with the onus on interested states to cooperate together in making decisions about necessary actions on fishery issues. States are encouraged to utilize various commissions or regional organizations where appropriate.¹³⁶ According to Edward Miles and William Burke, if Article 116 of the Convention is to be

¹³² *Ibid.*, Article 87.

¹³³ David Larson, "Conventional, Customary, and Consensual Law," 76.

¹³⁴ United Nations, UNCLOS, Article 89.

¹³⁵ *Ibid.*, Articles 63, 64, 65, 66, 67, 116, 117, 118, 119, 120.

¹³⁶ R.R. Churchill and A.V. Lowe, The Law of the Sea, 235.

effective, it is necessary for the interpretation of the Convention to allow superior rights to the coastal states in matters pertaining to conservation measures. Providing that this article is interpreted in such a manner, the high-seas fishing states would be obliged to comply with regulations formulated by the coastal state.¹³⁷

Article 117 discusses the obligation of states to cooperate in the adoption of regulations for the conservation of living resources on the high seas.¹³⁸ The next Article, 118, is also linked to cooperation by the fact that states are asked to cooperate in the conservation and management of the living resources of the high seas. Cooperation is to take place in the negotiation of measures for the conservation of resources and the establishment of regional or sub-regional organizations.¹³⁹ It is hoped that through such arrangements regional cooperation will be fostered.¹⁴⁰

Conservation of the living resources of the high seas is emphasized in Article 119. States must determine the total allowable catch and set the maximum sustainable yield based

¹³⁷ Edward Miles and William Burke, "Pressures on the United Nations Convention on the Law of the Sea," 352.

¹³⁸ United Nations, UNCLOS, Article 117.

¹³⁹ *Ibid.*, Article 118.

¹⁴⁰ Elisabeth Mann Borgese, "The Process of Creating an International Ocean Regime to Protect the Ocean's Resources." Freedom of the Seas in the Twenty First Century: Ocean Governance and Environmental Harmony. ed. Jon Van Dyke, Durwood Zaelke and Grant Hewison. (Washington: Island Press, 1993): 34.

on the best scientific data available.¹⁴¹ This scientific data needs to be contributed to by states and exchanged through appropriate regional, subregional or global organizations. The goal is to maintain and restore the fish stocks so that they can produce at MSY levels. When establishing measures, it is necessary to consider the effect on associated species. According to Burke, Article 119 is innovative in its provisions for the conservation of living resources because of the departure from the use of maximum sustainable yield as a goal for conservation.¹⁴² Even though this section deals with sustainability, the prohibition of gear is not discussed which weakens the sustainability principle.¹⁴³ While the Convention section on Conservation and Management of the Living Resources on the High Seas places a duty on states to cooperate, “as appropriate,” essentially through the establishment of regional fisheries organizations, and suggests that principles and rules set out in other parts of the Convention with respect to fisheries specifically those Articles 63 (2) and 64 to 70, are applicable to the high seas, the wording begs many legal and practical issues which are likely to arise. As examples, one might simply raise two: What if states enter into negotiations, but can not reach agreement? What if the level of cooperation is deemed satisfactory by some, but not other fishing states in a defined region? The process and issues at a

¹⁴¹ Maximum Sustainable Yield (MSY) is the highest sustainable yield for a particular fish stock. Joseph Gough and Trevor Kenchington, A Glossary of Fisheries Science (Halifax: Supply and Services Canada, 1995), 24 and United Nations, United Nations Convention on the Law of the Sea, Article 119.

¹⁴² William T. Burke, The New International Law of Fisheries, 111-112.

¹⁴³ *Ibid.*, 113.

multilateral level are much more protracted and complicated than bilateral negotiations. Adjudication on questions of whether or not states are negotiating seriously within the context of the Convention or on factual questions such as maximum sustainable yield or interdependency of stocks can be endless. The intertwined and unresolved political demands and applicable legal principles are too closely framed. Indications of these problems above, were already evident at the initial negotiations. And, in retrospect, filling the gaps would have to await future conferences and meetings.¹⁴⁴

A significant development in UNCLOS III is compulsory dispute settlement for high-seas fishing disputes. The recommended means for solving disputes includes: conciliation, mediation, arbitration, the International Court of Justice and the International Tribunal for the Law of the Sea.¹⁴⁵ There is also an obligation on states to negotiate conservation measures according to Article 118.¹⁴⁶

According to William T. Burke, the 1982 United Nations Law of the Sea Convention reversed the burden of proof: conservation measures are to be in place even if scientific data is not available when making decisions-- the precautionary principle.¹⁴⁷ Although this was

¹⁴⁴ United Nations, UNCLOS, Article 116. Article 116 (b) reads, "the rights and duties as well as the interests of coastal states are provided for, inter alia, in article 63, paragraph 2, and articles 64 to 67." Inter alia refers to all fishing related matters in the Convention. Hence, which is to predominate in a fishing area vis-a-vis the nationals of non-coastal states: the interests and rights of the coastal state or its duties.

¹⁴⁵ R.R. Churchill and A.V. Lowe, The Law of the Sea, 332-337.

¹⁴⁶ William T. Burke, The New International Law of Fisheries, 124.

¹⁴⁷ Ibid., 129.

not widely accepted at the time the Convention was drafted, it has gained credibility in recent years for both policy-makers and fishery management officials.

Freedom of fishing is not applicable to all fish stocks. In UNCLOS III, certain stocks have restrictions placed on their exploitation including: highly migratory species (Article 64); marine animals (Article 65); anadromous (Article 66); catadromous (Article 67); and certain cetaceans.¹⁴⁸

One difficulty in the conservation of marine resources is when fish stocks occur within two or more EEZ's and in areas beyond the EEZ. Article 63 addresses this matter specifying that coastal states, through regional or sub-regional organizations, must agree on the coordination of conservation for the species. Emphasis is on cooperation which places the onus on the coastal states and those who fish in the areas adjacent to the exclusive economic zones to cooperate in order to preserve the species.¹⁴⁹

2.5.3 Straddling Stocks

Various states including Australia, Canada, Cape Verde, Iceland, the Philippines, Sao Tome, Principe, Senegal, and Sierra Leone proposed additional measures to strengthen article 63 on straddling stocks. They advocated mandatory provisions and the establishment of an international tribunal to prescribe definitive measures in areas where coastal states and

¹⁴⁸ United Nations, UNCLOS, Articles 64, 65, 66, 67.

¹⁴⁹ *Ibid.*, Article 63.

fishing states could not negotiate a solution.¹⁵⁰ However, because these states were mainly coastal states and not a powerful group, they were unsuccessful in strengthening the article on straddling stocks.

According to Article 63, straddling stocks are defined as “where the same stocks or associated species occur both within the exclusive economic zone of two coastal states” or “both within the exclusive economic zone and in an area adjacent to the zone.”¹⁵¹ The concern about straddling stocks has increased since the extension of the exclusive economic zones because stocks that would have been in the high seas may now be present in the EEZ’s of various countries.

2.5.4 Migratory Species

Article 64 on the highly migratory species is similar to Article 63, in that it asks states to cooperate through international organizations to promote optimum utilization and ensure conservation of the fish stocks. If organizations do not exist, the states are charged with the task to form an appropriate organization.¹⁵²

¹⁵⁰ United Nations, Yearbook of the United Nations - 1982, 199.

¹⁵¹ United Nations, UNCLOS, Article 63.

¹⁵² Ibid., Article 64.

2.5.5 Anadromous Stocks

Anadromous stocks¹⁵³ are regulated under Article 66 of UNCLOS III. States in whose rivers the stocks originate have a responsibility to ensure conservation through the establishment of appropriate regulatory measures. According to Article 66(3) the exploitation of anadromous stocks may only take place in areas landward of the exclusive economic zone, except in cases where states would experience economic dislocation. States are encouraged to use existing regional organizations.¹⁵⁴

The EEZ solved certain fishery conservation problems; however, difficulties still exist with anadromous species because they are not confined only to the EEZ. Numerous international agreements exist regulating salmon, an anadromous species.¹⁵⁵

2.5.6 Catadromous Species

Under Article 67 catadromous¹⁵⁶ species are regulated and managed by the coastal state where catadromous species spends most of their life span. Similar to anadromous

¹⁵³ Anadromous Species: reproduce in and inhabit fresh water. They do travel to the ocean before they spawn. Some anadromous species are: salmon, steel head trout, sturgeon, and smelt. Joseph Gough and Trevor Kenchington, A Glossary of Fisheries Science, 11.

¹⁵⁴ United Nations, UNCLOS, Article 66.

¹⁵⁵ William T. Burke, "Anadromous Species and the New International Law of the Sea," Ocean Development and International Law 22 (1991): 95.

¹⁵⁶ Catadromous species spawn in the ocean but live part of their lives in fresh water. An example of a catadromous species is the eel. Joseph Gough and Trevor Kenchington, A Glossary of Fisheries Science, 12.

species, catadromous species can only be exploited in the landward areas of the exclusive economic zone. When this species migrates between different economic zones, the states must regulate the fish stocks through agreements in order to ensure conservation.¹⁵⁷

2.6 The Law of the Sea Convention

UNCLOS III attempted to accommodate the interests of all states. However, as in any bargaining situation, a certain amount of dissatisfaction always exists. The 1982 Convention allows for the exploitation of the high seas and the living resources within a framework or regime that attempts to conserve and manage the ecosystem.¹⁵⁸ Through the implementation of such a regime, it is hoped that nations will cooperate and adhere to regulations in their own interest, enabling continued harvesting of the oceans on a sustainable basis.

On April 30, 1982, the Third United Nations Conference on the Law of the Sea adopted the Law of the Sea Convention.¹⁵⁹ Great difficulty has been experienced in the implementation and ratification of this Convention. States were slow to ratify it. By November 1986, only 32 states had done so.¹⁶⁰ On 16 November 1993, Guyana deposited

¹⁵⁷ United Nations, UNCLOS, Article 67.

¹⁵⁸ William T. Burke, The New International Law of Fisheries, 108.

¹⁵⁹ Kenneth R. Simmonds, U.N. Convention on the Law of the Sea - 1982 (New York: Oceana Publications, 1983), vii.

¹⁶⁰ Hugh Kindred, International Law, 704.

the 60th ratification and finally twelve months later, the 1982 United Nations Convention on the Law of the Sea came into effect.¹⁶¹ Iceland was the only industrialized country that ratified UNCLOS III before 1994.¹⁶²

The failure of industrialized countries to ratify this agreement was due less to the fisheries provisions but more to concerns over the fairness and cost of the deep sea-bed mining regime and the transfer of technology. Compromises were made, with the revisions being approved in July 1994. With the approval of changes some industrialized countries, including Australia and Germany, ratified the agreement and it is also anticipated that Canada and the United States will ratify the treaty.¹⁶³ Many countries had already developed their marine laws on the assumption that the Law of the Sea Convention would come into effect.¹⁶⁴ As of March 14, 1997 116 states ratified the convention.¹⁶⁵

Even though a lengthy process, the 1982 Law of the Sea Convention has finally come into force, and at the same time managed to influence states' actions in maritime affairs.

¹⁶¹ D.H. Anderson, "LOS Convention: Status and Prospects," Marine Policy 18, (1994): 496.

¹⁶² Ted L. McDorman, "Canada's Aggressive Fisheries Actions: Will They Improve the Climate for International Agreements," Canadian Foreign Policy. 2 (1994): 9.

¹⁶³ *Ibid.*, 15.

¹⁶⁴ John Stevenson and Bernard Oxman, "The Future of the United Nations Convention on the Law of the Sea," 488.

¹⁶⁵ Oceans and Law of the Sea Homepage, Status of the United Nations Convention on the Law of the Sea, <http://www.un.org/Depts/los/los/94st.htm>, March 19, 1997.

Throughout the process, countries made changes to their laws and policies in order to operate within the new legal regime. In effect, the Law of the Sea Convention was implemented gradually prior to its coming into force.¹⁶⁶ The importance of this agreement is not only in its comprehensiveness but also in its demonstration that 160 sovereign states worked together to develop such an agreement.¹⁶⁷

The 1982 Law of the Sea Convention is a comprehensive agreement which has codified customary and as well as broken new ground for the exploitation and regulation of deep sea-bed resources. However, by the virtue of its comprehensiveness, many specific interpretations, definitions, and implementation need to be fine tuned at the regional and international levels.¹⁶⁸ One such area is that of high seas migratory fish stocks.

¹⁶⁶ United Nations, "Law of the Sea Convention: Ten Years Later," United Nations Chronicle 15 (1993): 87.

¹⁶⁷ David Larson, "Conventional, Customary, and Consensual Law," 77 .

¹⁶⁸ Elisabeth Mann Borgese, "The Process of Creating and International Ocean Regime to Protect the Ocean's Resources," 33.

Chapter 3 Rio Process

3.1 Introduction to Rio

Since the end of the 1982 United Nations Conference on the Law of the Sea, a more holistic and ecological approach to ocean management emerged.¹⁶⁹ In part the process was revitalized by the 1972 conference which drafted twenty-three principles and statements of objectives on the marine environment. Biliiana Cicin-Sain and Robert Knecht argue that prior to Stockholm, international environmental efforts were reactive and narrowly focused.¹⁷⁰ This new perspective surfaced with the realization that traditional management failed and proved to be inadequate.¹⁷¹ There has been an increased focus on the environment and the sustainability of resources. Evident by the 1992 United Nations Conference on the Environment and Development (UNCED or Earth Summit) at Rio de Janeiro, Brazil, changes in attitude had evolved. These changes brought the principle of sustainability of

¹⁶⁹ Douglas M. Johnston, "Vulnerable Coastal and Marine Areas: A Framework for the Planning of Environmental Security Zones in the Ocean," Ocean Development and International Law 24 (1993): 63.

