

International Protection of Marine Mammals

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I. INTRODUCTION

Many species of ocean mammals, including certain species of whales, seals, sea otters, sea lions and polar bears, are either nearly extinct or seriously depleted.¹ One reason marine mammals are vulnerable to the activities of humans is that they often inhabit the coastal zone and breed on land.² For example, ocean pollution often causes rapid deterioration of their habitat.³ An additional factor contributing to the endangerment of marine mammals is the dearth of available scientific information concerning most species. Because their breeding habits,⁴ critical populations,⁵ and relation-

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1. Two species of marine mammals have already been rendered extinct in the past century by man's activities—Stellar's Sea Cow and the sea mink. Herrington & Regenstein, *The Plight of Ocean Mammals*, 1 ENV'TL AFF. 792 (1972) [hereinafter cited as Herrington]. Furthermore, the largest creature to inhabit the earth at any time, the magnificent blue whale, may be depleted beyond the point of recovery. Hill, *Goodbye to the Great Whales*, READERS' DIG., Aug. 1975, at 74-80. Jacques Cousteau, in his award winning television series, "The Undersea World of Jacques Cousteau," has repeatedly warned that he sees almost daily evidence of the disappearance of ocean life.

2. THE WATER'S EDGE: CRITICAL PROBLEMS OF THE COASTAL ZONE 54 (B. Ketchum ed. 1972).

3. Heyerdahl, *Polluting the Ocean: Can Man Survive a Dead Sea?*, 79 CURRENT 49 (1976). According to this article, marine life is concentrated in about four percent of the ocean's total body, and this small segment of the ocean is that which is most susceptible to man-made pollution. *Id.* at 52. See Cousteau, *Butchery at Sea*, SATURDAY REV., July 10, 1976, at 43-44.

4. See generally N. MACKINTOSH, THE STOCKS OF WHALES (1965).

5. The term "critical population" or "critical minimum population" refers to that level below which the species cannot naturally survive in the wild. Scarff, *The International Management of Whales, Dolphins, and Porpoises: An Interdisciplinary Approach*, 6 ECOLOGY L.Q. 326, 389-90 (1970) [hereinafter cited as Scarff].

ship with the rest of the ocean ecosystem⁶ are mysteries, it is difficult to assess and correct the ramifications of negligent human behavior toward these animals.⁷

A responsible approach to the treatment of marine mammals necessitates international cooperation and strong protective measures. Unilateral action, especially concerning species that are taken commercially, is ineffective for two reasons. First, a decrease in one nation's take will be offset by another nation's increase. Second, many marine mammals are highly migratory, occupying both the high seas and the coastal zones of one or more nations.⁸ Joint conservation efforts are therefore essential.

The purpose of this article is to convey the urgent need for effective protection of marine mammals, to evaluate international efforts devised to accomplish that goal, and to suggest alternative methods that would improve the likelihood of survival for most species. The discussion is divided into three parts. The first part examines the present status of marine mammals. The second reviews past and present regulatory attempts. Finally, recommendations for the future are made.

II. THE PRESENT SITUATION

A. *Whales*

The stocks of many species of whales, especially the larger ones, have become severely depleted.⁹ This situation has been caused by

6. *Id.* at 389.

7. Human negligence toward marine mammals is exemplified by incidental catches of small cetaceans. "Incidental" catches are those made in the course of fishing for another species, and are generally unintentional. They most frequently occur during purse seine fishing operations, when porpoises are caught in a fishing net and drown because they cannot reach the surface for air. *Marine Mammal Protection Act*, 16 U.S.C. § 1371(a)(2) (1978), cited in *Committee for Humane Legislation, Inc. v. Richardson*, 540 F.2d 1141, 1143-45 (D.C. Cir. 1976). See Nafziger & Armstrong, *The Porpoise-Tuna Controversy: Management of Marine Resources After Committee for Humane Legislation, Inc. v. Richardson*, 7 ENV'T L. 223 (1977) [hereinafter cited as Nafziger].

8. Nafziger, *supra* note 7, at 340.

9. The Endangered Species Act, 16 U.S.C. §§ 1531-1543 (1976), as amended by Endangered Species Act Amendments of 1978, Pub. L. No. 95-632, 92 Stat. 3751 (1978), and its companion, the Marine Mammal Protection Act, 16 U.S.C. §§ 1361-1407 (1976), represents United States strategies to preserve creatures whose existence is jeopardized by human activities. Section 1533(c)(1) of the Endangered Species Act requires that the Secretaries of Interior and Commerce compile and publish each year a list of endangered and threatened species, and it is to these crea-

the whale's only significant enemy, man. Before the advent of the harpoon gun, the whale population was able to withstand man's assaults.¹⁰

Technological achievements, however, such as explosive harpoon warheads, faster chase boats, factory ships, helicopters and sonar devices have disrupted the balance between man and whale.¹¹

B. *The Smaller Mammals*¹²

The smaller mammals differ from whales in ways that both facilitate and inhibit protective efforts. First, smaller mammals tend to be more coastal and less migratory.¹³ Whether or not such geographical habits enhance the protection of smaller mammals depends on the fishing policies of the adjacent coastal states.¹⁴ Second, smaller marine mammals have more variable reproductive systems than do whales; this trait makes them very vulnerable to alterations in the ocean environment.¹⁵ Finally, the sociability of these mammals exposes them more to human activity.¹⁶

Smaller mammals do not differ from whales, however, in a significant respect: the outlook for their survival is similarly bleak.¹⁷

tures that prohibitions of the Act apply. Eight species of whales are presently on the list of endangered species. These are the bowhead, finback, gray, humpback, right, sei, sperm, and blue whales. 50 C.F.R. § 17.11 (1977). The blue, right, bowhead, humpback, and some sei whales are also protected from unregulated importation by the Convention on International Trade in Endangered Species of Wild Flora and Fauna, *done* Mar. 3, 1973. T.I.A.S. No. 8249 [hereinafter cited as Int'l Flora and Fauna Convention]. For a discussion of the latter Convention, see text accompanying notes 174-83 *infra*. For a discussion of the United States Marine Mammal Protection Act, see text accompanying notes 207-15 *infra*.

10. R. Komatsu, *Whaling and Japan 5* (1974) [hereinafter cited as Komatsu] (this pamphlet is distributed by the Japanese Embassy).

11. See D. McCracken, *FOUR MONTHS ON A JAPANESE WHALER* (1948), which, despite being three decades old, gives a reasonably accurate and detailed portrayal of the scale and level of mechanization of modern whaling.

12. The term "smaller mammals" will be used to refer to marine mammals other than whales.

13. Scarff, *supra* note 5, at 375.

14. The United States, for example, has adopted a very protective attitude toward marine mammals found in its coastal zone. See text accompanying notes 208-16 *infra*.

Many species of dolphins and porpoises (small cetaceans) inhabit areas that are also suitable for harbors, oil fields, refuse disposal, and maritime traffic. Nations unfortunately give very little consideration to these animals when determining whether to use these areas for such purposes. Scarff, *supra* note 5, at 589.

15. Scarff, *supra* note 5, at 375-76.

16. See text accompanying note 49 *infra*.

17. Two species of dolphins are endangered and three other species of dolphins and porpoises are vulnerable to extinction. Thirty-three other species of small ceta-

Incidental catches of dolphins and porpoises, as well as purposeful kills, are exhausting many stocks. In the early 1970s incidental catches were responsible for 250,000 porpoises of all kinds being killed annually.¹⁸ While the United States has instituted limitations on such kills,¹⁹ other nations have not followed its example.²⁰ For instance, the Japanese North Pacific gill net salmon fishery may have taken as many as 20,000 Dall's porpoises in a recent year, out of a total estimate population of 50,000.²¹

The killing of baby harp seals by Canada and Norway, severely depleting the herd,²² is another example of irresponsible treatment of smaller marine mammals. The seals are reacting to this exploitation by breeding earlier, one of nature's first signs that an animal species is in serious difficulty.²³ Yet the 1978 kill authorized by these countries was 10,000 higher than the year before.²⁴ The tragedy is that these animals, which are killed at the age of three weeks, are used almost exclusively for pelts.²⁵ There is no substantiation of charges by fishing interests that the seals interfere with the fisheries in the North Atlantic.²⁶

ceans are believed to be endangered, vulnerable, or rare, but so little is known about them that their status can only be classified as indeterminate. Scarff, *supra* note 5, at 406.

18. E. MITCHELL, *PORPOISE, DOLPHIN AND SMALL WHALE FISHERIES OF THE WORLD* 87-89 (I.U.C.N. Monograph No. 3 (1975)), *cited in* Scarff, *supra* note 5, at 379 n.318.

19. On December 23, 1977, regulations promulgated under the Marine Mammal Protection Act, 16 U.S.C. §§ 1361-1407 (1976), became effective. These regulations set incremental reductions in allowable incidental porpoise kills in an attempt to eliminate such kills completely by 1982. 42 Fed. Reg. 64551 (1977) (to be codified in 50 C.F.R. § 216.24).

20. Scarff, *supra* note 5, at 379-80.

21. *Id.* at 380.

22. From 1952-1972 the population dropped from an estimated 5 million to approximately 1.5 million. Present estimates have placed the population as low as 800,000. Despite these figures, and persistent international protest, the authorized kill for 1978 was 180,000. Animal Protection Institute, *Saving the Baby Seals* (1978) (pamphlet published in Sacramento, Cal.)

23. *Id.*

24. *Id.*

25. *Id.*

26. *Id.* Still another small marine mammal in peril is the polar bear. According to some estimates, indiscriminate hunting, sometimes by airplane, has left fewer than 10,000 in existence. Larsen, *Progress in Polar Bear Research and Conservation in the Arctic Nations*, 4 ENV'TL AFF. 295 (1975) [hereinafter cited as Larsen]. See text accompanying notes 166-73 *infra*.

C. *Reasons for Protection and Preservation*

Despite the gravity of the situation described above, the question might be asked, why, with so many other pressing issues in the world, the international community should concern itself with the preservation of ocean animals. Justifications for this concern can be classified as economic, ecological, aesthetic, and moral.²⁷ These rationales may sometimes work at cross-purposes, but each provides a compelling basis for international attention.

1. Economic

While a detailed economic analysis is beyond the scope of this article,²⁸ two economic arguments support the proposition that marine mammals should be protected. First, interests that do not require killing marine mammals greatly outweigh the marginal economic value derived from such killing. Second, even assuming that mammals must be killed, conservation measures would increase the economic efficiency of their use as a resource.

