

INTERNATIONAL LAW AND THE PROTECTION OF THE MARINE ENVIRONMENT

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Summary

The development of the modern law of the sea and the growing concern for the condition of the oceans have given rise to a number of legal regimes addressing problems of the marine environment including pollution, loss of biodiversity, protection of endangered species, and marine mammals. The international law of the sea provides a foundation for continuing progress. The future of marine conservation, however, depends upon the ability and willingness of states to cooperate in these common objectives and the capacity of individual states to prescribe and enforce their own marine conservation laws.

1. Introduction

One of the most remarkable developments in the field of international law in the latter half of the twentieth century was the increasing concern for the status of the marine environment. Outmoded ideas that the oceans were somehow bottomless dumping grounds with limitless assimilative capacity and a ceaseless ability to surrender their resources have been replaced with a new, and more scientifically oriented, awareness of the oceans' environmental and ecological health.

The oceans are indeed focal points of this recent and growing environmental consciousness. The environmental degradation of the oceans is by definition a global problem. Overfishing, vessel and land-based pollution, unsustainable and environmentally unfriendly exploitation of mineral resources, as well as the destruction of marine biodiversity are the concerns of all humanity (*see Law Regarding Protection of the Environment During Wartime*). The issues raised by marine mammal conservation are unique in the discourse. In future years, the impact of climate change on the marine environment promises to present even further challenges.

The various problems of marine conservation are potentially devastating to human beings. The significance of the oceans to industry, nutrition, and the sciences cannot be overstated. The oceans contribute to our food, medicines, energy, transportation, commerce, defense, and even recreation. Both the shallow coastlines and the murky depths support an intricate and interconnected web of life that is only beginning to yield its secrets. While the importance of the oceans is manifest, so, too, must the international legal order be prepared to address the inevitable conflicts and problems that arise from competing maritime interests? Indeed, the modern law of the sea and international environmental law have given rise to a proliferation of legal instruments that will help countries utilize the oceans in a responsible way.

2. Major Developments in the International Law of Marine Environmental Conservation

Like all domains of international law, international environmental law is comprised of treaties and customary law. Both of these sources of law provide supporting, yet distinct, legal obligations to be applied by states. In practice, however, the treaty has proven to be the dominant and more viable source in this area of law. Several major conferences and historical events have given life to the modern field of international environmental law in general and marine environmental conservation in particular. This

section discusses some of these events and provides a context for the development of the evolution of modern international marine conservation.

2.1. The 1972 Stockholm Conference on the Human Environment

If one could trace the awakening of an environmental awareness in international law to a single event, it would likely be the United Nations Conference on the Human Environment held in Stockholm in 1972 (the Stockholm Conference). While there were in fact environmental crises that required legal attention before the Stockholm Conference, such as the *Torrey Canyon* oil spill in 1967, such occurrences were typically dealt with on an *ad hoc* basis. No comprehensive body of international law existed to address them although several treaties addressing marine conservation predated Stockholm (some of which are discussed later in this article). The Stockholm Conference was convened by the United Nations (U.N.) following growing concerns by the United States and other industrialized countries for such factors as pollution, population growth, and the exhaustion of natural resources.

Representing both developed and less developed countries, 114 states attended the Stockholm Conference. One of the most palpable difficulties of Stockholm was balancing the views of less developed countries with wealthier industrial states. Less developed countries maintained that exploitation of natural resources was a path to economic growth, while developed states tended to view the diminution of resources as a degradation of the planet. This friction between developed and developing states remains a substantial factor in the debate over environmental conservation (*see Section 4.4.2. The Convention on Biological Diversity*).

The most significant achievements of the Stockholm Conference were the establishment of the United Nations Environment Programme (UNEP) and a statement of general principles called simply the “Stockholm Declaration.” The UNEP is a subsidiary organ of the U.N. and monitors environmental conditions, implements projects, develops recommended standards, and facilitates the efforts of various national and international environmental initiatives.