¹⁷⁰ Allan Gotlieb, "National Jurisdiction and International Responsibility: New Canadian Approaches to International Law," 18-91 Canadian Council on International Law Proceedings of the First Annual Conference held at the University of Ottawa, Ottawa, Canada, October 3-14 1972. Biliiana Cicin-Sain and Robert W. Knecht, "Implications of the Earth Summit for Ocean and Coastal Governance," Ocean Development and International Law 24 (1993): 323.

¹⁷¹ Peter H. Pearce, "From Open Access to Private Property: Recent Innovations in Fishing Rights As Instruments of Fisheries Policy," Ocean Development and International Law 23 (1992): 71.

living marine resources into the forefront of marine management circles.

By 1992, the international community became aware that the Earth could not support current exploitation levels on the land or the sea. Over sixty percent of the world's population lives within sixty kilometres of the shoreline, particularly poorer nations.¹⁷² With the world's growing population, many nations became dependent on fish as a major source of protein because it is relatively inexpensive. Poverty and high birth rates, along with the increased consumption by developed nations contributed to the depletion of fish stocks.¹⁷³ The marine environment is only able to maintain such levels briefly and marine catches have neared the maximum production obtainable.¹⁷⁴ Expansion of fisheries, inadequate management on the high seas, unregulated fishing, excessive fleet sizes, countries' reflagging to escape controls, and the use of unreliable databases have led to an overall decline of marine fisheries and the failure of fisheries management.¹⁷⁵

Over-harvesting is one of many factors that has led to the deterioration of fish stocks.

¹⁷² Shabbir G. Cheema, "UNDP Statement," Marine Policy 18 (1994): 104.

¹⁷³ Biliana Cicin-Sain and Robert W. Knecht, "Implications of Earth Summit," 325.

¹⁷⁴ Alicia Barcena, "Some Reflections on a New Approach to Ocean and Coastal Management," The Marine Environment and Sustainable Development: Law, Policy, and Science, 21-55 Alastair Couper and Edgar Gold, (Honolulu: Law of the Sea Institute: 1991) 2.

¹⁷⁵ United Nations, Earth Summit Agenda 21: The United Nations Programme of Action from Rio (New York: United Nations, 1993) 154.

Other factors include climactic change,¹⁷⁶ variation in the oceans' water temperature, and the salinity of water, which also influenced the life span of fish. As with other environmental problems, pollution has been a major contributing factor to the degradation of the marine environment. All of these elements contributed to the decline of biodiversity within the world's oceans.¹⁷⁷

The United Nations Conference on the Environment and Development (UNCED) was held at Rio de Janeiro from June 3-14 1992. This conference, known also as the Earth Summit, was significant in that almost every nation attended. Present were 178 countries, 114 heads of state, 1000 official delegates, and 1,400 non-governmental organizations.¹⁷⁸ By having such large participation by all nations, it was obvious that environmental concerns are high on all agendas. At the same time a People's Summit took place at the Global Forum, which was an unofficial conference held by non-governmental organizations, that produced its own initiatives and draft treaties.¹⁷⁹ The hosting of the Earth Summit is not only significant in the number of participants but also in that it raised international consciousness about environmental issues.

¹⁷⁶ Biliana Cicin-Sain and Robert W. Knecht, "Implications of the Earth Summit," 325.

¹⁷⁷ Douglas Johnston, "Vulnerable Coastal and Marine Areas," 64. and Biliana Cicin-Sain and Robert Knecht "Implication of the Earth Summit," 323-353.

¹⁷⁸ Biliana Cicin-Sain and Robert W. Knecht, "Implications of the Earth Summit," 328.

¹⁷⁹ Alicia Barcena "Marine Agenda of UNCED," *Marine Policy* 18 (1994): 99.

A significant preliminary meeting to UNCED Conference was a meeting of legal and scientific experts -- held in St. John's, Newfoundland September 5-7, 1990-- to discuss conservation and management of living resources of the high seas in anticipation of fisheries issues to be discussed at Rio.¹⁸⁰ This Conference on the Conservation and Management of the Living Resources of the High Seas was the result of a Canadian government initiative to discuss the issue of conservation and management of high seas fisheries, which it wanted to have discussed at UNCED. These included: unregulated fishing, re-flagging of vessels, harmful fishing practices, over-exploitation, and falsification of records.¹⁸¹ This initiative and the attending participants demonstrate that governments became concerned about the state of the world's oceans prior to 1992.

The discussions at Rio were wide-ranging, dealing with various aspects of the global environment, including the marine ecosystem. Fisheries were only one small part of this conference. However, the fishery discussions have proved to be significant on fisheries in the long term as it has acted as a link between UNCLOS and the Conference on Straddling Stocks and Highly Migratory Fish Stocks. This international conference produced five major agreements:

¹⁸⁰ International Conference on the Conservation and Management of the Living Resources of the High Seas, St. John's, Newfoundland, September 5-7, 1990. Proceedings, Institute of Fisheries and Marine Technology .

¹⁸¹ International Conference on the Conservation and Management of the Living Resources of the High Seas, St. John's, NF, September 5-7, 1990, Proceedings Institute of Fisheries and Marine Technology.

1. Rio Declaration of Principles
2. Convention on Climate Change
3. Convention on Biological Diversity
4. Agenda 21
5. Set of Forest Principles.¹⁸²

One important result of the Earth Summit was Agenda 21, a non-binding agreement which proposed a programme of action for global sustainable development.¹⁸³ Agenda 21 provided a general statement on principles and the state of the global environment. This document became the foundation for formulating all forms of environmental policies. Chapter 17 (Oceans Chapter), the largest in Agenda 21, dealt specifically with the marine environment and stressed the importance of the oceans and coastal areas as the global life support system.¹⁸⁴ This chapter will be concentrated on during this analysis as it is directly related to the fishery issues. It is important to keep in mind that Chapter 17 may be the longest but it is only one of the 21 chapters. According to Chapter 17, living resources are to be protected and developed rationally in all seas, including enclosed seas, semi-enclosed seas and all coastal areas.¹⁸⁵

¹⁸² Biliana Cicin-Sain and Robert W. Knecht, "Implications of the Earth Summit," 325.

¹⁸³ United Nations, United Nations Earth Summit, 3.

¹⁸⁴ Biliana Cicin-Sain and Robert W. Knecht, "Implications of the Earth Summit," 341 and G. Shabbir Cheema, "UNDP Statement," 104.

¹⁸⁵ United Nations, United Nations Earth Summit, 147.

Rio adopted an ecological perspective for the preservation of the oceans.¹⁸⁶ The marine environment must be considered an integrated component of the global life support system that needs to be sustainably developed.¹⁸⁷ Ecologically sustainable development implies safeguarding for future generations resources that can provide a constant yield of both economic and environmental services.¹⁸⁸ Chapter 17 discussed activities which should be undertaken to reduce the negative impact on the environment.¹⁸⁹ Particular emphasis was placed on marine pollution, including both land-based and sea-based pollution.¹⁹⁰

The Earth Summit addressed aspects of the 1982 Convention of the Law of the Sea that had failed to be implemented, particularly straddling stocks and highly migratory species. UNCLOS III dealt primarily with rights and obligations of states. With changes at the global level, a necessity has arisen for a new integrated and precautionary approaches to be adopted in the decision-making process. The failure to integrate may result in catastrophic occurrences for the interdependent and diverse marine environment. Decision-

¹⁸⁶ Douglas M. Johnston, "Vulnerable Coastal and Marine," 69.

¹⁸⁷ *Ibid.*, 69. United Nations, United Nations Earth Summit, 147.

¹⁸⁸ Michael Potier "Cost Effectiveness in Coastal Zone Management," Marine Policy 18 (1994): 121.

¹⁸⁹ U. Barg and UN Wijkstrom, "Environmental Management Options for Coastal Fisheries and Aquaculture," Marine Policy 18 (1994): 127.

¹⁹⁰ Parvis S. Towfighi, "Integrated Planning and Management of Coastal Areas," Marine Policy 18 (1994): 107.

makers must take appropriate action that is cautious even if data is unavailable at the time.¹⁹¹ Historically, ocean management regimes have been reactive but in the current climate, it is necessary for regimes to become proactive and anticipatory in order to avoid stock depletion and conflicts.¹⁹²

During Rio, new emphasis was placed on regional organizations. A new importance was also placed on strengthening the roles of non-governmental organizations, recognizing the need for local organizations or authorities to play a vital role in the management of the ocean resources.¹⁹³ However, Agenda 21 does not specify local authorities as the sole unit of decision-making for the managing of coastal authorities. Only vague references are made to local authorities and the need to act as partners in consultation with business, academia and user groups.¹⁹⁴

3.2 Ocean Topics at the Earth Summit

At the Rio conference six ocean topics were discussed.

1. integrated management of coastal areas and exclusive economic zones
2. marine pollution prevention and control

¹⁹¹ United Nations, United Nations Earth Summit, 148.

¹⁹² Alicia Barcena, "Some Reflections on a New Approach," 25.

¹⁹³ United Nations, United Nations Earth Summit, 270.

¹⁹⁴ Konrad Otb-Zimmerman, "Local Implementation of Agenda 21," Marine Policy 18 (1994): 112-113.

3. sustainable utilization of living marine resources
4. strengthening of international and regional cooperation
5. addressing critical uncertainties for ocean management and climate change
6. human resource development.¹⁹⁵

3.3 Agenda 21: Program Areas

Chapter 17 (Ocean Chapter) of Agenda 21 discussed seven major program areas.

These program areas were linked to the six ocean topics. The seven program areas include:

1. integration of management and sustainable development
2. marine environmental protection
3. sustainable use and conservation of marine resources of the high seas
4. sustainable use and conservation of marine resources under national jurisdiction
5. addressing critical uncertainties for the management of the marine environment and climate change
6. strengthening regional and international cooperation and coordination
7. sustainable development of small islands.¹⁹⁶

¹⁹⁵ Biliana Cicin-Sain and Robert W. Knecht, "Implications of the Earth Summit," 337.

¹⁹⁶ *Ibid.*, 341-346.

3.4 Fisheries Conservation Issues

3.4.1 Integrated Management and Sustainable Development

Integrated management and sustainable development of coastal and marine areas, including the exclusive economic zone, was addressed in paragraph 17.5 of Agenda 21. This section emphasized the need for coastal states to integrate policy-making, decision-making and institutions, as well as the importance of applying preventive and precautionary approaches.¹⁹⁷ States were asked to cooperate among themselves to prepare national guidelines for integrated coastal management. This chapter placed particular emphasis on the need for bilateral and multilateral cooperation.¹⁹⁸

3.4.2 Marine Environmental Protection

This program area called upon states to reduce land-based and sea-based pollution through precautionary and anticipatory measures. Land-based pollution accounts for over 70 percent of the total marine pollution levels, and maritime transport and dumping each account for a further 10 per cent of the total.¹⁹⁹ Proposed action plans included, use of precautionary measures, environmental impact assessments, recycling, and improving and building waste treatment facilities.²⁰⁰ There were also discussions on measures to limit the

¹⁹⁷ Ibid., 341.

¹⁹⁸ Ibid., 342.

¹⁹⁹ United Nations, United Nations Earth Summit, 150.

²⁰⁰ Ibid., 150.

amount of marine environmental degradation by utilizing the already existing international framework.²⁰¹

3.4.3 Sustainable Use and Conservation of Marine Resources of the High Seas

Sustainability of high-seas marine resources has evolved into an important issue as the result of the expansion of the high-seas fishery over the last decade. Five percent of the total global catch takes place on the high seas.²⁰² In this program area linkages were made to UNCLOS III. Chapter 17 asked states to adopt the Convention without final details and use it as a basis for fishery conservation. Currently, inadequacies exist in high-seas fishery management, which has led to the over utilization of marine resources. The failure of high-seas fishery management can be attributed to problems of unreliable databases, reflagging of vessels to escape control, large fleet sizes and use of selective gear.²⁰³ This section addressed straddling stocks and highly migratory species and deals with the necessity for cooperation between nations which fish on the high seas. An emphasis was placed on the need for a multi-species approach for the management of this resource.²⁰⁴ Delegates at the conference recognized that there is an interdependency of fish stocks and the whole

²⁰¹ Biliiana Cicin-Sain and Robert W. Knecht, "Implications of the Earth Summit," 342.

²⁰² United Nations, United Nations Earth Summit, 154.

²⁰³ *Ibid.*, 154.

²⁰⁴ United Nations, United Nations Earth Summit, 154; Biliiana Cicin-Sain and Robert W. Knecht "Implications of the Earth Summit," 343-344.

ecosystem must be considered in decision-making. It also recognized the need for state cooperation through appropriate organizations. This program area recognized the work of the International Whaling Commission and the Inter-American Tropical Tuna Commission. In this program area negotiators committed their countries to pursue the conservation and sustainability of marine living resources on the high seas. Agenda 21 included a list of objectives which needed to be met before the sustainability of the high seas could be ensured.²⁰⁵ According to Article 17.49 cooperation should occur through regional, subregional and other global levels while adhering to the 1982 United Nations Convention on the Law of the Sea. With the emphasis placed on adherence to UNCLOS III States were once again encouraged to ratify the convention.