The first prong of the economic rationale for marine mammal protection is that these animals are economically valuable in ways that do not involve their slaughter. "Whale watches" on both the east and west coasts of the United States enjoy increasing popularity,²⁹ and dolphins and porpoises are favorite attractions at zoos and aquariums. The area of non-consumptive uses is one that deserves increased attention.

The second economic justification for marine mammal protection centers on the whaling industry.³⁰ Whales are used primarily as a

27. This section of the article is drawn heavily from Scarff, *supra* note 5, especially at 381-87. The authors are indebted to his truly exceptional article for much of the substance of this section.

28. Scarff has thoroughly reviewed present economic utilization of marine mammal resources. *Id.* at 574-97. He articulates a number of reasons why inefficient economic practices are prevalent in the whaling industry today. *Id.* at 580-82. On the other hand, it may actually be economically efficient to hunt at least certain of the great whales to extinction. *Id.* at 583-84. See Fife, *Killing the Goose*, 13 ENVIRONMENT 20 (1971).

29. See Reiger, *Whale Watchers, Natural History Study Cruise off Baja California*, 79 AUDUBON 74 (1977), for an account of an excursion aboard a whale watcher. See also 2 WHALE REP. 7 (1978), regarding whale watch tours to California and Hawaii sponsored by the Whale Protection Fund; N. Y. Times, Apr. 18, 1979, § A, at 14, col. 3.

30. The ultimate economic value of small marine mammals has not been established and long-range planning to assure their continued supply has been minimal.

source of protein,³¹ especially in Japan where 120,000 tons of whalemeat are consumed annually.³² Japan should, therefore, have a strong incentive to conserve whales in order to maintain this level of consumption. Japan's policy, however, is to exhaust the current whale supply, rather than develop a long-term solution to obtain the protein it claims must be derived from whales.³³

Thus, although Japan makes a credible argument that the continued taking of whales provides an important adjunct to its food supply,³⁴ many other mammals are killed only for their pelts, to indulge a human luxury.³⁵ It is unlikely that great economic dislocation would result if the killing of marine mammals for this purpose were halted,³⁶ and in light of the other, non-economic values these creatures possess,³⁷ needless killings should end.

2. Ecological

In addition to economic considerations, ecological values support the conservation of marine mammals. Scientific knowledge about

Scarff, *supra* note 5, at 589. Profits and economic goals are generally unknown or poorly estimated. *Id.* at 588. Seals are known to be valuable for their furs, however, and the oil from small cetaceans can be used as a lubricant. *Id.* at 377. There are fisheries for small cetaceans, most commonly producing meat for local consumption. An exception is a large scale fishery for dolphin in the Black Sea which has an annual kill of approximately 100,000. *Id.* at 378.

31. Whales are also commercially valuable because of the by-products derived from their carcasses. These include sperm whale oil and ingredients for fuel, margarine, lard, soap, and ambergris for perfume. Nevertheless, assertions that whales are killed for these uses are only superficially true; rather, these are residual uses. (Schedule provisions in the International Convention for the Regulation of Whaling, Dec. 2, 1946, 62 Stat. 1716, T.I.A.S. No. 1849, 161 U.N.T.S. 72, art. V [hereinafter cited as the Whaling Convention of 1946], require that all parts of the whale be utilized.) Conservationists who argue for the preservation of whales maintain that substitutes for these by-products are readily available. Notably, the qualities of sperm oil are duplicated in jojoba, a common desert shrub easily cultivated. *See generally*, Vietmeyer, *Can a Whale Find Life in the Desert?*, 77 AUDUBON 101-05 (1975).

32. Komatsu, *supra* note 10, at 10-14.

33. Japan claims that because its mountainous terrain is not suitable for farming, it has been forced to resort to whaling to supply its population with adequate protein. *Id.* at 12. Seventy-five percent of Japan's catch is used for human consumption, and supplies one percent of all protein consumed by the Japanese. Rosa, *What Price Whales?*, 8 OCEANS 68 (1975). *See also* Friedman, *International Whaling Controversy*, 8 INT'L L. & POL. 211, 214 (1975) [hereinafter cited as Friedman].

34. Komatsu, *supra* note 10, at 10-16.

35. *See* text accompanying note 25 *supra*.

36. Komatsu notes, however, that tens of thousands of Japanese are employed by whale-related industries. Komatsu, *supra* note 10, at 25.

37. Griffis, *The Conservation of Whales*, 5 CORNELL INT'L L.J. 99 (1972) [hereinafter cited as Griffis]. *See* text accompanying notes 38-55 *infra*.

marine mammals is limited.³⁸ For instance, the critical populations of marine mammals, that number below which the species is inevitably doomed, remains undiscovered.³⁹ Despite ignorance as to the link marine mammals fill in the ecosystem, they are being destroyed in vast numbers.⁴⁰ To risk the depletions or disappearance of any form of life without knowledge of the consequences of such a loss, is unwise.

3. Aesthetic

Marine mammals also deserve protection for aesthetic reasons. Most are beautiful and graceful, exciting to watch in their almost perfect adaptation to their marine environment. Some people take pleasure in merely knowing that such extraordinary creatures exist and are permitted to roam the oceans. Examples of this aesthetic attraction abound. The haunting "Song of the Humpback Whale"⁴¹ has intrigued many, and folk singer Judy Collins has paid homage to whales in her album "Whales and Nightingales."⁴² Numerous popular television programs on whales have been aired in the last few years,⁴³ and increasing numbers of people enjoy watching whales and porpoises during migratory periods.⁴⁴ A world with diminishing natural beauty and wonder left to preserve should require substantial returns before sacrificing any of these unique and lovely forms of life.

38. Scarff, *supra* note 5, at 389. Perhaps one reason for this dearth of knowledge is that living marine mammals are very difficult to research. Until quite recently all research on whales was done on dead whales, and current whale management practice is primarily based on knowledge of non-marine mammal fisheries rather than direct knowledge of marine mammals. McHugh, *The Whale Problem*, 3 OCEAN DEV. & INT'L L.J. 389, 391-92 (1976). Yet it has been noted that cetaceans are so different from other animals in their intelligence, communication ability, and complex social interaction that experience in managing other species is at best partially applicable. Scarff, *supra* note 5, at 338.

39. As Scarff points out, there were still thousands of carrier pigeons left when their critical population was reached, and they were doomed to extinction despite every effort to save them. Research on cetaceans indicates that the critical population levels of marine mammals are probably quite high. Scarff, *supra* note 5, at 389-90.

40. See text accompanying notes 9-26 *infra*.

41. *Songs of the Humpback Whale*, SWR-11 (CRM Records 1970) ST-620 (Capitol Records, 1970).

42. Judy Collins, *Whales and Nightingales*, EKS-75010 (Elektra 1972).

43. *Draft Report of the Working Group on Low Consumptive Uses of Marine Mammals*, Doc. FAO/ACMRR/MM/SC/WG-24, app. at 1 (Sept. 1976), cited in Scarff, *supra* note 5, at 342 n.77.

44. See text accompanying note 29 *supra*.

4. Moral

The fate of marine mammals also presents a moral question. Arguably, the destruction of *any* species is unethical. As expressed by Senator Alan Cranston:

The death of a species is profound, for it means nature has lost one of its components, which played a role in the interrelationship of life on earth.

Here the cycle of birth and death ends. Here there is no life, no change to begin again—simply a void.

To cause the extinction of a species, whether by commission or omission is unqualifiedly evil. The prevention of this extinction . . . must be a tenet among man's moral responsibilities.⁴⁵

The exceptional qualities of many species of marine mammals, specifically the whales and smaller cetaceans, inject a more profound component into the moral consideration. Evidence of their singular intelligence has been documented in studies by Peter Morgane and his co-workers, showing that the brains of these mammals are large in the cortical silent associational area, the same sections in which human brains are larger than most ape brains.⁴⁶ Clinical experiments have demonstrated that these are the areas where qualities thought to be most "human" exist—the ability to plan and carry out future plans, memory, and emotional response.⁴⁷ Cetaceans evolved brains the size of ours thirty million years ago; ours have been the present size for only 10,000 years.⁴⁸

Many marine mammals possess a peaceful and playful nature and exhibit intense family and social cohesion.⁴⁹ Three poignant observations exemplify the latter characteristic. Porpoises caught in fishing nets will often not escape, even when given the opportunity, in order to remain with an infant.⁵⁰ A school of whales will follow and attempt to assist one of its members that has been harpooned, and a mother seal will often stay by the skinned carcass of her baby for days after its death.⁵¹

Another indication of the high intelligence and sensitivity of certain marine mammals is that they appear capable of a great variety

45. 116 CONG. REC. 17,198 (1970), *quoted in* Scarff, *supra* note 5, at 381 n.326.

46. Lilly, *The Cetacean Brain*, 10 OCEANS 4, 5 (1977) [hereinafter cited as Lilly].

47. Rosa, *supra* note 33, at 69; Lilly, *supra* note 46, at 5.

48. Lilly, *supra* note 46, at 6.

49. Herrington, *supra* note 1, at 797.

50. *Id.*

51. *Id.*

of inter- and intra-species communication.⁵² In addition, dolphins, porpoises and whales exhibit distinctive attitudes toward humans. John Lilly has produced evidence showing that cetaceans teach their young that humans are special and injury to them should be avoided.⁵³ Studies of humpback whales offer some confirmation of this observation.⁵⁴

Exactly how intelligent, sensitive, and understanding certain marine mammals are is debatable, but mounting evidence strongly suggests that they possess qualities that have previously been associated only with humans. Therefore, the world is faced with a profound moral choice. Should mankind take time to explore the nature of these animals, and try to communicate with them? Or should they be killed for unessential food, oil, furs, and trinkets? The proper answer is self-evident and was eloquently stated by Dr. Victor Scheffer, former Chairman of the United States Marine Mammal Commission:

I believe we should stop killing whales except for human survival . . . I see no need to extend this protective ethic to rabbits, chickens, or fish. Whales are different. They live in families, play in the moonlight, talk to one another, and care for one another in distress. They are awesome and mysterious. In their cold, wet and forbidding world they are complete and successful. They deserve to be saved, not as potential meatballs, but as a source of encouragement for mankind.⁵⁵

Neither whales nor any other cetacean has ever received international protection for ethical, moral, or aesthetic reasons. Unfortunately, it has been the heritage of mankind to destroy first and inquire later. Perhaps it is time for a new era to begin.

III. PAST AND PRESENT REGULATORY EFFORTS

A. *Whales*

Only in the twentieth century has mankind demonstrated any concern for the diminishing numbers of marine mammals, and the impetus for most regulatory attempts has been economic. In 1924, whaling was added to the agenda of the League of Nations

52. *Id.* at 5.