The Stockholm Declaration sets forth several broad, yet key, principles that have become cornerstones of international environmental law and are particularly relevant to marine conservation. First, Principle 1 recognizes the “solemn responsibility to protect and improve the environment for present and future generations.” Principle 4 recognizes a special responsibility to safeguard and manage wildlife and its habitat. Principle 5 warns against the exhaustion of natural resources. Furthermore, Principle 7 calls for states to “take all possible steps to prevent pollution of the seas by substances that are liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea.”

The Stockholm Declaration is most often cited for Principles 21 and 22. Principle 21 addresses “the sovereign right of states to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other [s]tates or of areas beyond the limits of national jurisdiction.” Principle 22 recognizes the obligation

of states to cooperate to develop international law concerning liability and compensation for victims of pollution and other environmental damage.

The Stockholm Conference was a significant starting point, but for all its lofty objectives without further substantive action it remained little more than a wish list. Consequently, Stockholm set in motion more specific attempts to address conservation issues on different levels. Although one might consider some of the more familiar Stockholm Principles as customary law, additional treaties would go on to refine and develop those objectives. One can discern from the Stockholm Declaration, as well as other instruments of law and policy, that the law with regard to marine conservation is basically comprised of two broad, intimately connected, categories: pollution and wildlife conservation. Shortly after the Stockholm Conference, negotiations began on another major document in international law that would give greater legal effect to both of these substantial concerns.

2.2. The 1982 United Nations Convention on the Law of the Sea

The law of the sea has been a centerpiece of international law for centuries. While it has long been concerned with the breadth of countries' territorial seas and the matter of maritime boundaries, a consideration for the ecological component of the oceans is a modern phenomenon. Although the inherent friction between coastal states and maritime states is as old as international law itself, no major convention concerning the law of the sea existed until most recently (*see International Trade Agreements*).

Until the mid-twentieth century the law of the sea was largely governed by custom. An international conference held in 1958, the United Nations Conference on the Law of the Sea, referred to as UNCLOS I, codified much of the existing custom into four conventions: the Convention on the Territorial Sea and the Contiguous Zone, the Convention on the High Seas, the Convention on Fishing and Conservation of the Living Resources of the High Seas, and the Convention on the Continental Shelf. Despite the acceptance of these conventions by quite a few states, UNCLOS I was largely regarded as a failure in that it did not reach agreement on the width of the territorial sea.

Two years later, in 1960, another conference, UNCLOS II, was convened but likewise failed to reach consensus on the breadth of the territorial sea. Due to the failure of these early conferences to resolve such key maritime issues, and their inability to address new challenges presented by developments in technology, a more comprehensive convention governing all maritime interests became necessary.

In 1973 negotiations convened for UNCLOS III. More than 150 countries and several specialized agencies took part in negotiations that lasted nine years. The product was the 1982 United Nations Convention on the Law of the Sea (UNCLOS). UNCLOS is sometimes referred to as a "constitution of the oceans" because it is so comprehensive in scope; virtually all uses of the oceans are addressed in the treaty. Numerous provisions address the conservation of the marine environment and the protection of marine wildlife. Part XII of UNCLOS is entitled "Protection and Preservation of the Marine Environment" and includes both general and specific obligations of state parties to prevent, reduce, and control pollution.

The particular contribution of UNCLOS is that it not only fixed the breadth of the territorial sea at a maximum of 12 nautical miles but it also designated other segments of the ocean where the interests of coastal states are balanced with the needs of maritime states. Each of these zones carries with it different rights and responsibilities concerning marine conservation. Beyond and adjacent to the territorial sea out to a distance of 200 nautical miles is a segment of the ocean referred to as the Exclusive Economic Zone (EEZ). Seaward of the EEZ, the ocean is designated as the “high seas.” As these maritime zones progress seaward, from the territorial sea to the high seas, the rights of the coastal state decrease while the rights of other maritime users increase.

2.2.1. The Territorial Sea

The territorial sea is an extension of the sovereignty of a state into the section of the ocean adjacent to its coastline (*see International Law and Sovereignty in the Age of Globalization*). Historically, the territorial sea was defined as the segment of the ocean that the coastal state could adequately defend from its shore. This was referred to as the “canon-shot rule.” In the eighteenth century the breadth of territorial waters was generally accepted by most states to be three miles. The 12 nautical mile maximum agreed to at the conference that produced UNCLOS represented a compromise of various maritime interests. The principle area of disagreement, however, reflected geo-strategic concerns of the Cold War.