3.4.4 Sustainable Use and Conservation of Marine Resources Under National Jurisdiction

This program area was concerned with national jurisdiction over the conservation of marine resources. States committed themselves to developing fisheries which met their peoples' nutritional needs, while minimizing the catch, using selective gear and protecting endangered species and ecologically sensitive areas. Concern for developing countries was expressed in the request for the transferring to them of fisheries and aquaculture

²⁰⁵ United Nations, United Nations Earth Summit, 154.

technology.²⁰⁶ One management related activity in this program area is the implementation of UNCLOS III and the addressing of straddling stocks and highly migratory species issues.²⁰⁷

3.4.5 Strengthening of Regional Cooperation and Coordination

The lack of coordinated activity has been a problem in the international system. In this program area, coastal states were asked to cooperate through the use of organizations, be they bilateral, multilateral or regional. States must assess the living resources and develop an inventory of over-utilized and under-utilized species.(17.80.a) The topic of implementation of sustainable usage strategies that take into account artisanal fishers, local communities and the indigenous people was discussed at the Rio Conference. This section also asked states to strengthen the legal and regulatory framework to allow for improved management, enforcement and surveillance. The program area stressed the sustainable usage of the marine environment for food, industry and recreation.²⁰⁸ Discussion of such matters demonstrated a growing understanding of the need for coordinated action by all users of the global commons.

²⁰⁶ Biliana Cicin-Sain and Robert W. Knecht, "Implications of the Earth Summit," 344.

²⁰⁷ United Nations, United Nations Earth Summit, 157.

²⁰⁸ *Ibid.*, 157.

3.4.6 Addressing Critical Uncertainties for the Management of the Marine Environment and Climate Change

This program area emphasized the need for proper scientific information, data and better forecasting of future conditions because of the marine environment's sensitivity to climate and atmospheric change.²⁰⁹ This section urges the use of the precautionary approach as a method to address uncertainty and the potential effect of climactic change. Formation of global databases and improved methodologies are methods to address the lack of scientific data and information.²¹⁰ It is necessary for states to exchange data and cooperate in conducting scientific research in order to deal with the uncertainties present in the current marine management and conservation regime.

3.4.7 Strengthening International Cooperation

The topic of cooperation was emphasized throughout the Rio process, as evident in the program area devoted to the strengthening of international cooperation and coordination, including regional organizations. Cooperation at the international level is needed to assist national efforts in the conservation and management of the marine ecosystem. This program area emphasized the need to link regional institutions and the United Nations system. By coordinating efforts, it may be possible to limit duplication, provide better data and take a

²⁰⁹ Ibid., 159.

²¹⁰ Biliiana Cicin-Sain and Robert W. Knecht, "Implications of the Earth Summit," 344-345.

broader approach to marine issues.²¹¹ This program area asserts that nations commit to the formation of institutional arrangements to perform various tasks including the gathering and distribution of scientific information. Regional fishery organizations are examples of the outcome from this program area.²¹²

3.4.8 Sustainable Development of Small Islands

The emphasis placed on small islands stems both from their size and their fragile ecological environments.²¹³ Moreover, small islands are frequently economically disadvantaged because of their location and distance from markets. This program area asked nations to adopt and implement programmes for the sustainable development and usage of marine and coastal resources. While carrying out this development, nations must ensure biodiversity and improvement of life for the people on the islands. Nations are to assist the islands to deal with environmental changes and help reduce their impact on the resources.²¹⁴

²¹¹ United Nations, United Nations Earth Summit, 162

²¹² Biliana Cicin-Sain and Robert W. Knecht "Implications of the Earth Summit," 345-346.

²¹³ United Nations, United Nations Earth Summit, 163.

²¹⁴ *Ibid.*, 164.

3.5 Summary

The Rio Conference managed to raise awareness of the global environmental situation, including the fisheries. Through the brief examination of the issues from Rio it is possible to gain an understanding of the international concerns. As a result of Rio and the continuing global fisheries crisis a conference on Straddling Stocks and Highly Migratory Species was held in New York in 1994. Rio was a major conference in raising concern for environmental issues and by hosting this conference and future conferences it highlights the sluggish development of international law.

Chapter 4

Straddling Stocks and Highly Migratory Species

4.1 Introductory Explanation of Issues Relating to Straddling Stocks and Migratory Stocks

As global ocean management evolved, one concern which re-emerged at the top of the international community's agenda was the management of straddling and highly migratory stocks. Evolution in the international law of the sea, particularly the extension of the exclusive economic zone to 200 miles, has heightened anxiety about these species, as was evident during the 1992 Earth Summit in Rio de Janeiro.

A focal point of concern at the Earth Summit fishery discussions was the issue of highly migratory species and straddling stocks, since these stocks cross different national boundaries. The conference indicated that states' attitudes towards conservation had changed and that they realized that systemic problems existed in the ocean management regime. Even though a change in attitude occurred, there persisted a debate between coastal states and distant- water fishing states.

Delegates to the Earth Summit agreed to conduct another conference to discuss the issue of straddling stocks and highly migratory species. While the Earth Summit covered many subjects and reached general conclusions, the necessity to deal with certain issues in greater detail was recognized. In 1993, under the auspices of the United Nations, a Conference on Straddling Stocks and Highly Migratory Fish Stocks was held. The General Assembly through Resolution 47/192 requested that nations find solutions for problems

related to the high seas.²¹⁵ The goal of this conference was to negotiate an agreement that would bind both coastal and distant-water fishing states to conserve and manage the high-seas fisheries and to adopt mechanisms for the peaceful resolution of disputes.²¹⁶ The convening of this Conference resulted from the inability of coastal states and distant-water fishing states to cooperate in the management and conservation of fish stocks. In part, the inability to cooperate led to the catastrophic collapse of fish stocks, such as the decimation of the northern cod stocks.²¹⁷

The 1982 United Nations Convention on the Law of the Sea made provisions for high-seas conservation, highly migratory fish stocks, straddling fish stocks, and catadromous and anadromous species. As noted in the previous discussion on UNCLOS III, the articles dealing with these species were vague as a result of the states' failure to agree on the types and mechanisms of conservation measures which should be taken. According to Miles and Burke, after 1982 many felt that the subject of straddling stocks area had not been dealt with sufficiently.²¹⁸

²¹⁵ United Nations, Background Release, United Nations Conference and Highly Migratory Stocks To Be Held at Headquarters, 15-26 August. SEA/1432, 11 August 1994. Hereafter cited as UNSEACOM.

²¹⁶ UNSEACOM, Background Release, Third Part of First Session of the International Seabed Authority, Kingston 7-18 August, SEA/1491, 1 August 1995.

²¹⁷ Evelyne Meltzer, "Global Overview of Straddling and Highly Migratory Fish Stocks: The Non-sustainable Nature of High Seas Fisheries," Ocean Development and International Law 25 (1994): 255.

²¹⁸ Edward L. Miles and William T. Burke, "Pressures on the United Nations Convention on the Law of the Sea," 343.

Although straddling stocks and highly migratory species were covered at UNCLOS III, a “soft approach”²¹⁹ was taken, because delegates did not perceive a sense of urgency. In the intervening years, however species began to be fully utilized or over utilized. For example, southern blue fin tuna evidenced a declining biomass, and albacore tuna were fully and intensively exploited.²²⁰ The goal of the 1993 Conference was to develop more specific rules for the management of fish stocks while maintaining principles of the 1982 Law of the Sea Convention.²²¹ Even though UNCLOS III tackled important topics of high seas fisheries, problems continue with the enforcement of regulations. With the lack of enforcement, state practice has risen in importance for the purpose of regulation but has also led to an alternative problem – the lack of uniformity.²²²

Also at the Earth Summit, the international community was asked to draw upon the scientific and technical expertise of the Food and Agricultural Organization (FAO). The FAO was asked to identify problems related to the conservation and management of

²¹⁹ “Soft Approach” is being used to describe the fact that regulations were not clearly outlined in the Law of the Sea Convention but rather states were encouraged to manage these stocks cooperatively.

²²⁰ Evelyne Meltzer, “Global Overview of Straddling and Highly Migratory Fish Stocks,” 324.

²²¹ David A. Balton, “Strengthening the Law of the Sea: the New Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks,” Ocean Development and International Law 27 (1996): 125.

²²² William T. Burke, “Unregulated High Seas Fishing and Ocean Governance,” 235-271 Freedom of the Seas in the 21st Century: Ocean Governance and Environmental Harmony ed. by Jon M. VanDyke, Durwood Zaelke and Grant Hewison (Washington: Island Press, 1993), 248.

straddling stocks and highly migratory species along with ways to improve state cooperation and to make appropriate recommendations.²²³

In its report, the FAO confirmed the view that management and over fishing was a high-seas problem.²²⁴ After 1982, a great redistribution of sea wealth took place with the creation of the exclusive economic zones. By creating the EEZ, coastal states were given full authority over most living and non-living resources of the sea in the area up to 200 miles.²²⁵ With this redistribution of ocean resources states were asked to implement legislation which would guarantee the rights and obligations of all states on the high seas.

4.2 Conflict on the High Seas

According to the Food and Agriculture Organization, the declining oceans and increased state conflict led to high seas ocean management dominating international relations.²²⁶ Other areas which have experienced conflict include:

1. the Bay of Biscay where the Spanish and French fought over tuna;

²²³ International Institute for Sustainable Development, Earth Negotiations Bulletin: A Daily Report on the Fifth Substantive Session of the Straddling Fish Stocks and Highly Migratory Stocks Conference Volume 7, No. 44 Monday 24 July 1995. <http://www.iisd.ca/linkages>.

²²⁴ United Nations, "Law of the Sea Convention," 69.

²²⁵ David A. Balton, "Strengthening the Law of the Sea," 129.

²²⁶ Food and Agriculture Organization, World Review of High Seas and Highly Migratory Fish Species and Straddling Stocks Fisheries Circular 858, (Rome: Food and Agriculture Organization of the United Nations, 1993), 1.

2. the Russian threat of military action against any foreign vessels in the enclave of the Sea Okhotsk;
3. the Costa Rican seizure of four American vessels in transit through its EEZ.²²⁷

Evidence of conflict has been seen on Canada's east coast where numerous disagreements have occurred between Canada and the Europeans over fishing quotas.²²⁸ Although European vessels have fished for cod on the Grand Banks and the Flemish cap for centuries, extension of the exclusive economic zone to 200 miles and a dramatic decline of stocks has led to several recent confrontations, especially with Spain.²²⁹ In 1994, prior to the Conference on Straddling and Highly Migratory Species heightened tensions and conflict level existed between Canada and other fishing nations. In April 1994, Canada seized the Kristina Logos for contravening NAFO and Canadian fishing regulations.²³⁰ On March 9, 1995, Canadian Officials pursued the Spanish vessel the Estaj for four hours. The vessel was charged with undersized catch violations, failure to stop and the throwing of gear overboard. Upon inspection it was determined that there was undersized net with a mesh liner, 79% of fish

²²⁷ David A. Balton, "Strengthening the Law of the Sea," 131.

²²⁸ Government of Canada, Department of Fisheries and Oceans, "Canada Seizes Spanish Trawler," News Release NR-HQ-95-29E, March 9, 1995.

²²⁹ Michael Sean Sullivan "The Case in International Law for Canada's Extension of Fisheries Jurisdiction Beyond 200 Miles" Ocean Development and International Law 28 (1997): 213.

²³⁰ *Ibid.*, 219.

were undersized, a secret hold containing fish that were under moratorium (American plaice), and the vessel was in possession of double logs.²³¹

Other parts of the world which have experienced conflict include the Bay of Biscay where the French and Spanish fought over who had the right to fish for tuna, the Bering Sea where collapse of the valuable pollock stocks led to American and Russian domestic pressure to stop over fishing by Japan, the People's Republic of China, the Republic of Korea and Poland, including the threat of Russian military action against foreign vessels fishing in the small enclave of the Sea of Okhotsk and the Costa Rican seizure, in its EEZ, of an American vessel which was not equipped with appropriate fishing gear.²³² These examples of conflicts between coastal and distant water fishing states demonstrate how frustration can escalate to outright conflict.

4.3 Conference on Straddling and Highly Migratory Fish Stocks

With the increase in tension and the decline of stocks, the need arose to strengthen the sections on straddling and highly migratory stocks of the Law of the Sea Convention. The requirement to implement the suggestions made at Rio, led to the United Nations giving states a directive to address issues of the high-seas fishery through a conference on straddling stocks. The sense of urgency had finally become evident resulting in the hosting of an

²³¹ Ibid., 223-225.

²³² David A. Balton "Strengthening the Law of the Sea," 131.

international conference.²³³ According to Conference Chairman Satya Nandan, the gloomy outlook for the fish stocks led to a new challenge -- not only formulating conservation measures, but also ensuring the implementation of necessary measures.²³⁴ At the outset, states realized the need to agree on a pact based on the precautionary approach to protect the marine environment and its living components. However, two viewpoints clashed: distant-water fishing nations asserted that stocks need to be managed as a biological unit without any political or other arbitrary boundaries, while coastal states argued that such an approach constitutes an infringement upon their jurisdictional rights in the EEZ.²³⁵

Numerous sessions were held leading up to the final negotiated text of the 1995 United Nations Agreement on Straddling Stocks and Highly Migratory Species. In January 1993, a preliminary United Nations Preparatory meeting took place in St. John's, Newfoundland, with participants coming from like minded coastal states. Five discussion papers resulted from this meeting.

1. management principles
2. fishing by non-contracting parties

²³³ UNSEACOM, Second Substantive Session of UN Conference on Straddling and Highly Migratory Fish Stocks, New York, 14-31 March 42nd meeting (AM) 31 March 1994 SEA/1424: 1.

²³⁴ International Institute for Sustainable Development "Summary of the First Substantive Session of the UN Conference on Straddling Fish Stocks and Highly Migratory Stocks" Earth Negotiating Bulletin 7 (16) Monday 2, August 1993: 1.