53. *Id.* at 6.

54. Scarff, *supra* note 5, at 338.

55. Scheffer, *The Status of Whales*, 29 PAC. DISCOVERY 2, 8 (1976), quoted in Scarff, *supra* note 5, at 385 n.350.

Committee on International Law.⁵⁶ Due to its belief that whales were in small danger of extermination, however, the League initially did virtually nothing to promote their conservation.⁵⁷ The threat of diminishing stocks was not recognized until 1931, when the League developed the International Convention for the Regulation of Whaling.⁵⁸

The 1931 Convention regulated commercial whaling in all oceans and in the territorial waters of the contracting countries, and implemented a system of licensing for the flag states⁵⁹ engaged in whaling.⁶⁰ Its main purpose was to curtail competition in the whaling industry; as a protective device it was grossly deficient. First, enforcement provisions were inadequate. Law enforcement officers who inspected the ports and handled the licensing had jurisdiction only in their own territorial seas and ports. Therefore, whaling on the high seas, where the bulk of the killing occurred, remained unpoliced by international forces. Moreover, the officers were lax in patrolling their native boats.⁶¹ A second critical deficiency in the 1931 Convention was the refusal of many of the major whaling nations—Japan, Chile, Argentina, and the USSR—to sign.⁶² The contracting states therefore felt unfairly constrained, and consequently enforced the provisions with less vigor than was required to achieve its purposes.⁶³ Most important, the failure of the 1931 Convention either to institute a quota system⁶⁴ or specifically to

56. Griffis, *supra* note 37, at 102.

57. Whaling demanded vast amounts of capital. The League reasoned that this limitation, together with difficulties in capturing whales in large numbers, precluded the development of a long-term profitable business capable of threatening the species. Schmidhauser, *Whales and Salmon: The Interface of Pacific Ocean and Cross-National Policy Making* in *LAW OF THE SEA: ISSUES IN OCEAN RESOURCE MANAGEMENT* 144, 158 (D. Walsh ed. 1977) [hereinafter cited as Walsh].

58. Convention for the Regulation of Whaling, Sept. 24, 1931, 49 Stat. 3079, T.S. No. 880, 155 L.N.T.S. 349. This 1931 Convention represented a victory of a multilateral approach to controlling whale exploitation over the national approach advocated by England and Norway, and the complete rejection of controls espoused by Germany and the Netherlands in 1927. Griffis, *supra* note 37, at 102-03. As of January 1, 1976, forty-seven nations were signatories of this treaty, which is still in force. U.S. Dep't of State, *Treaties in Force*, 444 (1976), cited in Scarff, *supra* note 5, at 349 n.115.

59. A flag state flies its nation's flag on its whaling vessels for identification purposes.

60. Griffis, *supra* note 37, at 102-03.

61. *Id.* at 103.

62. *Id.*

63. *Id.*

64. *Id.* A quota system would restrict the catch allowance of each species, regu-

define "immature whales," which qualified for special protection,⁶⁵ thwarted any conservationist thrust.

By 1937 the inadequacy of the 1931 Convention had become generally acknowledged, and a new covenant was signed in London. This covenant, the Agreement for the Regulation of Whaling,⁶⁶ increased the scope of supervision to include right and gray whales,⁶⁷ and continued the protection afforded by the previous Convention to sperm whales and the small blue, fin, and humpback species.⁶⁸ It also set quotas and established sanctuaries in the Atlantic, Pacific, and Indian Oceans.⁶⁹ Improved fishing techniques, coupled with refusals by Chile, Japan, and the USSR to sign, however, rendered the Agreement almost worthless.⁷⁰

Although the Second World War gave whales some respite,⁷¹ by 1946 whale catches were again rising precipitously.⁷² The threatened extinction of the blue whale prompted the United States to convene an international conference on whaling in 1946.⁷³ That conference resulted in the International Convention for the Regulation of Whaling which became effective in 1948,⁷⁴ and continues to supervise whaling activity and regulation.

The 1946 Whaling Convention expressly recognizes a common interest in achieving an optimum level of whale stocks in a manner that allows orderly development of the whaling industry.⁷⁵ To achieve these goals, it provides for the establishment of the International Whaling Commission, (IWC).⁷⁶ The IWC, composed of

late seasonal duration of whaling operations, and delimit the ocean territory in which whaling would be permitted.

65. *Id.* at 102-03.

66. The Agreement for the Regulation of Whaling and Final Act, June 8, 1937, 52 Stat. 1460, T.S. No. 933, 190 L.N.T.S. 79 [hereinafter referred to as 1937 Agreement].

67. *Id.* art. IV.

68. *Id.* art. V.

69. *Id.* art. IV. The quotas limited the area and seasons in which whaling would be permitted.

70. Japan promised to follow the 1937 Agreement without signing it. This pledge, however, was meaningless since in the two years following the 1937 Agreement Japan's percentage of total production increased from 9% to 15% and then to 21%. Griffis, *supra* note 37, at 104 n.30.

71. *Id.* at 105-06. Whaling was reduced since ships were diverted to military purposes and Japan was temporarily eliminated from the whaling market. *Id.*

72. Scarff, *supra* note 5, at 352.

73. Griffis, *supra* note 37, at 106.

74. The Whaling Convention of 1946 note 31 *supra*.

75. *Id.* Preamble.

76. *Id.* art. III. The Whaling Convention of 1946 also contains a provision

one member from each contracting government,⁷⁷ is authorized to acquire and disseminate information on whales and whaling,⁷⁸ It also performs the crucial function of adopting regulations⁷⁹ that fix the annual scope of whaling activities.⁸⁰

Despite conservationists' accusations of IWC inefficacy and irresponsibility,⁸¹ its achievements and those of the Convention deserve credit. Most notably, the International Observer Scheme, whereby a foreign observer is stationed on each whaling ship and at each whaling port to ensure compliance with IWC regulations, has greatly improved the enforcement capacity of the IWC.⁸² Moreover, the IWC has developed more expertise in the study of whales,⁸³ has become more independent of commercial whaling in-

requiring the transmission of whaling data to the International Bureau for Whaling Statistics at Sanderfjord, Norway, *id.* art. VII, and allows special whaling permits to be issued for scientific research, *id.* art. VIII. It further provides that each contracting state must take appropriate measures to insure application of the provisions of the Convention, and prohibits contracting states from providing remuneration to the gunners and crews of whale catchers for any whales taken in contravention of the Convention. *Id.* art. IX.

77. Most whaling nations are members, including Japan and the USSR; currently these two nations account for 80% of whale catches. Walsh, *supra* note 57, at 159.

78. Whaling Convention of 1946, *supra* note 31, at art. IV.

79. The Commission meets annually to set quotas and establish other regulations with respect to conservation and utilization of whale resources. Each regulation becomes effective ninety days after notification that the amendment has been passed by a three quarters majority of the Commission. *Id.* art. IV, para. 2, art. V, para. 3.

80. *Id.* art. V. Specifically, Article V states that the Commission may promulgate regulations fixing

(a) protected and unprotected species; (b) open and closed seasons; (c) open and closed waters, including the designation of sanctuary areas; (d) size limits for each species; (e) time, methods, and intensity of whaling (including the maximum catch of whales to be taken in any one season); (f) types and specifications of gear and apparatus and appliances which may be used; (g) methods of measurement; and (h) catch returns and other statistical and biological records.

Id. art. V, para. 1. Although the IWC has considered management of small cetaceans—porpoises and dolphins—they have not taken steps to do so. In all likelihood, such a move would require amendment of the Convention. No significant action has been taken despite the affirmative recommendation of the Science Committee of the Commission. Scarff, *supra* note 5, at 374. Dolphins and porpoises remain largely unprotected by international agreement.

81. See text accompanying notes 86-100 *infra*.

82. The Scheme, created by a Protocol to the Convention in 1956, *done* Nov. 19, 1956, 10 U.S.T. 952, T.I.A.S. No. 4228, 338 U.N.T.S. 366, initially failed due to basic disagreements over which quotas to enforce. This weakness was rectified, and the system presently operates on a renewable basis outside the framework of the IWC. Fox, *Report of the U.S. Delegation to the 26th Meeting of the IWC, cited in* Friedman, *supra* note 33, at 221 n.57.

83. In 1960, a committee of three scientists in population biology was enlisted to

terests,⁸⁴ and has fostered a more protectionist attitude towards whales.⁸⁵

Several factors, however, impede IWC efforts to promote conservation. First, while it is commendable that all major whaling nations have signed the Whaling Convention of 1946,⁸⁶ their interests have dominated IWC policies. The Whaling Convention of 1946 purports to achieve the optimum utilization of whale resources, and expressly requires the IWC to consider the interests of consumers of whale products and the development of the whaling industry towards this end.⁸⁷ These requirements pose an internal constitutional barrier to the IWC's attempts to conserve marine mammal resources, another stated goal of the Convention.⁸⁸ In attempting to reconcile these goals, the IWC has consistently com-

study whale stocks; their recommendations laid the foundation for the 1964 and 1965 quota reductions: A. KOERS, *INTERNATIONAL REGULATION OF MARINE FISHERIES* 88 (1973). Today, the IWC has three permanent as well as numerous ad hoc committees. One permanent committee, the Scientific Committee, reviews catch data and research programs submitted by member nations. The IWC relies on this group's recommendations regarding sustainable yield quotas (the number of whales that can be taken without jeopardizing the survival of the stock), depletion rates, and various research conclusions. A second group, the Technical Committee, supplements the IWC's enforcement mechanism by reviewing reports of infractions and drafting relevant regulations. The third permanent Committee handles the IWC's financial and administrative affairs.

84. Before 1975 the IWC had at its command only one part-time administrator and several part-time clerks. Today, its staff consists of one trained cetologist who acts as Executive Secretary, and other full time staff hired by the Executive Secretary as needed. Moreover, the IWC may hire its own researchers, so that it need not rely completely on statistics and data compiled and submitted by member nations that may not always be sufficiently disinterested. Scarff, *supra* note 5, at 350-57.

85. The IWC's increasing protectionist stance was exhibited in 1974 when it implemented a system of partial moratoria on selected whale stocks. Specifically, those stocks substantially below Maximum Sustainable Yield (MSY) levels are categorized as protection management stocks and enjoy complete protection until they recover to a "near" MSY level; then they may be harvested. Scarff, *supra* note 5, at 412. "Near" MSY level has been defined as 10% to 20% above the MSY. *Id.*

Originally developed to manage fisheries, the MSY model assumes that the difference between the number of births and the number of natural deaths of a species is the "sustainable yield" and may be harvested without changing the total population. See note 95 *infra* for criticism of this methodology.