In the territorial sea, the coastal state enjoys its greatest rights apart from its own internal waters (e.g. rivers and lakes). The coastal state has sovereign rights to exploit resources in, and pass prescriptive laws governing, its territorial sea. The only right enjoyed by maritime states in the territorial sea of another state is the right of “innocent passage” as defined in UNCLOS. The right of a coastal state to legislate environmental protection, and then enforce those laws, is strongest in the territorial sea.

2.2.2. The Exclusive Economic Zone

The EEZ is a particular innovation of UNCLOS and is especially important to marine conservation. Under Article 56, the coastal state has “sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil . . .” in the EEZ. The coastal state enjoys jurisdiction with regard to the protection and preservation of the marine environment.

With regard to the conservation of living resources, the coastal state is required by Article 61 to “determine the allowable catch of the living resources” in its EEZ. Article 61 further mandates the coastal state, taking into account the best scientific evidence available, to “ensure through proper conservation and management measures that the maintenance of the living resources in the [EEZ] is not endangered by over-exploitation.” At the same time, Article 61 provides that conservation measures “shall also be designed to maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield . . .” The importance of Articles 56 and 61 to marine conservation cannot be overemphasized. They permit coastal states to apply their own conservation laws to huge segments of the oceans.

Alongside the obligations of Article 61 concerning the conservation of living resources are the obligations of Article 62 to “promote the objective of optimum utilization of the living resources of the [EEZ] without prejudice to article 61.” The balancing of these objectives is one of the key challenges of the UNCLOS regime. While in theory the conservation and optimum utilization of resources may be reconcilable, in practice this has proved quite difficult. The application and interpretation of the concepts of “optimum utilization” and “maximum sustainable yield” are at the crux of modern conservation disputes. As UNCLOS is a treaty representing the balancing of interests, the arguments for both exploitation and conservation can find support in these provisions. Several disputes over fisheries and marine mammal conservation are directly traceable to disagreements about these objectives.

In the EEZ, maritime states may exercise those rights not specifically reserved to the coastal state. For example, they may exercise freedom of navigation and overflight and the laying of submarine cables and pipelines. Pursuant to the rights provided for in Articles 56 and 61, maritime states may not exploit resources in the EEZ of another state unless authorized to do so by the coastal state. Polluters are subject to the environmental protection laws of the coastal state. UNCLOS recognizes the jurisdiction of the coastal state to both prescribe and enforce its laws governing the exploration, exploitation, conservation, and management of the living resources of the EEZ.

2.2.3. The High Seas

In the high seas, unlike the EEZ, no state may pass laws concerning marine conservation. The high seas is sometimes referred to as “the global commons”: all states are equal and enjoy the same freedoms. Some of the high seas freedoms enumerated in UNCLOS are freedom of navigation, freedom of fishing (subject to conditions), freedom to lay submarine cables and pipelines, and freedom of scientific research. All freedoms must be exercised with “due regard” for other lawful maritime activities on the high seas.

The freedom of fishing is most important to a discussion of marine conservation. After all, if, unlike the EEZ, no state has jurisdiction to pass laws concerning sustainable yield and optimum utilization in the high seas, how should catch limits be determined? UNCLOS provides some guidance on this question. Article 116 declares the freedom of fishing to be subject to states’ other treaty obligations. Therefore, if a state is a member of one or more regional fishery treaties as well of UNCLOS, then its high seas fishing must be exercised in accordance with those other obligations. Such regional organizations (see *Section 4.1.2. Regional Fishery Arrangements*) are generally encouraged by UNCLOS. Additionally, under Article 118 states have a duty to cooperate in the conservation and management of resources on the high seas.