²³⁵ Max Collett, "Achieving Effective International Fishery Management: A Critical Analysis of the UN Conference on Straddling Fish Stocks," Dalhousie Journal of Legal Studies 4 (1995): 16.

3. surveillance, control and enforcement on the high seas
4. special problems of developing nations
5. remedies for the violation of conservation measures.²³⁶

A separate treaty, negotiated by the Food and Agriculture Organization (FAO) influenced the 1995 Straddling Stock and Highly Migratory Species Agreement. The FAO agreement dealing with the re-flagging of vessels became a section of the International Code of Conduct for Responsible Fishing. A related agreement developed by the FAO was the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, November 1993.²³⁷ The compliance agreement built upon flag state responsibilities cited in the 1982 Law of the Sea Convention. This new agreement clarifies state duties and responsibilities for their vessels but does not address the issue of conservation regulations.²³⁸ The Compliance Agreement complements the 1995 Agreement on Straddling Stocks and Highly Migratory Stocks and has added to the evolutionary character of the international law of the sea regime.

The Chairman of the United Nations Conference on Straddling Stocks, Satya Nandan, envisioned producing a vision to produce a binding instrument for the sustainable

²³⁶ Evelyn Meltzer, "Global Overview of Straddling and Highly Migratory Fish Stocks," 324.

²³⁷ Food and Agriculture Organization: Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas [33 I.L.M. 968 (1994)], David A. Balton, "Strengthening the Law of the Sea" 131.

²³⁸ David A. Balton, "Strengthening the Law of the Sea," 132.

exploitation of living high-seas resources.²³⁹ The Conference faced many challenges to identify and evaluate problems in regards to the conservation of straddling stocks and highly migratory species, while attempting to accommodate the opposing interests of the coastal and distant water fishing states. States considered various options to improve international cooperation and proposed recommendations to strengthen the management of these stocks.²⁴⁰

The Conference on Straddling and Highly Migratory Stocks adopted a procedural approach similar to that of UNCLOS III by utilizing draft agreements and negotiating texts. The draft agreement was composed of 48 articles; these provided general principles and guidelines for the fulfillment of conservation and management of living resources on the high seas consistent with the 1982 United Nations Convention on the Law of the Sea. Drafters of this agreement attempted to balance the interests of coastal states and distant-water fishing nations.²⁴¹ Three pillars of this draft agreement are: (1) to have compatible conservation and management based on precautionary approaches and scientific data, (2) to ensure effective enforcement of measures, and (3) peaceful settlement of disputes.²⁴²

²³⁹ UNSEACOM, Second Substantive Session of UN Conference on Straddling and Highly Migratory Fish Stocks, New York, 14-31 March, SEA/1424, 31 March 1994: 3.

²⁴⁰ Evelyn Meltzer, "Global Overview of Straddling and Highly Migratory Fish Stocks," 324.

²⁴¹ UNSEACOM, United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks Concludes 5th Session 80th meeting AM SEA/1482, 12 April 1995: 1.

²⁴² *Ibid.*, 3.

The result of the negotiation process was the Agreement for the Implementation of the Provisions of the 1982 Convention on the Law of the Sea Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks.²⁴³ Through this agreement the negotiators wished to further develop the regime of conservation and management of marine resources, particularly the high-seas fisheries. This new international agreement assists in clarifying articles of UNCLOS III and deals with the resurgent issue of straddling stocks caused by the extension of the exclusive economic zone and declining fish stocks. The goal of this agreement is to ensure the long term sustainability of fish stocks and promote optimum utilization of resources as specified by the Agreement in Part II, Art. 5(a). Some important issues which the treaty covers include international cooperation, compliance, enforcement, precautionary approach, and regional organizations.

4.3.1 International Cooperation

A key consideration in this agreement is the fostering of international cooperation. Coastal states and high seas fishing states are asked to pursue the goal of cooperation for the

²⁴³ United Nations, United Nations Conference for Straddling Fish Stocks and Highly Migratory Fish Stocks: Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982, Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (A/CONF.164/37) 34 I.L.M. 1542 (1995). This agreement will be referred to as the United Nations Agreement on Straddling Stocks and Highly Migratory Fish Stocks.

purpose of conservation and management of the straddling and highly migratory species.²⁴⁴ States need to cooperate either directly with other states or through appropriate regional/subregional organizations. If a regional organization does not exist, states must cooperate to form such an organization.²⁴⁵

4.3.2 Compliance and Enforcement

The Conference delegates recognized that without enforcement the regime for the management and conservation of fish stocks would be at the mercy of individual states. Subsequently, a desire for an internationally accepted framework for compliance and enforcement, strengthens the agreement.²⁴⁶ According to Satya Nandan, the compliance and enforcement section would provide strength to the agreement.²⁴⁷ Topics on compliance and enforcement discussed included scope, application and responsibilities of flag states.²⁴⁸

Countries advanced a range of views on the subject of compliance and enforcement. Canada felt that there is a need for a global agreement that would authorize the arrest of

²⁴⁴ United Nations, United Nations Agreement on Straddling Stocks and Highly Migratory Fish Stocks, Part III, Article 8 (1).

²⁴⁵ *Ibid.*, Part III, Article 8

²⁴⁶ UNSEACOM, UN Conference on Straddling and Highly Migratory Fish Stocks Discusses Compliance and Enforcement of High Seas Fisheries Management Measures 27th meeting (AM) 17 March 1994, SEA/1409: 1.

²⁴⁷ *Ibid.*, 1.

²⁴⁸ International Institute for Sustainable Development, "Report on Conference," Earth Negotiations Bulletin, Volume 7, Number 16, Monday 2 August, 1993: 4.

vessels on the high seas, which would contravene internationally accepted rules. It was argued by Canada that it was necessary to agree on which authorities may board, inspect, and arrest violators for the purpose of enforcing regulations.²⁴⁹ Brazil was concerned with who would actually benefit from the sanctions placed on offenders – coastal state, regional organization or the flag state. The Russian Federation asked that the agreement specify the type of penalties actions taken against states in violation of fishing quotas or fishing in prohibited zones.²⁵⁰ The European Union stated that constitutional problems existed with the compliance and enforcement section of the negotiating text.²⁵¹ Papua New Guinea felt that the enforcement and compliance measures were necessary for the overall success of the Conference and Agreement.²⁵² Samoa stated that joint enforcement mechanisms would complement the jurisdiction of flag states.²⁵³ The debate on this subject led to the development of the articles which related to compliance and enforcement.

One fundamental aspect of compliance and enforcement is the role of the flag state. A wide range of views on the subject of flag states and compliance exists; however, a

²⁴⁹ UNSEACOM, UN Conference on Straddling and Highly Migratory Fish Stocks Discusses Compliance and Enforcement of High Seas Fisheries Management Measure 27th meeting (AM) 17 March 1994, SEA/1409: 1.

²⁵⁰ *Ibid.*, 2.

²⁵¹ *Ibid.*, 2.

²⁵² *Ibid.*, 2.

²⁵³ *Ibid.*, 3.

persistent problem is the re-flagging of vessels.²⁵⁴ Canada supported the Russian proposal, which would prohibit the practice of re-flagging vessels while at sea in order to avoid regulations.²⁵⁵ The Conference, through Article 19, agreed that flag states have a duty to ensure compliance by their vessels with regional and subregional measures for conserving and managing straddling and highly migratory species. Flag states must enforce all measures, no matter where in the seas the infractions occur. All allegations need to be investigated and a report given to the state which laid the complaint.²⁵⁶

Related to compliance, Article 20 deals with enforcement. This article asks states to cooperate through the use of regional or subregional organizations for the purpose of implementing conservation and management measures established by the organizations. States need to cooperate in the identification of violators of conservation measures, as well as assisting one another in the investigation of violations.²⁵⁷

Subregional and regional organizations also have a role in the investigation and enforcement of regulations. According to Article 21 (1), on the high seas in areas covered by either a regional or subregional fisheries organization, states whose members may,

²⁵⁴ UNSEACOM, UN Conference on Straddling and Highly Migratory Fish Stocks Discusses Duties of Flag States, Compliance with Regional Conservation Measures 26th meeting (PM) 16 March 1994, SEA/1408: 1.

²⁵⁵ *Ibid.*, 1.

²⁵⁶ United Nations, United Nations Agreement on Straddling Stocks and Highly Migratory Fish Stocks, Article 19.

²⁵⁷ *Ibid.*, Article 20.

through the use of their authorized inspectors, board and inspect fishing vessels flying the flag of a member country for the purpose of ensuring that the vessel complies with regulations. The article also specifies that states must cooperate in the development of procedures for the boarding and inspection of vessels.²⁵⁸

When a flag state receives notification of a violation, it must respond within three working days. The flag state is obliged to investigate immediately the complaint; if a violation is discovered, it must take enforcement action against the vessel and notify the inspecting state of the findings from the investigation. Flag states may also authorize the inspecting state to carry out an investigation. If an inspecting state believes that a violation took place and the flag state failed to respond or take action, inspectors may stay on board in order to secure evidence. The inspectors must inform the flag state of the destination to which the vessel must proceed.²⁵⁹

4.3.3 Precautionary Approach

In 1987, the precautionary principle was introduced for the first time in the Declaration of the Second International Conference on the Protection of the North Sea.²⁶⁰ Subsequently, the precautionary approach became an accepted guideline, reconfirmed at the

²⁵⁸ Ibid., Article 21.

²⁵⁹ Ibid., Article 21.

²⁶⁰ Ellen Hey, "The Precautionary Approach: Implications of the Revision of the Oslo and Paris Conventions," Marine Policy 15 (1991): 244.

1992 Earth Summit and was incorporated as a principle in the 1995 United Nations Agreement on Straddling Stocks and Highly Migratory Species. Essentially, this approach holds that in cases of doubt about harmful effects on the environment, states must take preventive actions.²⁶¹

Article 6 deals with the application of the precautionary approach. It emphasizes the necessity of being cautious when information is uncertain. In applying the precautionary approach, states are asked to improve decision-making for the purpose of conservation and management of fish stocks by obtaining the best scientific information possible. States should consider uncertainties about productivity of fish, stock conditions, impact of activities on non-target species, and the effect on associated or dependent species. States must also consider oceanic, environmental and socio-economic factors when formulating policy. In collecting data, states should design data collection and research programs for assessing the impact of fishing.²⁶²

4.3.4 Compatibility

During the negotiation process, states expressed their views on the international high-seas fishery. A deadlock occurred on the issue of regulating the EEZ and the high seas

²⁶¹ Ibid., 245.

²⁶² United Nations, United Nations Agreement on Straddling Stocks and Highly Migratory Fish Stocks, Article 6.

throughout the range of the fish stocks.²⁶³ Canada stressed the biological unity of straddling and highly migratory fish stocks. Canada's Ocean Caucus, a coalition of non-governmental organizations, argued for measures to allow non-governmental organizations and artisanal fishery organizations to be included in regional organizations' decision-making.²⁶⁴ The United States also emphasized that conservation and management should extend throughout the range of the fish stocks.²⁶⁵ The Republic of Korea emphasized the need for compatible conservation measures, both on the high seas and in the exclusive economic zones. Both Indonesia and India expressed concerns about the extension of conservation measures from the high seas into the exclusive economic zone.²⁶⁶

Article 7 of the Agreement provides for the compatibility of conservation and management measures. It was necessary to avoid restricting the rights of coastal states to exploit, explore, and conserve living resources in their areas of national jurisdiction, without prejudicing the rights of all high-seas fishing states. Article 7(1) (a) specifies that the relevant coastal states and those whose nationals fish for the straddling stocks in the adjacent

²⁶³ UNSEACOM, Second Substantive Session of the UN Conference on Straddling and Highly Migratory Fish Stocks, New York, 14-31 March 42nd meeting (AM) 31 March 1994 SEA/1424: 2.

²⁶⁴ UNSEACOM, UN Conference on Straddling and Highly Migratory Fish Stocks Concludes a Discussion on Compatibility of Conservation Measures 24th meeting (PM) 22 March 1994 SEA/1416: 2.

²⁶⁵ UNSEACOM, Conference on Straddling Fish Stocks Focuses on Principles for Conservation and Management Measures 47th meeting (AM) 17 August 1994 SEA/1438: 2.

²⁶⁶ *Ibid.*, 2.

high seas should seek agreement on the necessary measures for the purpose of conservation of fish stocks.²⁶⁷ Coastal states and states that fish for highly migratory stocks are asked to cooperate directly or through appropriate mechanisms in order to ensure conservation while attaining optimum utilization throughout the region. The purpose of compatibility of conservation measures on the high seas and in areas of national jurisdiction is to ensure that the straddling stocks and highly migratory stocks are managed throughout their complete range.²⁶⁸

Without compatibility in management between the exclusive economic zone and the high seas, there is a risk that there would be competing and conflicting regulations.²⁶⁹ States need to consider various factors when formulating conservation measures, some of which include: previously agreed upon measures; measures adopted under Article 61 of the Law of the Sea Convention; biological unity of stocks; dependence of coastal states and those who fish the species on the high- seas; and, the avoidance of new measures that would have an adverse effect on the living marine resources.

States are asked to agree on measures within a time frame; however, if states are unable to reach an agreement within a reasonable time span, any state may invoke dispute

²⁶⁷ United Nations, United Nations Agreement on Straddling Stocks and Highly Migratory Fish Stocks, Article 7.

²⁶⁸ *Ibid.*, Article 7(2).