86. While the IWC has made continuing efforts to expand its membership to include all whaling nations, the efficaciousness of promulgated regulations has been hampered by the unregulated whaling of non-IWC nations, which may hunt even species that enjoy complete IWC protection. Nine of these nations are Chile, Peru, People's Republic of China, the Republic of South Korea, North Korea, Portugal, Somalia, Spain, and Cyprus. Scarff, *supra* note 5, at 598; 2 *WHALE REP.* 4-8 (1978).

87. International Whaling Convention of 1946, *supra* note 31, at art. V, para. 2.

88. *Id.* Preamble.

promised conservation concerns in favor of policies favoring consumers.⁸⁹

A second factor curtailing the conservationist function of the IWC is the ease with which contracting states can avoid compliance with inconvenient regulations. If any contracting state objects to a regulation within ninety days of enactment, the objection period is automatically extended an additional ninety days.⁹⁰ Any government that objects during this extended period is not bound by the regulation.⁹¹ Another, more drastic method for a contracting state to escape the regulations is to opt out of the Convention altogether pursuant to Article XI of the 1946 Whaling Convention. Moreover, certain IWC nations have conducted unregulated operations under "flags of convenience" in order to circumvent IWC quotas.⁹² These operations, in addition to the whaling activities of non-IWC nations and at least one known pirate ship, threaten to exhaust various geographically distinct stocks and to further endanger those species that are nearly extinct.⁹³

A third major impediment to the effective functioning of the IWC as a conservationist organ is its adherence to the methodology of Maximum Sustainable Yield (MSY)⁹⁴ in determining quotas. This methodology has been deemed scientifically invalid.⁹⁵ A fourth factor hampering the IWC is that it has no power to restrict the number and nationality of factory ships or stations, and cannot allocate specific quotas to such ships or stations.⁹⁶

The uncertainty of the IWC's ability to protect whales is underscored by the fact that certain IWC measures originally viewed as promising have proven to be short-lived. For example, the protec-

89. Fears that strict regulations will cause major whaling nations to opt out of the requirements for a particular year, or even to withdraw from the Convention, have caused the IWC to adopt regulations for limited duration, and to err on the side of consumption. Whaling Convention of 1946, *supra* note 31, art. V, para. 3; Scarff, *supra* note 5, at 357; Friedman, *supra* note 33, at 218.

90. Whaling Convention of 1946, *supra* note 31, art. V, para. 3.

91. *Id.*

92. Scarff, *supra* note 5, at 594.

93. 3 MARINE MAMMAL NEWS 3 (1977).

94. See note 85 *supra* for a description of this methodology.

95. Educated criticism of this methodology claims that: "What data exists (sic) are questionable in many aspects, fragmentary, and at best, highly speculative. Information on the marine ecosystem necessary for any real understanding for living whales is almost totally lacking." Friedman, *supra* note 33, at 219. Negligent extermination of whales may occur if criticism of the MSY concept proves correct.

96. Whaling Convention of 1946, *supra* note 31, art. V, para. 2.

tion of all whale stocks in 1974⁹⁷ and a 1977 moratorium on all bowhead whale killing⁹⁸ presaged additional moves toward greater protection. The 1978 and 1979 quotas,⁹⁹ however, and the reinstatement of a limited bowhead quota,¹⁰⁰ represent a regression from a conservationist attitude.

The future of the whale is far from certain. Decisions necessary to insure its survival are not being made. International protective measures combined with aggressive and adequate enforcement must be adopted if the whale is to survive.

B. *Seals*

One of the most successful international efforts in the conservation of marine mammals resources is the Convention on the Conservation of North Pacific Fur Seals.¹⁰¹ These seals inhabit a num-

97. This refers to the IWC's 1974 implementation of a system whereby whale stocks categorized as protection management stocks were completely protected from whaling. See text accompanying note 85 *supra*.

98. 2 WHALE REP. 1 (1978).

99. The sperm whale quota was increased from 763 in June, 1977, to 6444 in December, 1977. 9 MAINSTREAM 6 (1978). The sperm whale quota was mildly reduced in October, 1978 to 5436. 43 Fed. Reg. 47,532 (1978) (to be codified in 50 C.F.R. § 351.38), and even further decreased to 2203 for 1980. However, it has still not fallen to pre-1978 levels and critics argue that the quotas, because of drastic population decreases, represent the realistic kills expected. 10 MAINSTREAM 32 (1979).

100. In its December, 1977 meeting in Tokyo, the IWC, backed by the United States and nine other nations, lifted its zero quota on bowhead whales. The new quota was twelve taken or eighteen struck. 43 Fed. Reg. 9486 (1978) (to be codified in 50 C.F.R. § 350.36). Three countries including Canada supported total protection. The Scientific Committee admitted that considerations of subsistence economy and native culture claimed by the Eskimos were beyond their expertise, and the IWC bowed to Eskimo claims that they and their culture were threatened by the ban. *The IWC in Tokyo*, 2 WHALE REP. 1-8 (1978).

The Eskimos, despite their clear dissatisfaction with the quotas set by the IWC, agreed to abide by them as a demonstration of their good faith. It has been reported that they have done so during their 1978 hunting season. Walsh, *Eskimos Honor Whale Quota, But Ask New Terms for the Hunt*, 200 SCIENCE 1248-49 (1978).

The 1979 quota was even higher than the 1978 quota, eighteen taken or twenty-seven struck. The Eskimos have indicated that they do not consider themselves bound by this quota, although only seven bowheads were taken and 15 struck in their Spring hunt because of bad weather and poor ice. The 1979 Fall hunt began as this article was printed. The 1980 bowhead quota of eighteen taken or twenty-seven struck has barely been changed from 1979, despite the strong and unequivocal recommendation of the Scientific Committee of the IWC that the bowhead quota for 1980 be reduced to zero. WHALE CENTER NEWSLETTER, Fall 1979, p. 6, 11.

101. Interim Convention on the Conservation of North Pacific Fur Seals, Feb. 9, 1957, 8 U.S.T. 2283, T.I.A.S. No. 3948, 314 U.N.T.S. 105 [hereinafter cited as the North Pacific Seal Treaty]. The Convention is between the United States, the USSR, Canada, and Japan. Its predecessor, discussed at note 117 *infra*, was a con-

ber of islands in the Bering Sea owned by the United States, the USSR, and Japan. The largest herd occupies the Pribilof Islands, owned by the United States.¹⁰² North Pacific Fur Seals are therefore commonly known as "Pribilof" seals.

In 1867 the Pribilof Islands became United States territory. Shortly after their acquisition Congress banned pelagic sealing in the territorial sea surrounding the islands,¹⁰³ limited sealing on land to fully mature "bachelor" males,¹⁰⁴ and set a quota of 100,000.¹⁰⁵ Between 1872 and 1878 these measures were sufficient to protect the herd, since pelagic sealing was only carried out on the high seas on a small scale.¹⁰⁶

After 1878, however, pelagic sealing rapidly expanded, and by 1885 three females were being taken for every male.¹⁰⁷ As a result, the pups that would have otherwise replenished the herd were either never born or died of starvation. The United States reduced the land catch in an effort to compensate for the diminishing herd, but this action merely increased the numbers available to the pelagic sealers.¹⁰⁸ Finally, in 1886 three Canadian ships engaged in pelagic sealing were seized by the United States on the high seas, pursuant to an 1881 declaration by the Acting Secretary of Treasury that all waters east of the United States/Russian demarcation line were waters of the Alaskan territory.¹⁰⁹ The seizures were

vention for the preservation and protection of these seals, concluded and signed by the United States, Great Britain, Russia, and Japan on July 7, 1911. J. TOMASEVITCH, *INTERNATIONAL AGREEMENTS ON CONSERVATION OF MARINE RESOURCES* 95 (1943) [hereinafter cited as TOMASEVITCH].

102. TOMASEVITCH, *supra* note 101, at 68, 73.

103. "Pelagic" sealing is sealing that occurs on the open sea, as contrasted with the taking of seals on land, usually upon their land rookeries. Pribilof seals are vulnerable in both locations; they are highly migratory, but always return to land to breed. Scarff, *supra* note 5, at 598-60.

104. "Bachelor" males are those males from two to five years old. Fur seals are polygamous with an active bull servicing a great number of females. Thus, a great number of males can be removed without impairing the increase of the herd at maximum rate. It is impossible, however, to ascertain during pelagic sealing whether a male is a bachelor or not, or even whether a particular seal is a male or female. TOMASEVITCH, *supra* note 101, at 68-70.

105. *Id.* at 74. In 1867 the herd numbered approximately two million to four million. *Id.* at 73.

106. The annual take for all pelagic sealing during these years was only 5,400. *Id.* at 73.

107. *Id.* at 77. By 1887, the annual take had risen to over 30,000 seals, both males and females. *Id.* at 76.

108. *Id.* at 77-78.

109. *Id.* at 81.

upheld in the United States courts on the basis that the Bering Sea was a "mare clausum,"¹¹⁰ due to the tacit international acceptance of a Russian declaration to that effect in 1821.¹¹¹

Although the United Kingdom vigorously disputed the United States position, other seizures followed. A breakthrough came in 1892 when the United States and the United Kingdom submitted the issue to international arbitration.¹¹² An international tribunal convened in France that year and adjudicated all issues in favor of the United Kingdom.¹¹³ The tribunal offered, however, a proposal that both countries adopted: a sixty mile protective belt was placed around the Pribilof Islands; an annual closed season for pelagic sealing from May 1 to July 31 was established; recordkeeping and licensing of pelagic sealers were required.¹¹⁴

This first attempt at international cooperation was ineffective in protecting the Pribilof seals. Not only did the sixty mile protective belt prove insufficient, since most of the seals travelled more than 100 miles from their rookeries in the islands, but also the closed season was too short to be of much value. Furthermore, Japan was not a party to the agreement, and its pelagic sealing continued unabated.¹¹⁵ From 1896 to 1899 further attempts to control the dangerous increase in sealing resulted in failure.¹¹⁶

Talks resumed in 1909, and on July 7, 1911 a new treaty was signed.¹¹⁷ This treaty prohibited pelagic sealing, except for a very limited scientific exception, and gave the United States full rights to regulate the seal harvest in the Pribilofs. Of each annual harvest by the United States, fifteen percent was to be given to Canada

110. *Id.* The term "mare clausum" means "closed sea," i.e. a body of water under the sole jurisdiction of one nation.

111. *Id.*

112. *Id.* at 82.