Furthermore, Article 119 requires states to determine “maximum sustainable yield” using the best scientific evidence available for their high seas fishing, as it likewise does for a coastal state’s EEZ. Similarly, states must consider the effects on species associated with or dependent upon harvested species with a view to maintaining them as well as harvested species. States must cooperate in the management of “straddling stocks” (Article 63) and “highly migratory species” (Article 64). Straddling stocks are

species that occur within the EEZ of two or more coastal states or an EEZ and an area beyond and adjacent to it (typically the high seas). Highly migratory species are those species that during their life cycle have a migratory route beyond the boundaries of a single state, but typically within a particular region (see **Section 4.4.3. The Convention on Migratory Species**). Annex I of UNCLOS enumerates 17 such highly migratory species.

The problems of straddling stocks and highly migratory species are an inherent flaw of UNCLOS. A clear example of this occurred in 1995 when Canada arrested the Spanish fishing vessel *Estai* slightly seaward of Canada's EEZ. The *Estai* was fishing on the high seas for turbot stocks that straddled Canadian waters. In Canadian waters they received substantial management but in the high seas they obviously did not. Spain's resulting protests and initiation of legal proceedings against Canada in the International Court of Justice underscored the delicate issue presented by straddling stocks in law and policy. Straddling stocks are even more likely to occur where the area of the high seas is completely surrounded by the EEZ of more than one state as in the case of the Bering Sea's "Donut Hole."

The problem of straddling and migratory fish stocks is so vexing that a separate treaty was negotiated. The treaty is 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." The "Straddling Stocks treaty" entered into force on December 11, 2001 and promises to address these issues with more specificity than UNCLOS.

The nature of the high seas as a global commons presents particular problems of environmental conservation. While UNCLOS confers upon coastal states prescriptive and enforcement rights in the EEZ, the authority to punish environmentally irresponsible conduct on the high seas falls to the flag-state of each vessel. As the flag-state, or state of nationality, has always had primary authority to regulate the activities on board its vessels, the issue of "flags of convenience" remains a key problem. Flags of convenience, or vessels registered with states that do not prescribe or enforce rigorous fishing practices, sanitation, and pollution control standards, are very much a weakness of the high seas regime.

2.2.4. Protection and Preservation of the Marine Environment

The maritime zones designated by UNCLOS are important in a discussion of marine conservation in that they put a burden of marine conservation on the coastal state. Realistically, the coastal state is in the best position to apply and enforce those laws. But since the power of the coastal state ends where the high seas begins, the convention contains provisions applicable to all states setting forth requirements to protect the environment and reduce pollution. Part XIII requires states to enact and, wherever possible, to enforce their own marine conservation laws.

Part XIII declares the general obligation of all states to protect and preserve the marine environment. Article 193 is similar to Principle 21 of the Stockholm Declaration (see **Section 2.1. The 1972 Stockholm Conference on the Human Environment**),

recognizing the sovereign right of states “to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment.” Article 194 requires states, individually and jointly, “to take all measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source, using . . . the best practicable means at their disposal and in accordance with their capabilities.”

Article 194(3) enumerates four specific sources of pollution: “the release of toxic, harmful and noxious substances . . . pollution from vessels . . . pollution from installations and devices used in exploration or exploitation of the natural resources of the seabed and subsoil . . . pollution from other installations and devices operating in the marine environment . . .” Finally, Article 194(5) mandates measures necessary “to protect and preserve rare and fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life.”

Among the most profound contributions of UNCLOS are its provisions for the conservation of cetaceans and other marine mammals. There is hardly a more visible issue in marine conservation than the status of whales and dolphins. The particular case of cetaceans is discussed in *Section 4.5. The Special Problem of Cetaceans*, but the UNCLOS provisions addressing them are worthy of review. Article 65 permits a coastal state in its EEZ, or a competent international organization “to prohibit, limit or regulate the exploitation of marine mammals more strictly than provided for” in the part of the convention governing the EEZ. Furthermore, Article 120 extends Article 65 to the conservation and management of marine mammals in the high seas. These provisions are but one substantial step in the evolution of marine mammal conservation. The UNCLOS designation of cetaceans as a special resource deserving of more substantial protection than other marine species is a notable factor in their conservation.

UNCLOS is without qualification the single most important and far-reaching legal instrument to address issues of marine conservation. The comprehensive nature of UNCLOS provides a framework to address future issues in the law of the sea and its provisions can foster additional progress in their conservation.

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Biographical Sketch

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