²⁶⁹ David Balton , “Strengthening the Law of the Sea,” 136.

settlement procedures.²⁷⁰ While negotiating a final agreement on conservation measures, states may enter into provisional arrangements.²⁷¹ Coastal states and states which fish on the high seas are asked to notify others, either directly or through appropriate organizations on the measures adopted for the conservation and management of straddling and highly migratory stocks.²⁷²

4.3.5 Dispute Settlement

One long-standing problem with the international ocean management regime has been the absence of effective dispute settlement mechanisms in previous agreements. Not surprisingly, negotiators at the straddling stocks sessions disagreed over compulsory dispute settlement. Russia wanted the text to allow only for the resolution of disputes through mediation or other forms of peaceful dispute settlement. It noted that states could always resort to the Part XV of the 1982 Law of the Sea Convention²⁷³ or, finally, after exhausting

²⁷⁰ United Nations, United Nations Agreement on Straddling Stocks and Highly Migratory Fish Stocks, Article 7 (3) & (4).

²⁷¹ *Ibid.*, Article 7 (5).

²⁷² *Ibid.*, Article 7 (7) & (8).

²⁷³ United Nations, UNCLOS, Part XV Settlement of disputes. This section covers a variety of methods including conciliation, International Court of Justice, International Court of Justice, an arbitral tribunal constituted in accordance with Annex VII and a special tribunal constituted in accordance with Annex VIII for one or more of the categories of disputes.

a range of non-binding solutions, states could turn to binding arbitration.²⁷⁴ Disagreements over compulsory dispute settlement led some countries to fear that this agreement would be ineffective. Peru, for example, believed that some countries were trying to subvert the conference process through their opposition to compulsory and binding dispute settlement.²⁷⁵ The Canadian delegation felt dispute settlement mechanisms were necessary if there was to be an effective regime, as did other delegations which believed compulsory dispute settlement was one of the only ways to ensure that conservation measures were applied to the high seas. Supporters of compulsory dispute settlement for conservation included: the United States, Canada, Australia, Sweden and Columbia.²⁷⁶

At this conference, few participants saw compulsory recourse to dispute settlement as a viable mechanism for conflict resolution. David Balton argues that the reason for this lack of vision is that countries wanted to protect their self-interest and were unwilling to allow a disinterested party to resolve disputes.²⁷⁷ Sweden, in an idealistic turn, felt that dispute settlement could be avoided by taking preventive measures. It was proposed by

²⁷⁴ UNSEACOM, Provisions on Non-Parties to Regional Organizations Dispute Settlement, Discussed at Straddling and Highly Migratory Fish Stocks 29th meeting (AM) 18 March 1994 SEA/1411: 2.

²⁷⁵ UNSEACOM, UN Conference on Straddling and Highly Migratory Fish Stocks Discusses Compulsory Dispute Settlement Provisions 24 th meeting (PM) 15 March 1994 SEA/1407: 1.

²⁷⁶ UNSEACOM, UN Conference on Straddling and Highly Migratory Fish Stocks Discusses Compulsory Dispute Settlement Provisions SEA/1407: 1.

²⁷⁷ David Balton, "Strengthening the Law of the Sea," 137.

Sweden that a group of experts from the Food and Agriculture Organization be called upon for assistance before there is a need for dispute settlement.²⁷⁸

In the 1995 Agreement Regarding Conservation and Management of Straddling Fish Stocks and Highly Migratory Stocks dispute settlement is covered in Part VIII, Articles 27-32. States have an obligation under this agreement to settle disputes through peaceful means. Disputes may be settled through, negotiation, inquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or the parties involved may decide upon their own mechanisms.²⁷⁹ Furthermore, in this new Agreement it is recognized that the dispute settlement provisions in the 1982 Law of the Sea Convention combine to apply also: Article 30 reaffirms the use of the dispute settlement provisions as outlined in Part XV Article 2.²⁸⁰ Through the reference to the Convention's dispute settlement mechanisms it was reaffirmed and accepted as a viable method to resolve disputes. The 1995 Agreement does not seek radical change to dispute settlement but tries to improve upon the process.

²⁷⁸ UNSEACOM, UN Conference on Straddling and Highly Migratory Fish Stocks Considers Dispute Settlement Provisions 24th meeting (PM) 15 March 1994 SEA/1412: 1.

²⁷⁹ United Nations, United Nations Agreement on Straddling Stocks and Highly Migratory Fish Stocks, Article 27.

²⁸⁰ *Ibid.*, Article 30.

4.3.6 Regional Organizations

The 1995 Agreement places emphasis on the use and establishment of regional or subregional organizations. Articles 8 to 11 specifically cover this aspect. Article 8 requests states to consult and cooperate in the conservation of straddling stocks and highly migratory species either directly through the establishment of regional organizations, or through the implementation of the Convention in existing organizations. According to Article 9, states are required to agree on certain management arrangements e.g., determining which stocks require conservation on the basis of scientific advice, taking into account , e.g., the nature of the fisheries, socio-economic and environmental factors. Article 10, lists various functions which the organization is to undertake. These include, e.g., reaching agreements on long-term sustainability on stocks, allocation of allowable catches, effective and timely decision-making, and effective monitoring and surveillance mechanisms. Cooperation for strengthening existing regional organizations is mandated under Article 11.²⁸¹

The thrust of these articles clearly demonstrates that most members of the international community have realized that regional organizations and sub-regional organization, composed of states which have a direct stake in the sustainability of this vital resource, are likely to be more effective avenues for conservation and management of the fisheries. The provision in Article 8(4) that only states which cooperate with a regional organizations "shall have access to the fishery to which those conservation measures

²⁸¹ United Nations, United Nations Agreement on Straddling Stocks and Highly Migratory Fish Stocks, Articles 8-11.

apply,"should provide substantial incentive for the establishment and/or revitalization of such organizations.

Nevertheless, not all states fully accept the principle of regional organization centrality as laid out in the Agreement. One opponent to management by regional organizations was the European Community (EC). The EC held that the issue of straddling and highly migratory species was a problem essentially between the coastal states and high-seas fishing states. According to the EC, the problem between these two state types was only a matter of cooperation; therefore, jurisdiction would not have to be given to regional organizations.²⁸² This view of the European Community is consistent with its opposition to compulsory dispute settlement. Perhaps the EC has failed to realize that regional organizations can assist in fostering cooperation and communication.

The 1995 Agreement built and expanded on the 1982 Convention. The changes it made led to an ecosystem approach for the management of fish stocks and clarified the roles and powers of international fishery organizations.²⁸³

4.4 Summary of Straddling Stocks and Highly Migratory Fish Stocks

The focus of this conference was fishery conservation and management. The FAO

²⁸² UNSEACOM, Speakers at Conference on Straddling Fish Stocks Say Crucial Areas in Draft Text, Particularly Enforcement, Yet To Be Resolved 77th meeting 10 April 1995 SEA/1479: 1.

²⁸³ Max Collett, "Achieving Effective International Fishery Management," 1.

stressed that new biological reference points had been proposed with a focus on defining acceptable fish mortality levels and minimum spawning levels.²⁸⁴ During the discussions, it was emphasized that limits were not target catch levels; rather, if catch levels neared the limit, reductions should be imposed.²⁸⁵ In this sense, target catch limits act as a guide for fishery management and the development of policy. Concerning reference points, Russia stated that the decision should be made for stock unity and that a single reference point should be used to determine the optimum management levels.²⁸⁶ The World Wide Fund for Nature stressed that the MSY should be a maximum limit reference point not a target.²⁸⁷ Brazil felt that MSY had led to the current over-exploitation. While discussing conservation, Sweden stressed that measures need to apply both to the high seas and the exclusive economic zones.²⁸⁸ Evidently, countries are concerned about fishery conservation but still have different views on how this goal could be attained.

The Agreement also provides detailed rules, lacking in the Law of the Sea Convention, for the implementation of the conservation measures including the establishment and functions of regional organizations, responsibility of flag states,

²⁸⁴ UNSEACOM, Reference Point for Fisheries Management Discussed at UN Conference on Straddling and Highly Migratory Stocks 31st meeting (AM) 21 March 1994 SEA/1413: 1.

²⁸⁵ *Ibid.*, 1.

²⁸⁶ *Ibid.*, 2.

²⁸⁷ *Ibid.*, 3.

²⁸⁸ *Ibid.*, 2.

compliance and enforcement measure, and enhanced dispute settlement procedures. Thus, the Agreement expands and builds on the 1982 Convention by clearly emphasizing an ecosystem approach for the management of fish stocks and clarifying the roles and powers of international fishery organizations.²⁸⁹

Although not yet in force, The Agreement on Straddling Stocks and Highly Migratory Stocks demonstrates that some states consider fishery conservation and management a priority.²⁹⁰ As of April 17, 1998 there were 59 signatory states, however only 18 had ratified the agreement. A large portion of states who have ratified the agreement are less developed nations. This is ironic since the less developed nations do not have the same capacity to take part in the global fishery.

²⁸⁹ Max Collett, "Achieving Effective International Fishery Management," 1.

²⁹⁰ States that have ratified the Straddling Stocks agreement include: Bahamas, Fiji, Iceland, Republic of Iran, Mauritius, Micronesia, Namibia, Nauru, Norway, Russian Federation, Saint Lucia, Samoa, Senegal, Seychelles, Solomon Islands, Sri Lanka, Tonga, and United States of America. "Status of the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks" As of April 17, 1998. Law of the Sea Homepage June 21, 1998, <http://www.un.org/Depts/los/los164st.htm>.

Chapter 5 Regional Organizations: The NAFO Example

5.1 Purpose of Regional Organizations

For centuries, freedom of the seas has been an accepted principle; however, with the development of regional organizations the traditional concept of freedom of the seas is being limited. Establishment of these organizations is encouraged by a number of international treaties. The 1982 United Nations Law of the Sea Convention stipulates that regional organizations manage areas adjacent to coastal states and Agenda 21 advocated regional organizations as a method for cooperation in the management and conservation of the living resources of the high seas. Most recently, the 1995 UN Agreement on Straddling Stocks and Highly Migratory Species emphasizes that regional organizations play a vital role in the management and conservation of the straddling and highly migratory species in their convention areas.

Since 1946, the Food and Agriculture Organization has encouraged the use of regional organizations, specifically in aiding developing countries in the Indo-Pacific, Indian, Caribbean and Mediterranean Oceans. Other regional commissions have formed outside the FAO framework in the Northern and Southeastern Pacific, the Baltic Sea and the Antarctic.²⁹¹

²⁹¹ James C.F. Wang, Handbook on Ocean Politics and Law (Wesport: Greenwood, 1992), 143.

Some organizations formed along the regional and species division including the International Whaling Commission (IWC).²⁹²

An example of a fairly successful regional organization is the Northwest Atlantic Fisheries Organization (NAFO). NAFO was formed as an effort to implement UNCLOS III and improve cooperation in fishery management.²⁹³

5.2 Northwest Atlantic Fisheries Organization

The Northwest Atlantic Fisheries Organization (NAFO) came into being with the signing of The Convention on Future Multilateral Cooperation in the Northwest Atlantic on October 24, 1978 and entered into force on January 1, 1979. The original members were Canada, Cuba, the European Economic Community, the German Democratic Republic, Iceland, Norway and the Union of the Soviet Socialist Republics.²⁹⁴ The predecessor to NAFO was the 1949 International Convention for the Northwest Atlantic Fisheries and the International Commission for the Northwest Atlantic Fisheries (ICNAF).²⁹⁵

²⁹² *Ibid.*, 143.

²⁹³ Max Collett, "Achieving Effective International Fishery Management," 7.

²⁹⁴ Northwest Atlantic Fisheries Organization, Northwest Atlantic Fisheries Organization Handbook (Dartmouth: Northwest Atlantic Fisheries Organization, 1996), 7.

²⁹⁵ *Ibid.*, 7.

ICNAF had been formed in 1949 with the objective of maintaining fisheries resources at a level which allowed for sustainable yield.²⁹⁶ When established, it was responsible for the investigation, protection and conservation of living resources. However, ICNAF was only authorized to recommend necessary measures based on scientific data.²⁹⁷ In 1976, ICNAF recommended that a new framework be developed for fishery management in the North Atlantic. This recommendation was a result of states intending to announce the extension of fisheries jurisdiction to the 200 mile limit commencing in 1977.²⁹⁸ ICNAF asked all members to withdraw from the current organization to allow a smooth and orderly transition to the new organization (NAFO) with an overlap period of one year.²⁹⁹

The aim of this new fisheries organization was to promote conservation and optimum utilization of marine resources in the Northwest Atlantic and it was empowered to adopt proposals for action by member parties in order to accomplish optimum utilization of

²⁹⁶ C.E. Lucas, International Fishery Bodies of the North Atlantic, Occasional Paper No. 5 (1970) The Law of the Sea Institute: University of Rhode Island), 18.

²⁹⁷ Northwest Atlantic Fisheries Organization, From ICNAF to NAFO, 5 July 1998, www.nafo.ca/icnaf.htm.

²⁹⁸ R.G. Halliday and A.T. Pinhorn, Journal of Northwest Atlantic Fishery Science 20 (1996): 18.

²⁹⁹ *Ibid.*, 18.

the regulatory area.³⁰⁰ NAFO developed as a consequence of the extension of coastal rights and jurisdiction.³⁰¹

When it was formed as a regional organization, NAFO was to play a managerial role in the areas beyond the 200-mile exclusive economic zone. It was also to act as a scientific consultative body for the management of fish stocks.³⁰² The mandate for NAFO can be summarized as collaboration: states are encouraged to share information and work together.³⁰³

One role NAFO plays is the setting of the total allowable catch (TAC) and the allocation of nations' quotas. In its early years, NAFO was successful in establishing conservative catch limits and maintaining traditional allocation of fish stocks.³⁰⁴ An underlying problem in NAFO, however, is that while total allowable catch is adopted by majority vote, any member state may object to the quota assigned and establish its own quota by invoking the objection procedure.³⁰⁵ This opt-out provision has undermined the effectiveness of NAFO, because parties are likely to opt-out when faced with domestic

³⁰⁰ Lawrence Juda, International Law and Ocean Use Management, 269.