113. The Tribunal of Arbitration consisted of two Americans, two Britishers, one Frenchman, one Italian, and one Swede. *Id.* at 83.

114. *Id.* at 85. Japan and Russia were not parties to the agreement although there were separate, less comprehensive, agreements between the United States and Russia, and the United Kingdom and Russia. *Id.* at 86.

115. *Id.*

116. For example, in December, 1897, the United States prohibited its citizens from engaging in pelagic sealing, and prohibited the importation of seal skins obtained through pelagic sealing, but between 1894 and 1898 more than 205,000 seals were taken. *Id.* at 88-89.

117. Convention between the United States, Great Britain, Russia and Japan for the Preservation and Protection of Fur Seals, July 7, 1911, 37 Stat. 1542, T.S. No. 564 [hereinafter cited as 1911 Treaty]. The Treaty became effective December 14, 1911.

and fifteen percent was to be given to Japan. The minimum annual harvest was set at 1,000 but the United States could prohibit sealing completely for any period of time if it paid \$10,000 both to Canada and Japan for each year of prohibition.¹¹⁸ Shortly after the activation of the treaty, the United States Congress prohibited sealing altogether for a period of five years and the seal herd began a slow recovery.¹¹⁹ Despite the later expiration of the Convention,¹²⁰ a series of informal agreements after World War II precluded the resumption of pelagic sealing and eventually resulted in the present Convention—the Interim Convention on the Conservation of North Pacific Fur Seals of 1957.¹²¹

The structure of the present Convention is very similar to that of the 1911 Convention. It contains a complete prohibition on pelagic sealing, with limited exceptions for scientific purposes.¹²² Again, fifteen percent of the annual harvests of the United States and USSR must be given to Canada and fifteen percent to Japan.¹²³ The Convention prohibits importation of North Pacific fur seal products except in accordance with its terms,¹²⁴ and establishes the North Pacific Fur Seal Commission. The Commission is made up of one member for each contracting state, and is responsible for recommending the annual commercial take and formulating, coordinating, and recommending research programs.¹²⁵

The Convention was to be effective for an initial period of seven years,¹²⁶ but a Protocol to the Convention signed in 1963 extended its term and gave the Commission the outright power to determine the annual harvest.¹²⁷ In 1969 another Protocol¹²⁸ further

118. *Id.* art. XI. Similar provisions were included with respect to the annual harvest by Russia on its Commander Islands. *Id.* art. XII.

119. When Japan abrogated the Treaty in 1941, the seal herds had increased from about 125,000 in 1911 to approximately 2,300,000. 5 DEP'T STATE BULL. 336 (1941).

120. Article XVI of the 1911 Treaty provided for its expiration upon twelve months written notice of withdrawal by a party. 1911 Treaty, *supra* note 117, at art. XVI.

121. Interim Convention on Conservation of North Pacific Fur Seals, note 101 *supra*.

122. *Id.* art. III.

123. *Id.* art. IX.

124. *Id.* art. VIII.

125. *Id.* art. V.

126. *Id.* art. X.

127. Protocol Amending No. Pacific Fur Seals Treaty, Oct. 8, 1963, 15 U.S.T. 316, T.I.A.S. No. 5558, 494 U.N.T.S. 303.

128. Protocol Amending No. Pacific Fur Seals Treaty, Nov. 3, 1969, 20 U.S.T. 2992, T.I.A.S. No. 6774, 719 U.N.T.S. 313.

protracted the Convention; the latest Protocol entered into force on October 12, 1976.¹²⁹ In addition to lengthening the Convention's term, it expands the scope of the Convention's scientific inquiry to include the relationship between fur seals and other living marine resources, and the relationship of fur seals to the ocean ecology.¹³⁰ It also requires the parties to insure that humane methods of killing and capture are used.¹³¹

The present population figure of the herd, approximately 1.5 million,¹³² testifies to the management capability of the Convention,¹³³ but most of the factors contributing to its accomplishments are inapplicable to the management or conservation of marine mammals other than Pribilofs. First, since the Pribilofs breed on land, it is possible to determine with precision the size of the herd and to measure restoration. This is not so with many other marine mammals, especially the deep sea whales.¹³⁴ Second, the Pribilof problem involved only a small number of nations. Here again, the whaling situation is different; while only two countries continue to whale on a large scale basis, the whaling activities of numerous other nations continue to endanger the survival of the larger whales.¹³⁵ A third reason for the success of the Convention is that the industry's geographical concentration has made enforcement relatively easy. The whaling industry, however, is geographically diverse.¹³⁶ Finally, a much greater body of knowledge about the habits and biology of the Pribilof seals has been available than about other marine mammals such as whales, dolphins, and porpoises. Consequently, determination of data critical to effective conservation efforts is more likely to be accurate.¹³⁷ Despite these unique advantages, the Pribilof Convention demonstrates that sincere efforts at international cooperation can result in a successful conservation effort.

An important convention negotiated in 1959 governs the use of

129. Protocol Amending No. Pacific Fur Seals Treaty, May 7, 1976, T.I.A.S. No. 8368.

130. *Id.* art. II.

131. *Id.* art. X.

132. 39 Fed. Reg. 12,053 (1974).

133. This large figure should not obscure the fact that the past few years has seen the slaughter of too many seals. Herrington, *supra* note 1, at 792.

134. Scarff, *supra* note 5, at 598-60.

135. *Id.*

136. *Id.*

137. *Id.*

the Antarctic continent,¹³⁸ where a large number of seals spend at least a portion of their time. The provisions of this treaty, the Antarctic Convention of 1959, have been periodically updated. In 1961 the contracting parties met in Canberra as provided by Article IX of the Convention,¹³⁹ and adopted measures prohibiting the destruction of any indigenous animal or plant life.¹⁴⁰ Such measures, however, applied only to those plants and animals found on the Antarctic continent itself, and left seals found in the water unprotected. The 1962 Buenos Aires meeting ended without the subject of pelagic sealing having been considered.¹⁴¹ In 1964 the contracting parties met in Brussels and agreed to a provision calling for voluntary restrictions on pelagic sealing,¹⁴² but failed to specify what these measures should be. Finally, at the 1966 Santiago meeting the parties addressed the question of pelagic sealing in detail and adopted guidelines calling for voluntary compliance with the following measures:

- (1) The total taken by all nations was not to exceed the Maximum Sustainable Yield (MSY) as established in an Appendix to the Agreement;
- (2) If the number taken of any species disturbed the natural ecological balance, no more were to be taken until the balance was restored;
- (3) Taking of the Ross Seal was totally prohibited;
- (4) Methods of information exchange were established;
- (5) If the MSY was approached, steps were to be taken to convene a Consultative Meeting.¹⁴³

138. Antarctic Treaty, Dec. 1, 1959, 12 U.S.T. 794, T.I.A.S. No. 4780, 402 U.N.T.S. 71 [hereinafter cited as Antarctic Treaty]. The Treaty has been in force since 1961. It was signed by thirteen countries, including the United States, Japan, and the USSR.

139. Article IX of the Antarctic Treaty requires the contracting parties to meet regularly to formulate and recommend measures for, among other things, the preservation and conservation of the resources of the Antarctic. Antarctic Treaty, *supra* note 138, art. IX.

140. Antarctica Measures in Furtherance of Principles and Objectives of the Antarctic Treaty, July 24, 1961, 13 U.S.T. 1349, T.I.A.S. No. 5094.

141. Measures in Furtherance of Principles and Objectives of the Antarctic Treaty, July 28, 1962, 14 U.S.T. 99, T.I.A.S. No. 5274.

142. Measures in Furtherance of Principles and Objectives of the Antarctic Treaty, June 2-13, 1964, 17 U.S.T. 991, T.I.A.S. No. 6058.

143. Measures in Furtherance of Principles and Objectives of the Antarctic Treaty, Nov. 3-18, 1966, 20 U.S.T. 614, T.I.A.S. No. 6668.

These guidelines were refined in 1968, and have not been modified since then. Although they continue to be voluntary,¹⁴⁴ a number of protectionist changes were made. The MSY concept was exchanged for Optimum Sustainable Yield,¹⁴⁵ which generally permits fewer animals to be taken than MSY.¹⁴⁶ Other species were accorded full protection,¹⁴⁷ and a closed season was established.¹⁴⁸ Protected zones and sanctuaries were created,¹⁴⁹ and specific numerical quotas were mandated for the Crabeater, Leonard, and Weddell seals.¹⁵⁰

A separate international convention specifically for the protection of Antarctic seals was negotiated on February 11, 1972.¹⁵¹ The Convention for the Conservation of Antarctic Seals states as its objectives the "protection, scientific study, and rational use of Antarctic seals, and to maintain a satisfactory balance within the ecological system."¹⁵² The Convention prohibits the killing of seals except in accordance with its terms¹⁵³ and requires the passage of appropriate domestic legislation by the contracting parties.¹⁵⁴ Signatories include all twelve of the original Antarctic Treaty parties.¹⁵⁵ Five nations, including the United States, have ratified the 1972 Treaty,

144. Measures in Furtherance of Principles and Objectives of the Antarctic Treaty, Nov. 29, 1968, 24 U.S.T. 1793, T.I.A.S. No. 7692.

145. *Id.* Recommendation V-7 and Annex 1 to Recommendations.

146. Scarff, *supra* note 5, at 394. Neither of the documents referred to in notes 143 and 144, *supra*, contains definitions of these terms, which are sometimes used interchangeably. See note 193, *infra*. However, the change was probably meant to have a substantive effect.

147. The Ross Seal, Elephant Seal, and fur seals of the genus *Arctocephalus* should not be taken at all except in an emergency or in accordance with a permit. Measures in Furtherance of Principles and Objectives of the Antarctic Treaty, *supra*, note 144, at Annex 1, para. 4. See Annex 1, para. 5, regarding the prohibition against taking Weddell Seals over one year old.

148. *Id.* Annex C.

149. *Id.* Annex B.

150. *Id.* Annex A, Permissible Catches.

151. Convention for the Conservation of Antarctic Seals, Feb. 11, 1972, 11 INT'L LEGAL MAT. 251 (1972) [hereinafter cited as 1972 Antarctic Convention]. The Convention applies to all waters south of sixty degrees South Latitude, and to six types of seals: Southern Elephant Seal, Leopard Seal, Weddell Seal, Crabeater Seal, Ross Seal, and Southern Fur Seal. *Id.* art. 1. The treaty, however, is not yet effective. See text accompanying note 156 *infra*.

152. 1972 Antarctic Convention, *supra* note 151, Preamble.