³⁰¹ Max Collett, "Achieving Effective International Fishery Management," 7.

³⁰² L.S. Parsons, Management of Marine Fisheries in Canada (Ottawa: National Research Council of Canada, 1993), 263.

³⁰³ Max Collett, "Achieving Effective International Fishery Management," 7.

³⁰⁴ Lawrence Juda, International Law and Ocean Use Management, 269.

³⁰⁵ Max Collett, "Achieving Effective International Fishery Management," 9.

political pressure.³⁰⁶ Another difficulty with NAFO and other regional organizations is the limited number of members of such organizations as opposed to the states which exploit the resources of the area, making the organization less successful.³⁰⁷

NAFO has three distinct roles: cooperation, research and protection. These three roles are carried out by three sections within the organization.

The Fisheries Commission acts as the protector of the fish stocks. This Commission assists with the conservation, rational management, and optimum utilization of the fish resources. The goal of protecting fish stocks may be achieved through the development of new regulatory measures, inspections of vessels, observations and surveillance. It is hoped that these activities lead to effective management of living resources in the Atlantic Ocean.³⁰⁸

Another important and vital branch within NAFO is the Scientific Council. Its purpose is to coordinate scientific programs and provide the best scientific data available to make predictions and future forecasts.³⁰⁹

The General Council facilitates cooperation among states. This Council is composed

³⁰⁶ L.S. Parsons, Management of Marine Fisheries in Canada, 265 and Max Collett, "Achieving Effective International Fishery Management," 9.

³⁰⁷ David Vanderzwaag, "The Management of Straddling Stocks: Stilling the Troubled Waters of the Grand Banks," Canadian Ocean Law and Policy ed. David Vanderzwaag, (Toronto: Butterworths Canada Limited, 1992), 118.

³⁰⁸ Northwest Atlantic Fisheries Organization, Fisheries in the Northwest Atlantic 2nd Edition, (Dartmouth: Northwest Atlantic Fisheries Organization, 1996), 23.

³⁰⁹ *Ibid.*, 23.

of all contracting parties and has the role of coordinating inspections, scientific research, controlling parties and enforcement action against unregulated fishing of non-contracting parties. Finally, the Council acts as a liaison with the international community and promotes NAFO's objectives world wide.³¹⁰

With the initial formation of NAFO, successes were achieved in the establishment of conservative catch limits and the maintenance of traditional proportionate stock allocations for the member countries.³¹¹ In the early years of the organization, relations between Canada and the member states of the European Community were characterized by efforts to seek mutually beneficial arrangements.³¹² However, this initial success was short lived because non-member vessels conducted their fishing operations in the NAFO regulatory area. Spain did not join NAFO for some years but continued to fish in this area while avoiding NAFO's rules and quotas. Other fishing vessels flying flags from non-member countries, which previously had not participated in the Northwest Atlantic fishery, also appeared in the NAFO regulatory area.³¹³

NAFO, as an organization, has been fairly successful in the area of multilateral cooperation; however, there are several weakness with the NAFO organization. The major weakness, the objection procedure, has been previously noted. The inspection and

³¹⁰ Ibid., 23

³¹¹ Lawrence Juda, International Law and Ocean Management, 269.

³¹² L.S. Parsons, Management of Marine Fisheries in Canada, 271.

³¹³ Lawrence Juda, International Law and Ocean Management, 270.

surveillance systems are not strong enough, while enforcement is weak because of the lack of a provision for third-party enforcement. Compliance in this organization is completely voluntary, which weakens the enforcement procedure. The lack of unanimity on conservation measures has prevented the effective conservation and management of the living resources in the convention area.³¹⁴ NAFO has also experienced internal disputes and the inability to enforce regulations, problems that face many international fisheries organizations.³¹⁵ From 1985 onward the EC confronted both Canada's fisheries policies while attempting to sabotage NAFO's effectiveness in the multilateral management of stocks beyond the two-hundred mile limit.³¹⁶

The fundamental problem for international fisheries organizations is their reactive posture.³¹⁷ If fishery management were more proactive, there might be higher success rates and a sustainable marine resource.

New international agreements have placed an emphasis on regional organizations. The Northwest Atlantic Fisheries Organization must make changes to its organization and structure in order to successfully carry out its duties under in the 1995 United Nations Agreement on Straddling Stocks and Highly Migratory Species.

³¹⁴ Karl M. Sullivan, "Conflict in the Management of a Northwest Atlantic Transboundary Cod Stocks" Marine Policy 13 (1989): 132.

³¹⁵ Max Collett, "Achieving Effective International Fishery Management," 11.

³¹⁶ L.S. Parsons, Management of Marine Fisheries in Canada, 271.

³¹⁷ Max Collett, "Achieving Effective International Fishery Management," 12.

In recent years, NAFO members have emphasized the need to improve conservation and enforcement measures. Canada and the European Union (EU) developed a new control and enforcement agreement.³¹⁸ This new agreement requires that all EU vessels fishing in NAFO regulatory zones must have an observer aboard. The Canada-EU Control and Enforcement Agreement is a bilateral commitment for an effective system to enforce rules and apply strict penalties against violators.³¹⁹ The new enforcement control measures, include 100% observer coverage, 35% of vessels to have satellite tracking and 100% dockside inspections, apply both to Canada and the EU.³²⁰ Canada and the EU proposed that the provisions in their agreement be adopted by all NAFO parties as an integral part of the Organization.³²¹ In 1996, NAFO contracting parties agreed that they need to cooperate with NAFO Secretariat by fulfilling their obligations to report catch statistics, disposition of apparent infringements and various other requirements.³²²

³¹⁸ Government of Canada, Department of Fisheries and Oceans, "Canada-EU Enforcement Agreement Implementation" News Release NR-HQ-95-43E, May 2, 1995.

³¹⁹ Government of Canada, Department of Fisheries and Oceans, "Canada-EU Reach Agreement to Conserve and Protect Straddling Stocks" News Release NR-HQ-95-36E, April 15, 1995.

³²⁰ Government of Canada, "Canada-EU Enforcement Agreement Implementation" News Release NR-HQ-95-43E, May 2, 1995.

³²¹ *Ibid.*, 30.

³²² Northwest Atlantic Fisheries Organization, "What's New in NAFO Conservation and Enforcement Measures," NAFO News Dartmouth, Nova Scotia No. 6 July - December (1996): 3.

Members of NAFO are aware of some of the fundamental weaknesses in the organization. The objection procedure has been a concern for some members, with Canada lobbying for changes. Canadian delegates to NAFO do not necessarily want to abolish the opt-out provision but would like to eliminate the potential for abuse, by requiring that all objections are made on justifiable grounds.³²³

NAFO's attitudes and policies continue to evolve. At the 1996 Scientific Council and Fisheries Commission meetings, the precautionary approach to conservation and management of fish stocks was discussed. NAFO realized the importance of implementing regulations which would make it illegal to exceed a certain level of by-catch or to capture young fish.³²⁴ Also discussed at the 1996 meetings the issue of transparency in decision-making and other activities related to the 1995 United Nations Agreement on Straddling and Highly Migratory Fish Stocks.³²⁵

Although to date only four NAFO members (Iceland, Norway, Russia and the United States of America) have ratified the 1995 Agreement it appears that there is an ongoing and evolving process which will incorporate its principles and rules in the Organization's

³²³ Northwest Atlantic Fisheries Organization, "How Should NAFO Settle its Disputes Arising From Objection Procedures," NAFO News No.5 Jan-June 1997: 3.

³²⁴ Northwest Atlantic Fisheries Organization, Annual Report of the Northwest Atlantic Fisheries Organization-1996 (Dartmouth: NAFO, 1997), 8.

³²⁵ *Ibid.*, 21.

mandate.³²⁶ The time-frame for such adoption is likely to be a function of the efficacy of the Canada-EU Agreement and the working out of mutually satisfactory procedure for setting and allocating quotas, i.e., eliminating the present objection procedure.

NAFO has the potential to take a leading role in shaping the future of global fishery management. However, states need to set aside their self-interest and make sustainability of all fish stocks before they disappear.

³²⁶ Oceans Affairs and Law of the Sea Homepage, Status of the Agreement of the Provisions of the Convention Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks
<http://www.un.org/Depts/los/los164st.htm> February 22, 1998.

Chapter 6 Conclusion

Throughout history, states have vied for supremacy of the sea on a regional or global basis to satisfy their self-interest whether it was for commercial purposes, military supremacy or the exploitation of resources. In our era, the devastation of the fisheries resource (and ocean environment) has become a major concern because of our reliance on it for global sustenance and survival.

Going back to the Phoenicians more than 3500 years ago, the seas have been the life line for nations. They provided necessary food and commercial routes for trade. Rules applicable to the seas were developed in these ancient times with extensive codifications centuries later in the Rhodesian and Byzantine Laws. Exploration of the seas, especially by Europeans, continued in the hope of finding alternate trade routes to far away lands so that spices and other goods could be obtained more quickly and cheaply. Sea-faring nations also realized that they could expand their power and domain through the “discovery” and acquisition of new territory. And, naval history emphasizes the importance of the oceans for security and military purposes. For centuries, the magnitude of the ocean had not been realized. At one point in history, it was believed that once the ocean’s horizon ended the world ended; however, as exploration continued, the vastness of the world’s seas became evident. Even with the recognition of the vastness of the oceans, conflicts over ownership arose. Traditionally, nations adhered to the concept of the freedom of the seas, although Spain and Portugal, for example, unsuccessfully claimed ownership over large expanses of

the oceans in the 15th and 16th centuries. By the 18th century freedom of the high seas again became the norm; however, for purposes of security and exclusive fishing rights, the concept of the territorial sea developed whereby nations controlled the section of the ocean with the range of a canon shot, otherwise known as the three mile limit.

The general acceptance of sovereignty over the territorial sea did not eliminate conflict between states in that area but led to differences with respect to rights and responsibilities of free passage. Over time, rules for navigation developed which provided for specific rights and obligations when traversing a country's territorial seas. As shipping technology improved, e.g., motorized vessels including large ocean tankers, and an increased number of vessels were crossing territorial waters, further regulations evolved through the development of sea lanes for both domestic and international waters, as well as rules for compensation in instances of environmental damages. Protection of the environment continues to be an area of contention within the international community. A number of international organizations have been created, primary amongst which is the International Maritime Organization (IMO), to regulate marine activities including the prevention of pollution.

As various forms of technology have developed, states wanted to both protect their interests and exploit the resources adjacent to their land territory. Nations, again, began to expand areas of their jurisdiction, claiming a more extended territorial sea, contiguous zone, an exclusive economic zone, and the continental shelf. The desire to expand resulted largely from improved technology which proved to be a two-edged sword. On the one hand, for

example, technology enabled fishing vessels to be at sea for extended periods of time, catching and processing enormous quantities of fish; on the other hand, this also led to over-exploitation by both contiguously coastal as well as distant-water fleets. Similarly, while modern transports and tankers can move goods more cheaply, environmental damage, accidental or otherwise, can be substantially more devastating. Increasing domestic jurisdiction was also spurred by potential security threats because of improved weapons and technology. As the territorial sea is classified part of a country's territory, any actions within that area by a foreign nation could be seen as an act of aggression. Through the extension of these seaward zones, coastal states subsequently sought to maximize their gains (living and non-living resources, security, and environment) while at the same time minimizing their losses vis-a-vis foreign interests.

Development of law of the sea has been evolutionary, responding gradually to conflicting interests and issue areas of given periods in history. Traditionally, the long standing standard has been freedom of the seas even though, periodically, nations have claimed sovereignty over greater or lesser portions. At the same, time regulatory regimes which limit the indiscriminate and irresponsible use of the oceans and its resources, have been developing. In the context of the broader development of the law of the sea, so the norms with respect to fisheries and fisheries management have been evolving. Disputes with respect to "ownership," regulation, and conservation of fisheries are not unique to the present. As noted in the first chapter, for example, differences on these matters existed well before the 17th century in both the old and the new worlds. In essence, the issues were no

different than they are today -- who can catch what, where, and according to whose laws -- coastal states contiguous to specific stocks claim jurisdiction; distant fishing states argue freedom of the seas. Nevertheless, treaties resolving disputes and international conferences sponsored by both governments and private organizations have, over the last few centuries, set the stage for this century's development of ground rules and legal norms.

In the twentieth century several significant conferences have been held and agreements signed whose objective was and is to codify and advance the legal regime for the oceans generally, and, for purposes of this paper, the regimes for fisheries management and conservation more specifically. Each of the three United Nations Conferences on the Law of the Sea sought to codify existing norms and prod states to accept rules which could resolve emerging areas of potential disputes. The resultant 1982 United Nations Convention on the Law of the Sea, has become the blueprint for resolving jurisdictional and management issues of the oceans, including the extension of national jurisdiction over living and non-living resources in the ocean and on the continental shelf.

According to the Convention, and arguably under customary law, virtually all coastal states have claimed an Exclusive Economic Zone (EEZ) of up to 200 miles in which they have jurisdiction over resources. The creation of the EEZ led to changes in fisheries jurisdiction, and as a consequence also brought about greater concern regarding straddling stock and highly migratory species. With these stocks crossing legally defined boundaries, an increasing number of conflicts erupted with respect to who had the jurisdiction over them in international waters and who, in the light of declining and decimated stocks, had the

responsibility for conservation. Although the 1982 Convention specifies that states should cooperate to manage the stocks, it does not provide a sufficiently detailed procedure for doing so. States began to tackle this issue at the Rio Conference.