153. *Id.* art. 2, para. 1.

154. *Id.* art. 2, para. 2.

155. The United States, Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, the USSR, South Africa, and the United Kingdom are signatories to this Convention. 76 DEP'T STATE BULL. 135 (1977).

but two more must ratify before it can become effective.¹⁵⁶

The Convention includes an Annex that specifies in detail regulations regarding the taking of Antarctic seals.¹⁵⁷ The Annex presently provides absolute protection for three species¹⁵⁸ and sets numerical kill limits for three others.¹⁵⁹ It also provides for both a closed season¹⁶⁰ and specially protected sealing zones,¹⁶¹ and requires scientific input by the Scientific Committee for Antarctic Research.¹⁶² Finally, the Annex attempts to ensure that humane methods are used to take the seals.¹⁶³

Two substantial weaknesses mark the 1972 Convention's protective scheme. The most serious flaw is that it is not yet in force.¹⁶⁴ Furthermore, it lacks a strong enforcement mechanism.¹⁶⁵ Despite these difficulties, the Convention for the Conservation of Antarctic Seals is exceptional in its explicit recognition of ecological values and its liberal protective measures. Moreover, it represents a virtually unprecedented instance of intergovernmental regulation *before* commercial use begins on a large scale and *before* a particular species becomes threatened.

156. The other four nations are France, Norway, South Africa, and the United Kingdom. *Id.*

157. Any party may propose amendments to the Annex, which become effective if there is no objection within 120 days. If a party objects, the matter is considered at the next meeting of the parties. If two-thirds of the parties approve the amendment at the meeting, it becomes effective for the approving parties. The objecting parties are not bound by the amendment. 1972 Antarctic Convention, *supra* note 151, art. 8.

158. These species are: Ross Seal, Elephant Seal, and Fur Seals of the genus *Arctocephalus*. *Id.* Annex 2.

159. These quotas are lower than those established by the voluntary guidelines to the Antarctic Treaty of 1959, discussed in text accompanying note 144 *supra*. Under the 1968 voluntary guidelines to that Treaty, the permissible kills were: 200,000—Crabeater seals; 15,000—Leopard seals; 10,000—Weddell seals. Under the Annex to the 1972 Antarctic Treaty, the permissible kills are: 175,000—Crabeater seals; 12,000—Leopard seals; 5,000—Weddell seals. *Id.* Annex 1.

160. *Id.* Annex 3.

161. *Id.* Annex 4, 5.

162. *Id.* Annex 6. Scientific input is to be provided by the Scientific Committee on Antarctic Research (SCAR). *Id.* art. 5. SCAR, an arm of the International Council of Scientific Unions, expressed its willingness to carry out the tasks requested of it in this 1972 Convention. *Id.* Preamble.

163. *Id.* Annex 7.

164. *See* text accompanying note 156 *supra*.

165. Enforcement is largely a matter of meetings and consultation. 1972 Antarctic Treaty, *supra* note 152, art. 6. Coggins, *Legal Protection for Marine Mammals*, 6 ENV'T L. 1, 6 (1975).

Another factor hampering the effort to protect Antarctic seals is the difficulty in obtaining necessary data about them. For example, unlike the Pribilof seals, Antarctic seals do not concentrate their breeding at land rookeries; it is therefore more difficult to census the stocks accurately. Scarff, *supra* note 5, at 333 n.16.

C. *Polar Bears*

The protection accorded to polar bears under the United States Marine Mammal Protection Act,¹⁶⁶ has not prevented serious depletion of their numbers.¹⁶⁷ To address this problem, five nations entered into the Agreement on the Conservation of Polar Bears in 1973.¹⁶⁸ The Agreement prohibits the hunting, killing or capturing of polar bears and obligates the parties to take appropriate action to protect the ecosystem of polar bears.¹⁶⁹ It also bans the importation of any polar bear products and allows individual parties to adopt even more stringent controls.¹⁷⁰

However, exceptions to the Agreement's prohibitions dilute its potency. Polar bears taken by local people using traditional methods in the exercise of traditional rights,¹⁷¹ as well as polar bears taken "wherever polar bears might have been subject to taking by traditional means by local people . . ." are excluded from the auspices of the Act.¹⁷² These broad exceptions have the potential to undercut much of the protection granted by the Agreement. Their impact may be limited, however, by the Agreement's preclusion of the use of aircraft and motorized vehicles for any takings.¹⁷³

D. *Other International Conventions*

One recent international effort attempts to conserve wildlife through the indirect means of regulating international trade in the products of endangered animals. This approach is embodied in the Convention on International Trade in Endangered Species of Wild Fauna and Flora,¹⁷⁴ which entered into force in 1975. Its basic purpose is to cut off trade outlets for products of designated species

166. 16 U.S.C. § 1371 (1974). See text accompanying note 207 *infra*.

167. The USSR has completely banned their taking since 1964, but they have been hunted relentlessly in other countries by airplane and snowmobile. The present world population of polar bears is estimated at less than 10,000. Larsen, *supra* note 26, at 296.

168. Agreement for the Conservation of Polar Bears, done Nov. 15, 1973, T.I.A.S. No. 8409. The agreement entered into force on November 1, 1976.

169. *Id.* arts. I, III, VI.

170. *Id.* arts. V, VI.

171. *Id.* art. III, para. 1(d).

172. *Id.* art. III, para. 1(e). There are three other exemptions to the Agreement's prohibitions. They are all exceptions for scientific and conservation purposes. *Id.* art. III, paras. 1(a)-(c).

173. *Id.* art. IV.

174. Int'l Convention on Flora and Fauna, note 9 *supra*. By 1978 the Convention had been ratified by 34 nations, including the United States, and signed by 30 others.

of wild fauna and flora, including certain species of marine mammals, and thereby decrease the incentive to procure those species.

The Convention strictly regulates the importation and exportation of species of flora and fauna named in its Appendices.¹⁷⁵ Appendix I lists those species threatened with extinction. Commercial trade in these species is absolutely prohibited, and the Convention mandates strict controls to insure that non-commercial trade will not be detrimental to the survival of the species.¹⁷⁶ Appendix II lists species which, though not presently threatened with extinction, may become so unless trade is tightly regulated. These species are subject to less rigid, but still substantial controls.¹⁷⁷ The Convention also safeguards geographically isolated stocks regardless of their world-wide status as a species.¹⁷⁸ This is an especially valuable provision, because it protects ecosystems as well as individual species.¹⁷⁹

The Convention on International Trade in Endangered Species of Wild Fauna and Flora is a laudable endeavor for it represents the only example of large scale international cooperation to conserve living resources that is based upon ecological, aesthetic, and moral grounds, rather than economic utility. Nevertheless, significant infirmities attenuate its potential. First, while there can be no general reservations¹⁸⁰ from the Treaty provisions,¹⁸¹ a nation can

175. *Id.* art. III, para. 2. Meetings of the contracting parties are held every two years to review progress and to consider amendments to the Appendices. Amendments are adopted by a two-thirds vote of the parties, and can be adopted either at regular meetings or through a notification procedure. *Id.* art. XV.

176. *Id.* art. III, para. 3(c). Appendix I lists a number of marine mammals: six species of whales; two species of seals; the Southern Sea Otter; the River Dolphin.

177. *Id.* art. IV, paras. 2-6. The exportation of any specimen of a species included in Appendix II requires the prior grant and presentation of an export permit, such grant being subject to the provisions of Article IV. Appendix II lists four species of seals, and the polar bear.

178. "Species" is defined for purposes of the Convention as "any species, subspecies, or geographically separate population thereof." *Id.* art. I(a).

179. The parties are free to adopt more stringent measures, such as total prohibition of the importation and exportation of endangered species. *Id.* art. XIV. See note 183 *infra*.

180. A "reservation" to a treaty or other international agreement is "a unilateral statement, however phrased or named, made by a State, when signing, ratifying, acceding to, accepting, or approving a treaty, whereby it purports to exclude or to vary the legal effect of certain provisions of the treaty in their application to that State." *Vienna Convention on the Law of Treaties*, Art. II.1(d), U.N. Doc. A/CONF. 39/27 (1970). The Int'l Flora and Fauna Convention, unlike many other conventions, deals specifically with those reservations that are permissible and those that are not. See Reservations to the Convention on the Prevention and Punishment of the Crime of Genocide, I.C.J. 15 (1951).

181. Int'l Flora and Fauna Convention, *supra* note 9; art. XXIII, para. 71.

enter a specific reservation with regard to any species included in Appendices I, II, or III.¹⁸² Second, two major nations, Japan and the People's Republic of China, have not signed. Third, the absence of an effective enforcement mechanism is a major deficiency. Finally, the treaty is weak in that it restricts only international trade and not domestic depletion.¹⁸³ Though a commendable effort in international cooperation, the Treaty is inadequate to deal with today's problems.

Four Conventions were adopted in 1958¹⁸⁴ on the Law of the Sea, but they provide only a modicum of protection for marine mammals. One, the Convention on the High Seas,¹⁸⁵ guarantees freedom of the high seas, including the freedom to fish, to both coastal and non-coastal states.¹⁸⁶ It restricts that freedom only by obligating each contracting state to give "reasonable regard" to the interests of other contracting states.¹⁸⁷ This vague provision, however, does not link restraints on fishing to the protection of those species threatened with extinction and is therefore of dubious value to marine mammal conservationists.

The Convention on the Territorial Sea and the Contiguous Zone,¹⁸⁸ the second 1958 Convention, provides for coastal state sovereignty over its territorial sea and the contiguous zone,¹⁸⁹ thereby freeing coastal states to accord protection to marine mammals found in these waters. However, because many marine mammals are highly migratory¹⁹⁰ and often occupy the coastal zones of more than one nation or the high seas, any action by an individual state would be largely ineffectual. Moreover, the failure of the

182. Until a party withdraws its reservations, it will be treated as a state not a party to the Convention with respect to trade in the particular species, or parts or derivatives specified in such reservation. *Id.* art. XXIII, para. 3.

183. The Convention does not, however, affect the rights of the parties to adopt legislation dealing with domestic depletion. *Id.* art. XIV, para. 1(b).

184. The fourth Convention on the Law of the Sea adopted in 1958 will not be discussed here. It is the Convention on the Continental Shelf, *done* Apr. 29, 1958, 15 U.S.T. 471, T.I.A.S. No. 5578, 499 U.N.T.S. 311.

185. Convention on the High Seas, *done* Apr. 29, 1958, 13 U.S.T. 2312, T.I.A.S. No. 5200, 450 U.N.T.S. 82. This Convention purports to codify the rules of international law relating to the high seas. *Id.* Preamble. It has been ratified by fifty-five nations, including all of the major whaling nations, except Peru, Chile, Norway, and South Korea.

186. *Id.* art. II.

187. *Id.*

188. Convention on the Territorial Sea and Contiguous Zone, *done* Apr. 29, 1958, 15 U.S.T. 1606, T.I.A.S. No. 5639, 516 U.N.T.S. 205.

189. *Id.* arts. 1, 2, 24.

190. *See* text accompanying note 8 *supra*.

Convention to set the breadth of the territorial sea and contiguous zone inhibits the conservation measures of any state. A more efficacious scheme would *require* individual states to enact protective measures.

The Convention on Fishing and Conservation of Living Resources of the High Seas¹⁹¹ is the 1958 Convention most closely related to marine mammal protection. Its preamble recognizes the need to protect on an international level living resources of the seas from exploitation. Unfortunately, each state's duty under the Convention to cooperate with the other states in adopting conservation measures¹⁹² is so nebulous as to be worthless. Moreover, other provisions of the Convention¹⁹³ emphasize food supply rather than their non-consumptive values of ocean resources.¹⁹⁴ The effectiveness of the Treaty for the protection of marine mammals is further undermined by the failure of major whaling states to adopt it.¹⁹⁵ Its weaknesses aside, however, the Convention served two significant functions. It introduced the right of a coastal state to im-

191. Convention on Fishing and Conservation of Living Resources, *done* Apr. 29, 1958, 17 U.S.T. 138, T.I.A.S. No. 5969, 559 U.N.T.S. 285.

192. *Id.* art. I, para. 2. Specifically, the Convention establishes two management zones. The first is the high seas, and, according to Article III, all states whose nationals fish in any area on the high seas where the nationals of other states are not thus engaged shall adopt conservation regulations for its own nationals. Under Article IV, a state must, at any of the others' request, enter into negotiations to prescribe conservation measures. This language is impotent because it fails to impose an affirmative duty on the states to adopt regulations in the absence of a request by one of the states.

The second management zone is the area of the high seas adjacent to the territorial sea in which a coastal state shows it has a "special interest." Such a coastal state may prescribe unilateral conservation measures for this area pursuant to Articles VI and VII of the Convention. Similarly, Article VIII allows a state that does not fish in a particular area of the high seas to request implementation of conservation measures if it can prove that it has a "special interest" in the living resources found there. Although the term "special interest" is not defined, it is unlikely that it would be interpreted to indicate merely an ecological, aesthetic, or moral interest in preserving the animals, since the underlying foundation of the Convention is purely economic.

193. Convention on Fishing and Conservation of Living Resources, *supra* note 191, art. II. This provision embodies the concept of optimum sustainable yield, which may not be sound on ecological grounds. Scarff, *supra* note 5, at 392-93, 408-10. "Optimum sustainable yield" is used in the Convention synonymously with "maximum sustainable yield." See Scarff, *supra* note 5, at 391 n.373, and note 146 *supra*.

194. See text accompanying notes 26-55 *supra*.

195. It has not been ratified by Japan, the USSR, Norway, Chile, Peru, Brazil, or South Korea. In fact, only 37 of the 86 nations represented at the Conference signed this Convention.

plement conservation regulations unilaterally,¹⁹⁶ and it established the principle of international conservation of living marine resources.

The United Nations Conference on the Law of the Sea has also addressed the problem of marine mammal protection in its Informal Composite Negotiating Text (ICNT).¹⁹⁷ Article 56 of the ICNT gives the coastal state sovereign rights for the purpose of exploring, exploiting, conserving, and managing the natural resources located in the 200 mile wide area of sea adjacent to its coastline.¹⁹⁸ This area, called the "Exclusive Economic Zone" (EEZ), is inhabited by many marine mammals. The coastal state is obligated to safeguard its living resources in the EEZ by designing conservation measures and cooperating with global organizations.¹⁹⁹ If the

196. Convention on Fishing and Conservation of Living Resources, *supra* note 191, art. VII. The right of a coastal state under Article VII to adopt unilateral measures of conservation is subject to the proviso that negotiations to that effect with other states concerned have not led to an agreement within six months. Moreover, such unilateral regulations shall be valid as to other states only if the following requirements are fulfilled:

- (a) That there is no need for urgent application of conservation measures in light of the existing knowledge of the fishery;
- (b) That due measures adopted are based on appropriate scientific findings;
- (c) That such measures do not discriminate in form or fact against foreign fishermen.

Id. art. VII, para. 2. These measures shall remain in force pending the settlement of any disagreement as to their validity, *id.* art. VII, para. 3; if the measures are not accepted by the other states concerned, any of the parties may initiate the settlement procedure contemplated by Article IX. *Id.* art. VII, para. 4.

197. *U.N. Conference on the Law of the Sea*, U.N. Doc. A/CONF. 62/W.P. 10 (1977). The present conference is entitled "The Third United Nations Conference on the Law of the Sea." Its ambitious purpose is to draft a Convention codifying all significant aspects of the international law of the sea, including the crucial and complex issue of access to undersea mineral resources. At the end of the Seventh Session of this conference on September 15, 1978, Conference President H.S. Amerisinghe offered hope that a treaty might be finally concluded in late 1979.

Informal Committee II consultations revealed an increasing interest in strengthening the Conservation requirements of Article 65 on marine mammals, *see* text accompanying note 202 *infra*, and negotiators expressed cautious optimism that a stricter article will be accepted. 7 *SIERRA CLUB INT'L REP.* 2 (1978). The provision of the ICNT concerning conservation of living resources and fisheries were formulated by the Second Committee and are found in Part III, the Exclusive Economic Zone, and in Part V, the High Seas.

198. *U.N. Conference on the Law of the Sea*, U.N. Doc. A/CONF. 62/W.P. 10 art. 57 (1977).

199. *Id.* art. 61, para. 3. These measures must be sufficient to maintain the Maximum Sustainable Yield of living resources found there. In establishing such measures the coastal state is obligated to consider the effects on species associated with

coastal state does not have the capacity to harvest the entire allowable catch in its EEZ, Article 62 of the ICNT requires that other states be allowed to harvest the unutilized portion. The standard by which utilization is to be measured is "the optimum utilization of living resources."²⁰⁰

Article 64 of the Text protects highly migratory species, a category that includes most whales, dolphins, and porpoises, as well as other marine mammals. It imposes a duty on the coastal state to cooperate directly or through international organizations to insure conservation and promote the objective of optimum utilization.²⁰¹ Article 65 focuses particularly on marine mammals, and states that "[n]othing in the present Convention restricts the right of a coastal state or international organization, as appropriate, to prohibit, regulate, and limit the exploitation of marine mammals. States shall cooperate either directly or through appropriate international organizations with a view to the protection and management of marine mammals."²⁰² This provision permits a coastal state to establish regulations more restrictive than the optimum utilization standard, and even prohibit entirely the taking of marine mammals within its EEZ.

The Conference's dedication to the protection of marine mammals has been challenged²⁰³ because of its failure to create a more comprehensive and specific scheme to safeguard these species. One ground for dissatisfaction is the omission in Article 65 of both specific affirmative obligations and a definitive standard of protection. Rather, that Article merely relieves the coastal state of the duty to maximize resource utilization, and requires that states cooperate to protect and manage marine mammals. The absence in Article 65 of either a designation of the "appropriate international organizations" with which states are to cooperate, or a delineation

or dependent upon harvested species, with a view to maintaining or restoring populations of such species above levels at which their reproduction may become seriously threatened. *Id.* art. 61, para. 4. This provision is directed to relationships that exist between certain species of dolphins and tuna in which they are always found together. *See* note 7 and text accompanying notes 18-21 *supra*.

200. *U.N. Conference on the Law of the Sea*, U.N. Doc. A/CONF. 62/W.P. 10 art. 62, para. 1 (1977).

201. *Id.* This duty extends to both within and beyond the exclusive economic zone, defined in Article 57 as 200 nautical miles from the baselines from which the breadth of the territorial sea is measured. *Id.* art. 57.

202. *Id.* art. 65.

203. A. PARDO, *THE EMERGING LAW OF THE SEA* 51 (1976).

of the nature and measure of "cooperation" required, is further evidence of the ICNT's imprecision and debility. The language of Article 64, requiring states to cooperate with existing international organizations or establish such organizations, is equally ambiguous. Moreover, neither Article 64 nor 65 creates a mechanism to insure that the necessary "cooperation" takes place.

An additional criticism of the ICNT stems from its lackluster attempt to protect marine mammals from incidental catches. Article 61 requires that coastal states shall "take into consideration the effects" of such casualties "with a view in maintaining or restoring populations . . . above levels at which their reproduction may become seriously threatened."²⁰⁴ These words can be read to obligate a state to prevent only the *extermination* of a species; the provision is deficient therefore, as a conservation measure. Overall, the Convention's concern with the consumer aspects of marine mammal fisheries policy has precluded it from developing an ecologically sound approach.

IV. RECOMMENDATIONS AND CONCLUSIONS

Existing legislation and treaties extend inadequate protection to marine mammals, but are amenable to improvement. While the severity of the situation marine mammals face may require a radical solution, lasting and realistic changes will come about more rapidly if the protective mechanisms that are currently in place are strengthened rather than abolished and replaced. The United States should work aggressively through existing international organizations to promote wider global safeguards. Increased participation in and support for international conferences and programs on environmental issues such as the United Nations Environmental Program (UNEP)²⁰⁵ would benefit this cause. Also worthy of assistance is

204. *U.N. Conference on the Law of the Sea*, U.N. Doc. A/CONF. 62/W.P. 10 art. 61, para. 4 (1977). See note 199 *supra*. Article 120, dealing with marine mammals on the high seas, only refers to the language of Article 65, and is therefore of little value.

205. The charter of the United Nations Environment Program is contained at G.A. Res. 2997, 27 U.N. GAOR, Supp. (No. 30) 43, U.N. Doc. A/8730 (1973), *cited in* Scarff, *supra* note 5, at 627 n.847.