Since the 1970s, there has been a change in views and approach regarding the marine environment. The development of a more holistic ecological approach has led to questions about traditional ocean management and how to best protect the world's oceans environment. A heightened concern about marine issues due to the expansion of fisheries, inadequate management on the high seas, unregulated fishing, and over-harvesting became more evident in the 1980s. Concerns over environmental degradation, including the oceans and their management led to the United Nations Conference on the Environment and development (UNCED), otherwise known as the 1992 Earth Summit, which took place in Rio de Janeiro. At this meeting state leaders discussed and negotiated the development of a global plan for sustainable development called Agenda 21. This agreement dealt with a variety of environmental issues including the oceans. The Oceans Chapter (Chapter 17) dealt with a wide range of marine environment issues but emphasized the area of straddling stocks and highly migratory fish stocks and the use of local regional organizations to sustainably manage this vital global resource. The programme for action suggested recommended that another conference be convened to more specifically deal with straddling stocks and highly migratory species.

As an outgrowth of Rio and continued fisheries crises, the Conference on Straddling and Highly Migratory Stocks was convened in New York in 1993 to reach an agreement that

would bind both coastal states and distant-water fishing states to conserve and manage high seas fisheries and to adopt mechanism for peaceful conflict resolution. The desire was to develop a strong agreement that would ensure the sustainability of fish stocks and develop a pro-active ocean management regime. Government leaders and fishers attending realized that there existed systemic problems in ocean management which needed to be changed in order to preserve global fish stocks and species. Of vital importance was the realization that there existed a need for nations to cooperate to protect the vulnerable species. The emphasis on cooperation is interesting considering that the previous inability to cooperate led to collapse of high seas fisheries. The negotiated agreement binds parties to the agreement, both coastal and non-coastal, to sustainable management of the fishery and emphasizes the precautionary approach in the ocean management process. Also of fundamental importance is the emphasis on the use of regional or sub-regional organizations. Conference delegates agreed that ocean management on a regional basis would allow the various stakeholders to develop appropriate policies. This agreement, thus, clarifies relevant articles in the Convention on the Law of the Sea and develops a regime for conservation and management for straddling and migratory marine resources.

Cooperation has developed into a key concept in recent agreements. During the Conference on Straddling Stocks and Highly Migratory Fish Stocks cooperation, through the use of regional organizations was emphasized. A fairly successful model of regional organizations is that of the Northwest Atlantic Fisheries Organization (NAFO). Regional organizations have received a renewed and emphasized purpose in the field of ocean

management. In recent years these organization have increased their purpose and have become the cornerstone in ocean management.

The law of the sea has evolved gradually as a regulatory and conflict resolution mechanism. For centuries, change occurred very gradually, possibly because issues were not perceived as critical or were considered to be of only local concern. Given the tempo of contemporary technological innovation, the speed of global communications, and the evident decline of the ocean's resources, the development of legal regime for the sea appears to be plodding along. This conclusion is reached with the realization that a crisis situation can provide the stimulus for some kind of action such as negotiating a treaty. But, such documents also require ratification and effective implementation over an extended period of time to become embedded in a legal regime.

Perhaps, the crisis level recently seen in the global fishery has raised awareness of the catastrophes that can occur if states fail to cooperate in a timely manner. States appear to be learning to take a more cooperative, global approach in working towards the sustainability of both living and non-living resources. Whether this will become a reality must be left for future judgement.

While evolutionary development of the ocean regime may not have allowed individuals to appreciate the tremendous changes that have occurred in ocean management over the centuries, and while it is necessary for the international ocean management regime to continue to adapt to changes, one has to question whether recent adaptation has been sufficiently quick to avoid impending disaster, especially in the North Atlantic. The Law of

the Sea Convention, now in effect but not yet ratified by Canada, took more than three decade to come into force for a small number of states, the exhortations of the United Nations Conference on the Environment and Development appear to be diminishing, the Agreement on Straddling and Highly Migratory Stocks has achieved 59 signatories but only 15 ratifications, and the Northwest Atlantic Fisheries Organization appears to be moribund on the issue of the objection procedure. If the fisheries regime were able to adapt at a quicker pace, it might be possible to avoid or minimize further crises in the current fishery conservation and ocean management regime.

While the will to cooperate is one thing; finding workable mechanisms for cooperation is, as we have seen, a complex, difficult matter. For a ocean regime to be successful in the future, regional organizations will need to act coherently and cohesively to enforce regulations upon their members and other nations fishing in their regulatory area. This is a challenging goal, but failure will mean that there will be no fish for future generation to harvest. It is time that human-kind realize that it is necessary for all to live cooperatively in an interdependent global ecosystem.

For ocean management to be successful in the future it will be necessary for lawmakers and state leaders to become more pro-active in protecting and sustaining the oceans' resources.

Bibliography

- Alexander, Lewis M. "Regionalism and the Law of the Sea: The Case of Semi-Enclosed Seas." Ocean Development and International Law 1 (1974): 151-186.
- , "Offshore Claims of the World." 71-84 ed. Lewis M. Alexander The Law of the Sea: Offshore Boundaries and Zones Columbus: Ohio State University Press, 1967.
- Allott, Philip. "Power Sharing in the Law of the Sea." American Journal of International Law 73 (1983): 1-30.
- Anand, R.P. Origin and Development of the Law of the Sea. The Hague: Martinus Nijhoff Publishers, 1983.
- . "The Politics of a New Legal Order for Fisheries." Ocean Development and International Law 11 (1982): 265-295.
- Anderson, D. H. "LOS Convention: Status and Prospects." Marine Policy 18 (1994): 494-497.
- Balton, David A. "Strengthening the Law of the Sea: The New Agreement on Straddling Stocks and Highly Migratory Fish Stocks." Ocean Development and International Law 27 (1996): 125-151.
- Barcena, Alicia. "Marine Agenda of UNCED." Marine Policy 18 (1994): 99-103.
- . "Some Reflections on a New Approach to Ocean and Coastal Management." (21-55) The Marine Environment and Sustainable Development: Law, Policy, and Science. ed. Alastair Couper and Edgar Gold. Honolulu: Law of the Sea Institute, 1991.
- Barg U., and U.N. Wijkstrom. "Environmental Management Options for Coastal Fisheries and Aquaculture." Marine Policy 18 (1994): 127-137.
- Beesley, J. Alan. Grotius and the Pirates. Presented at the Memorial University of Newfoundland Colloquium on the Oceans on the Occasion of the Fiftieth Anniversary of the United Nations, St. John's, Newfoundland, 17 November 1995, unpublished.
- Black, Henry Campbell. Black's Law Dictionary. 4th edition St. Paul, Minnesota: West

- Publishing, 1968.
- Bodin, Jean. On Sovereignty. ed. Julian H. Franklin. Cambridge: Cambridge University Press, 1992.
- Borgese, Elizabeth Mann. "The Process of Creating an International Ocean Regime to Protect the Ocean's Resources." Freedom of the Seas in the Twenty First Century: Ocean Governance and Environmental Harmony. (23-87) ed. Jon Van Dyke, Durwood Zaelke and Grant Hewison. Washington: Island Press, 1993.
- Brown, E.D. The International Law of the Sea: Volume 1 Introductory Manual. Vermont: Dartmouth Publishing, 1994.
- Burke, William T. The New International Law of Fisheries. Oxford: Clarendon Press, 1994.
- Burke, William T. "Unregulated High Seas Fishing and Ocean Governance." Freedom of the Seas in the Twenty First Century: Ocean Governance and Environmental Harmony. (235-271) ed. Jon Van Dyke, Durwood Zaelke and Grant Hewison. Washington: Island Press, 1993.
- Burke, William T. "Anadromous Species and the New International Law of the Sea." Ocean Development and International Law 22 (1991): 95-131.
- Burke, William T. "Highly Migratory Species in the New Law if the Sea." Ocean Development and International Law. 14 (1984): 273-314.
- Cheema, G. Shabbir. "UNDP Statement." Marine Policy. 18 (1994): 104-106.
- Christy, Francis T. (Jr.) "The Distribution of the Seas Wealth in Fisheries." (106-121) ed. Lewis Alexander The New Law of the Sea: Offshore Boundaries and Zones Columbus: Ohio State University Press, 1967.
- Christy, Francis T. (Jr.) "Disparate Fisheries: Problems for the Law of the Sea Conference and Beyond." Ocean Development and International Law 1 (1974): 337-354.
- Churchill R.R. and A.V. Lowe. The Law of the Sea. Manchester: Manchester University Press, 1988.
- Cicin-Sain, Biliana. "Earth Summit Implementation: Progress Since Rio." Marine Policy 20 (1996): 123-143.
- Cicin-Sain, Biliana and Robert W. Knecht. "Implications of the Earth Summit for Ocean and

- Coastal Governance." Ocean Development and International Law 24 (1993): 323-353.
- Clingan, Thomas A. The Law of the Sea: Ocean law and Policy. Bethesda: Austin & Winfield Publishers, 1994.
- Colombos, C. John. International Law of the Sea. New York: David McKay Company Inc. 1967.
- Collett, Max. "Achieving Effective International Fishery Management: A Critical Analysis of the UN Conference on Straddling Fish Stocks." Dalhousie Journal of Legal Studies 4 (1995): 1-34.
- Copes, Parzival. "The Impact of UNCLOS III On Management of the World' Fisheries." Marine Policy 5 (1981): 217-228
- Deans, Arthur H. "The Geneva Conference on the Law of the Sea: What Was Accomplished." American Journal of International Law 52 (1958): 607-629.
- Dubner, Barry Hart. The Law of Territorial Waters of Mid Ocean Archipelagos and Archipelagic States. The Hague: Martinus Nijhoff, 1976.
- Dupuy, René-Jean and Daniel Vignes. A Handbook of the New Law of the Sea. Dordrecht: Martinus Nijhoff Publishers, 1991.
- Elder, Danny L. "International Union for Conservation of Nature and Natural Resources." ed. Alastair Couper and Edgar Gold The Marine Environment and Sustainable Development: Law Policy and Science. Honolulu: Law of the Sea Institute, 1991.
- Food and Agriculture Organization. FAO Fisheries Department Fact Sheet - June 1998. <http://www.fao.org/WAICENT/FAOINFO/FISHERY/fifacts/newfact/htm>, 2 August 1998.
- Food and Agriculture Organization. Agreement to Promote Compliance with International Conservation and Management Measures by Fishing on the High Seas. [33 LL.M. 968 (1994)].
- . World Review of High Seas and Highly Migratory Fish Species and Straddling Stocks. Fisheries Circular 858, Food and Agriculture Organization of the United Nations, Rome: 1993.

- Friedheim, Robert L. "Fishing Negotiations at the Third United Nations Conference on the Law of the Sea." Ocean Development and International Law 22 (1991):209-257.
- Friedheim, Robert L. Negotiating the New Ocean Regime. Columbia: University of South Carolina, 1993.
- Gamble, John King., and Maria Frankowska. "The Significance of the 1982 Montego Bay Convention on the Law of the Sea." Ocean Development and International Law 14 (1984): 121-160.
- Gotlieb, Allan. "National Jurisdiction and International Responsibility: New Canadian Approaches to International Law." 18-91 Canadian Council on International Law Proceedings of the First Annual Conference held at the University of Ottawa. Ottawa, Canada, October 3-14, 1972.
- Gough, Joseph and Trevor Kenchington. A Glossary of Fisheries Science. Halifax: Supply and Services Canada, 1995.
- Government of Canada, Department of Fisheries. "Tobin Says Net With Illegal Liner Recovered." News Release NR-HQ-95-45E, May 5, 1995.
- . "Spanish Captain Released on Bail." News Release NR-NF-95-22E, March 12, 1995.
- . "Canada Seizes Spanish Trawler." News Release NR-HQ-95-29E, March 9, 1995.
- . "Canada Extends Authority to Protect Straddling Stocks on the High Seas to Include Spanish and Portuguese Vessels." News Release NR-HQ-95-27E, March 3, 1995.
- . "European Union Over Fishing in the Northwest Atlantic." Backgrounder B-HQ-95-4E.
- . "Tobin Takes Further Action to Protect Turbot Stocks." News Release NR-HQ-72E, July 20, 1994.
- . Commons Debate May 11/94 - Government Orders.
- . "Canada Moves to Conserve Turbot Stocks." News Release NR-HQ-94-60E, June 29, 1994.
- . "Greenland Halibut (Turbot) in the Northwest Atlantic." Backgrounder B-HQ- 94-26E, September 1994.

- Halliday, R.G. and A.T. Pinhorn, Journal of Northwest Atlantic Fishery Science 20 (1996).
- . "The Delimitation of Fishery Areas in the Northwest Atlantic." Journal of Northwest Atlantic Fishery Science 10 (1990).
- Hargrove, John Lawrence. "New Concepts in the Law of the Sea." Ocean Development and International Law 1 (1973): 5-12.
- Herrington, William C. "The Convention on Fisheries and Conservation of Living Resources: Accomplishments of the 1958 Geneva Conference." (26-36) in The Law of the Sea: Offshore Boundaries and Zones by Lewis M. Alexander Columbus: Ohio State University Press, 1967.
- Hey, Ellen. "The Precautionary Approach: Implications of the Revision of the Oslo and Paris Conventions." Marine Policy 15 (1991): 244-254.
- Hinds, Lennox. "World Marine Fisheries: Management and Development Problems." Marine Policy 16 (1992): 394-403.
- International Conference in the Conservation and Management of the Living Resources on the High Seas, Proceedings St. John's, NF, September 5-7, 1990.
- International Institute for Sustainable Development. "A Daily Report in the Fifth Substantive Session of the Straddling Fish Stocks and Highly Migratory Stocks Conference." Earth Negotiations Bulletin Volume 7, Number 44, Monday 24 July 1995, <http://www.iisd.ca/linkages>.
- . "Summary of the First Substantive Session of the UN Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks." Earth Negotiations Bulletin Volume 7, Number 16, Monday 2 August 1993.
- Johnston, Douglas M. "Vulnerable Coastal and Marine Areas: A Framework for the Planning of Environmental Security Zones in the Ocean." Ocean Development and International Law 24 (1993): 63-79.
- Juda, Lawrence. "The 1995 UN Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks: A Critique." Ocean Development and International Law 28 (1997): 147-166.
- . International Law and Ocean Use Management. London: Routledge, 1996.

- . "UNCLOS III and the New International Economic Order." Ocean Development and International Law 3/4 (1979): 221-256.
- Juda, Lawrence and R.H. Burroughs. "The Prospects for Comprehensive Ocean Management." Marine Policy (14) 1990: 23-35.
- Juda, Lawrence., and R.H. Burroughs. "The Prospects for Comprehensive Coastal Management." Marine Policy 14 (1990): 23-35.
- Kearney, R.E. "The Law of the Sea: Regional Fisheries Policy." Ocean Development and International Law 5 (1978): 249-286.
- Kenchington, Trevor. A Glossary of Fisheries Science Halifax: Supply and Services, 1995.
- Kindred, Hugh M. et al. International Law: Chiefly As Interpreted and Applied in Canada. 4th edition, Canada: Emond Montgomery Publications Limited, 1987.
- King, John and Maria Frankowska. "The Significance of the Signature of the 1982 Convention on the Law of the Sea." Ocean Development and International Law 19 (1984): 121-160.
- Knight, Gary., and Hungdah Chiu. The International Law of the Sea: Cases, Documents and Readings. New York: Elsevier Applied Science, 1991.
- Krasner, Stephen. "Structural Causes and Regime Consequences: Regimes as Intervening Variables." International Regimes ed. Stephen Krasner, Ithaca: Cornell University Press, 1982.
- Kury, Channing P. "The Application of a Market Theory to the Regulation of International Fisheries." Ocean Development and International Law 1 (1974): 355-368.
- Kwiatkowska, Barbara. The International Exclusive Economic Zone in the New Law of the Sea. Dordrecht: Martinus Nijhoff Publishers, 1989.
- Larson, David. "Conventional, Customary, and Consensual Law in the United Nations Convention on the Law of the Sea." Ocean Development and International Law 25 (1994): 75-85 .
- LeGresley, Eric. The Law of the Sea Convention. B.P. 322E Ottawa: Library of Parliament and Supply and Services, 1993.

- Lucas, C.E. International Fishery Bodies of the North Atlantic. Rhode Island: Occasional Paper Series, Law of the Sea Institute, 1970.
- Macdonald, John M. "Approaching the Precautionary Principle As An Ethical Evolution in Ocean Management." Ocean Development and International Law 26 (1995): 255-286.
- McDorman, Ted L., "Canada's Aggressive Fisheries Actions: Will They Improve the Climate for International Agreements." Canadian Foreign Policy 2 (1994): 5-28.
- McFee, William. The Law of the Sea. New York: L.B. Lippincott Company, 1950.
- Meltzer, Evelyne. "Global Overview of Straddling and Highly Migratory Fish Stocks: The Nonsustainable Nature of High Seas Fisheries." Ocean Development and International Law 25 (1994): 255-344.
- Miles, Edward and William Burke. "Pressures on the United Nations Convention on the Law of the Sea of 1982 Arising from New Fisheries Conflicts: The Problem of Straddling Stocks." Ocean Development and International Law 20 (1989): 343-357.
- Miles, Edward L. "Changes in the Law of the Sea: Impact on International Fisheries Organizations." Ocean Development and International Law 4 (1977): 409-444.
- Mohan, Saroj. "Fisheries Jurisdiction." Law of the Sea: Caracas and Beyond ed. R.P. Anand, New Delhi: Radiant Publishers, 1980: 223-252.
- Nandan, Satya N., "The 1982 UN Convention on the Law of the Sea at a Crossroad." Ocean Development and International Law 20 (1989): 515-518.
- Neblett, William. "Then 1958 Conference on the Law of the Sea: What Was Accomplished." (36-46) in The Law of the Sea: Offshore Boundaries and Zones by Lewis M. Alexander Columbus: Ohio State University Press, 1967.
- Northwest Atlantic Fisheries Organization., Annual Report of the Northwest Atlantic Fisheries Organization - 1996. Dartmouth: NAFO, 1997.
- . From ICNAF to NAFO. www.nafo.ca/icnaf.htm, 5 July 1998.
- . Northwest Atlantic Fisheries Organization: Handbook-1996. Dartmouth: Headquarters of NAFO, 1996.

- . Fisheries in the Northwest Atlantic Organization. Second Edition. Dartmouth: Northwest Atlantic Fisheries Organization, 1996.
- . "What's New in NAFO Conservation and Enforcement Measures." NAFO News July-December 1996, Number 6.
- . "How Should NAFO Settle Its Disputes Arising From Objection Procedures." NAFO News Jan-June 1996, Number 5.
- Nye, J.S. "Ocean Rule Making from a World Politics Perspective." Ocean Development and International Law 3 (1976): 29-52.
- Oceans and Law of the Sea Homepage. Status of the Agreement for the Implementation of the Provisions of the Convention Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. <http://www.un.org/Depts/los/los164st.htm>, February 22, 1998.
- . Status of the United Nations Convention on the Law of the Sea. <http://www.un.org/Depts/los/los94st.htm>, March 19, 1997 .
- O'Connell, D. P., and ed. I.A. Shearer. The International Law of the Sea. Volume 1 New York: Clarendon Press, 1982.
- Oda, Shigeru. "Fisheries Under the United Nations Convention on the Law of the Sea." American Journal of International Law 77 (1983) 739-755.
- . International Law of the Resources of the Sea. Germantown: Sitjhoof & Noordhoff, 1979.
- Otb-Zimmerman, Konrad. "Local Implementation of Agenda 21." Marine Policy 18 (1994): 112-115.
- Oxman, Bernard. "The Third United Nations Conference on the Law of the Sea: The Seventh Session (1978)." American Journal of International Law 73 (1979): 1-41.
- Oxman, Bernard. "The Third United Nations Conference on the Law of the Sea: The Tenth Session (1981)." American Journal of International Law 76 (1982): 1-23.
- Queirolo, Lewis E. and Richard S. Johnston. "Distant Water Fishing Nations and Extended Fisheries Jurisdiction." Marine Policy 13/14 (1989): 16-21

- Parsons, L.S. Management of Marine Fisheries in Canada. Ottawa: National Research Council of Canada, 1993.
- Pearse, Peter H. "From Open Access to Private Property: Recent Innovations in Fishing Rights as Instruments of Fisheries Policy." Ocean Development and International Law 23 (1992): 71-83.
- , "Fishing Rights, Regulations and Revenues." Marine Policy 5 (1982): 135-146.
- Pearse, Peter H. and Carl J. Waller. "Harvesting Regulation Under Quota Management Systems for Ocean Fisheries: Decisionmaking in the Face of Natural Variability, Weak Information, Risks and Conflicting Incentives." Marine Policy 16 (1992): 167-183.
- Pontecorvo, Giulio., and Maurice Wilkinson. "From Cornucopia to Scarcity: The Current Status of Ocean Resource Use." Ocean Development and International Law. 5 (1978): 283-395.
- Pontecorvo, Giulio. "Opportunity, Abundance, Scarcity: An Overview." The New Order of the Oceans The Advent of a Managed Environment ed. Giulio Pontecorvo 1-14 New York: Columbia University Press, 1986.
- Potier, Michael. "Cost Effectiveness in Coastal Zone Management." Marine Policy 18 (1994) 121-126.
- Prescott, J.R.V. The Political Geography of the Oceans. North Vancouver: Douglas, David & Charles Limited, 1975.
- Sanger, Clyde. Ordering the Oceans: The Making of the Law of the Sea. Toronto: University of Toronto Press, 1987.
- Schachte, William L. "The Value of the 1982 UN Convention on the Law of the Sea: Preserving Our Freedoms and Protecting the Environment." Ocean Development and International Law. 23 (1992): 55-69.
- Shaw, M.N. International Law. 3rd edition Cambridge: Grotius Publications Limited, 1991.
- Simmonds, Kenneth R. U.N. Convention on the Law of the Sea - 1982. New York: Oceana Publications, 1983.

Smith, Courtland L. "Fishing Success in Regulated Commons." Ocean Development and International Law 1 (1974): 369-381.

Stevenson, John and Bernard Oxman. "The Future of the United Nations Convention on the Law of the Sea." American Journal of International Law 88 (1994): 488-499.

----. "The United Nations Conference on the Law of the Sea: The 1974 Caracas Session." American Journal of International Law 69 (1975): 1-30.

----. "The Third United Nations Conference on the Law of the Sea: The 1975 Geneva Session." American Journal of International Law 69 (1975): 763-797.

Sullivan, Michael Sean. "The Case in International Law for Canada's Extension of Fisheries Beyond 200 Miles." Ocean Development and International Law 28 (1997): 203-260.

Sullivan, Karl M. "Conflict in the Management of Northwest Atlantic Transboundary Cod Stocks." Marine Policy 13 (1989):

Towfighi, Parviz S. "Integrated Planning and Management of Coastal Areas." Marine Policy 18 (1994): 107-111.

United Nations. "Status of the Agreement for the Implementation of the Provisions of UNCLOS of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks as of 17 April 1998." Oceans and Law of the Sea Homepage <http://www.un.org/Depts/los/los164st.htm> 2 June 1998.

----. United Nations Conference for Straddling Fish Stocks and Highly Migratory Fish Stocks: Agreement for the Implementation of the Provisions of the United Nations Convention of the Law of the Sea of 10 December 1982, Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. (A/Conf.164/37) 34 I.L.M. 1542 (1995).

----. Background Release, Third Part of First Session of the International Seabed Authority, Kingston 7-18 August. SEA/1491, 1 August 1995.

----. United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks Concludes Fifth Session. SEA/1482, 12 April 1995.

----. Background Release, United Nations Conference on Straddling Stocks and Highly Migratory Stocks To Be Held at Headquarters; 15-26 August. SEA/1432, 11 August 1994.

- . Second Substantive Session of UN Conference on Straddling and Highly Migratory Fish Stocks, New York, 14-31 March. SEA/1424, 31 March 1994.
 - . United Nations Conference on Straddling and Highly Migratory Fish Stocks Concludes a Discussion on Compatibility of Conservation Measures. SEA/1416, 22 March 1994.
 - . Provision on Non-Parties to Regional Organizations Dispute Settlements Discusses at Straddling and Highly Migratory Fish Stocks Meeting. SEA/1411, 18 March 1994.
 - . United Nations Conference on Straddling And Highly Migratory Fish Stocks Discusses Compliance and Enforcement of High Seas Fisheries Management Measures. SEA/1409, 17 March 1994.
 - . United Nations Conference on Straddling and Highly Migratory Fish Stocks Discusses Duties of Flag States, Compliance With Regional Conservation Measures. SEA/1408, 16 March 1994.
 - . "Law of the Sea Convention: Ten Years Later." UN Chronicle 15 (1) 1993: 87.
 - . Earth Summit Agenda 21: The United Nations Program for Action From Rio. New York: United Nations, 1993.
 - . A Quiet Revolution: The United Nations Convention on the Law of the Sea. New York: Department of Public Information of the United Nations, 1984.
 - . United Nations. Yearbook of the United Nations - 1982. New York: Columbia University Press, 1983.
 - . United Nations Convention on the Law of the Sea. A/Conf.62/122, 7 October 1982.
 - . United Nations. Yearbook of the United Nations-1960. New York: Columbia University Press, 1961.
- VanderZwaag, David. "The Management of Straddling Stocks: Stilling the Troubled Waters of the Grand Banks." Canadian Ocean Law and Policy. ed. David VanderZwaag, Toronto: Butterworths Canada Limited (1992): 115-139.

- Vascianne, S. Land-locked and Geographically Disadvantaged States in the International Law of the Sea. Oxford: Oxford University Press, 1990.
- Vicuna, Francisco Orrego. "Toward an Effective Management of High Seas Fisheries and the Settlement of the Pending Issue of the Law of the Sea." Ocean Development and International Law 24 (1993): 81-92.
- Von Glahn, Gerald. Law Among Nations 6th edition. Toronto: Maxwell MacMillan Canada, 1992.
- . Law Among Nations 5th edition. New York: Collier MacMillan, 1986.
- Walsh, Don. (ed.) The Law of the Sea: Issues in Ocean Resource Management. New York: Praeger Publishers, 1977.
- Wang, James C. Handbook on Ocean Politics and Law. Westport: Greenwood Press, 1992.
- Weld, Christopher M. "Critical Evaluation of Existing Mechanisms for Managing Highly Migratory Pelagic Species on the Atlantic Ocean." Ocean Development and International Law 20 (1989): 285-295.
- Zacher, Mark W., and James G. McConnell. "Down to the Sea with the Stakes: The Evolving Law of the Sea and the Future of the Deep Seabed Regime." Ocean Development and International Law 21 (1990): 71-10