The United States should increase its financial support for the UNEP, which has a dreadfully low budget. Scarff, *supra* note 5, at 627. The United States should also continue to participate in international conferences such as the United Nations Conference on the Human Environment. Held in 1972 in Stockholm, this Conference was attended by representatives from 110 nations. It dealt with all aspects of the en-

the United Nations Food and Agricultural Organization, which has completed a great deal of basic research on marine mammals.²⁰⁶

In addition, the United States should use its influence through regular bilateral diplomatic channels to augment international awareness of its interest in protecting marine mammals,²⁰⁷ and to urge other nations to pass protective legislation similar to the United States Marine Mammal Protection Act.²⁰⁸ That Act's primary objective is to protect species populations from falling below the point where they cease to be significant functioning elements in the ecosystem.²⁰⁹ To this end, it imposes a moratorium, with a few limited exceptions, on the taking or importing of any marine mammal or any product derived therefrom.²¹⁰ In the international sphere, the Act requires the United States to initiate negotiations as soon as possible for the development of bilateral and multilateral agreements extending protection to marine mammals,²¹¹ and make consistent with the Act's purposes any existing treaty for the conservation of marine mammals to which the United States is a party.²¹²

vironment, and among its numerous recommendations was Resolution 33, a call for a ten-year moratorium on the whaling operations of all nations.

Resolution 33 was unanimously adopted, and read "It is recommended that governments agree to strengthen the IWC, to increase international research efforts, and as a matter of urgency, to call for an international agreement under the auspices of the IWC and involving all governments concerned for a ten-year moratorium on commercial whaling." U.N. Conference on Human Environment (Stockholm), U.N. Doc. A/CONF. 48/14, at 23 (June 5-10, 1972). The United States' motion for the moratorium was defeated by the IWC in its 1972 meeting by a vote of six to four, with four abstentions. Scarff, *supra* note 5, at 368.

206. Scarff, *supra* note 5, at 627-28. This organization has been suggested as the appropriate authority for assuming responsibility for marine mammals. *Id.* at 627.

207. This tactic has been proven partially successful in the effort to reduce incidental kills of porpoises. The United States has used diplomatic persuasion to convince other nations in the Inter-American Tropical Tuna Association to adopt its fishing methods designed to decrease such casualties. Nafziger, *supra* note 7, at 278-79.

208. 16 U.S.C. §§ 1361-1384 (1974).

209. *Id.* § 1361(2).

210. *Id.* § 1371.

211. *Id.* § 1378(a)(1).

212. *Id.* § 1378(a)(4). The Act also requires the Secretary of the Interior to consult with the Secretary of State to determine what modification, if any, should be made to the North Pacific Fur Seal Treaty, note 101 *supra*. The latest protocol has implemented one such modification, the requirement that humane killing methods be employed. Protocol Amending and Extending Interim Convention on the Conservation of North Pacific Fur Seals, Article X, 27 U.S.T. 3371, T.I.A.S. 8368 (1976). Further modifications will be necessary. For example, the management concept embodied in the Marine Mammal Protection Act is "optimum sustainable population" (OSP), which is more restrictive than the maximum sustainable yield (MSY) concept of the

Another legislative alternative that should be urged upon coastal nations is exemplified by the Pelly Amendment to the Fisherman's Protective Act of 1967.²¹³ This provision permits the Secretary of Commerce, upon determining that nationals of a foreign country are conducting fishing operations in a manner that diminishes the effectiveness of an international fishery conservation program,²¹⁴ to certify this fact to the President. Upon receipt of such a certificate, the President may direct the Secretary of the Treasury to prohibit the importation into the United States of any fish products of the offending country for such duration as the Secretary deems appropriate.²¹⁵

The Pelly Amendment's strength derives from its influence over offending states that are not parties to conservation agreements. For example, its reach extends to pelagic whalers who are dependent upon American markets for fish products or for whaling operations personnel.²¹⁶ Furthermore, the very threat of its invocation may convince certain offenders to cooperate after an initial transgression. Such an impact was evident when Japan and the USSR objected formally to the IWC quotas for 1973. The Secretary of Commerce certified to President Ford that the objections diminished the effectiveness of the IWC, and the threat of an embargo induced Japan to support the quotas for the following year.²¹⁷

North Pacific Fur Seal Treaty. The OSP concept mandates consideration of the optimum carrying capacity of the population and the health of the relevant ecosystem, while the MSY concept does not. Scarff, *supra* note 5, at 394. The North Pacific Fur Seal Treaty should be amended to employ the OSP concept rather than MSY.

In 1977 the Act was amended to prohibit whaling in any waters subject to United States jurisdiction, 16 U.S.C. § 1372(f) (Supp. 1978). United States jurisdiction has been extended to 200 miles as a result of the Fishery Conservation and Management Act of 1976. *Id.* § 1811.

213. 22 U.S.C. § 1978 (Supp. 1978).

214. The term "international fishery conservation program" is defined broadly to include multilateral agreements to which the United States is a party, such as the International Whaling Convention. Friedman, *supra* note 33, at 231.

215. *Id.* A proposed extension of the Pelly Amendment would apply the embargo to *all* products imported from countries that hamper marine conservation programs. H.R. 80, 94th Cong., 1st Sess. (1975). This change was proposed by Congressman Dingell (D-Mich.), former Chairman of the House Subcommittee on Fisheries and Wildlife. Another proposal, offered by Congressman Bell (R-Cal.), would limit the embargo to all products distributed by enterprises engaged in commercial whaling. Friedman, *supra* note 33, at 233. Although these proposals have been criticized as violative of existing trade agreements, Friedman, *supra* note 33, at 234-35, they demonstrate the far-reaching conservation potential of domestic legislation.

216. Friedman, *supra* note 33, at 230.

217. *Id.* at 232. It is also possible that the provision could be invoked against

The passage of new legislation should include amendments to existing agreements to incorporate more forceful conservation values. One such agreement, the International Whaling Convention, should be revised to strengthen its protective capacity.²¹⁸ The revision should not, however, abolish the IWC as the primary protective vehicle of the International Whaling Commission, despite arguments that a new regulatory body ought to be constructed.²¹⁹

non-IWC whaling countries such as Peru and South Korea, whose refusal to join the IWC diminishes its effectiveness. Letter from Robert M. White, Administrator, Nat'l Oceanic and Atmos. Admin., U.S. Dep't of Commerce, to Dr. Victor Scheffer, Chairman, Marine Mammal Commission (Jan. 8, 1976), *quoted in* Scarff, *supra* note 5, at 604 n.703.

218. At present, three drafts for a Protocol amending the Convention have been submitted; however, action on these proposals awaits an outcome of the Law of the Sea Conference, in the hope that some guidance will be forthcoming from that forum. The eighth session of the Third U.N. Law of the Sea Conference convened in Geneva on March 19, 1979. 7 *Sierra Club Int'l Rep.* 2 (Sept. 29, 1978).

219. See "No Man Apart," a publication of the Friends of the Earth, *cited in* Walsh, *supra* note 57, at 163.

Those who would prefer a new organization for the protection of marine mammals claim that the institutional momentum of the IWC has stalled, and that a new agency, with a breath of fresh optimism and manpower, would accomplish more. They argue that if such an agency were established, transfer of the information held by the IWC and the International Whaling Statistics Bureau, supplemented by the system described in text accompanying note 223 *infra*, would probably achieve scientific parity with the IWC. Finally, it is maintained that the IWC is unnecessarily accommodating to the whaling industry, and that its recent success in protecting whale stocks is due more to IWC responsiveness to unilateral conservation efforts undertaken by the United States and other countries, such as consumer boycotts and threatened trade sanctions, than to its ability to deal with whaling nations' concerns.

Suggestions for a new organization range from one established pursuant to the Law of the Sea Conference to the proposal by the Friends of the Earth for an independent body with no vested interests in whaling that would make decisions reflecting the interests of all nations concerned about the ecosystem. Walsh, *supra* note 57, at 163. Several other groups have suggested that the United Nations administer a separate international cetacean convention, perhaps under its environmental program. A. KOERS, INTERNATIONAL REGULATION OF MARINE FISHERIES, 268 (1973) [hereinafter cited as KOERS]. Common to all proposals is a desire to prevent nonsignatories from taking advantage of the quotas or moratoria to which signatories must conform. In order to eliminate the incentive for much whaling by nonsignatories it has been recommended that trade in all of the products of the great whales be prohibited. Friends of the Earth, *No Man Apart*, *cited in* Walsh, *supra* note 57, at 163-64. The effectiveness of this suggestion depends, however, upon the questionable assumption that nonsignatories are substantially dependent upon exportation of whale products. Friends of the Earth, *No Man Apart*, *cited in* Walsh, *supra* note 57, at 163-64. Consequently, Albert Koers proposes that if fishing states abuse the rights of a world community by not taking effective conservation action, they should be forced to abdicate control over marine resources to an organization in which all nations are represented. KOERS, *supra* note 219, at 268.

Three reasons support retention of the IWC. First, the IWC has acquired an institutional momentum over the thirty years of its existence. Such momentum would be absent in a new agency. Second, retaining the IWC would avoid duplication of effort. Its expertise is unique, due to the small number of cetologists and the limited amount of scientific information available.²²⁰ A new or additional agency would necessarily rely upon these same resources, and thus would be in no better position to innovate than the IWC. Third, although a new agency might be less responsive to the whaling industry, the effectiveness of the IWC as a conservation agency is in part due to this very attitude. Whaling nations might distrust a regulatory body composed of a nonwhaling majority, and decide not to participate at all.

A revised IWC must operate from a broader perspective. It must extend to its scope to include all cetaceans²²¹ and amend its statement of purposes to consider not only consumptive uses of cetaceans, but also those values that contribute in other ways to the welfare of mankind.²²² In addition, the Commission should expand its scientific responsibility and establish new quotas on the basis of scientific data obtained from mandatory investigations undertaken by the whaling nations. Such information would be published by the Commission and made available to the public.²²³ Another improvement would be a provision in the Whaling Convention restricting the transferability of whaling equipment from IWC nations to nonmember whaling nations. This would deter IWC nations from illicit whaling under flags of convenience. Furthermore, it is vital that enforcement provisions be strengthened. The International Observer Scheme²²⁴ should be incorporated into the Con-

220. Scarff, *supra* note 5, at 618-26.

221. This has been recommended by the IWC Science Committee. *Id.* at 374.

222. U.S. Proposal for an Int'l Cetacean Convention, Draft Protocol to the Int'l Whaling Comm., Preamble, para. 2, in Scarff, *supra* note 5, at 618 n.789. This proposal enumerates ecological, recreational, and scientific values, as well as ethical considerations. Scarff, *supra* note 5, at 620; Friedman, *supra* note 33, at 225. The proposal also recommends provisions regarding the humane killing of marine mammals, as well as provisions relating to the entire marine ecosystem. Scarff, *supra* note 5, at 621.

223. Scarff, *supra* note 5, at 624.

224. This is the procedure, adopted by the IWC in 1972, by which observers from one nation accompany another nation's whaling vessels and station themselves at various shore stations of another nation. This procedure insures compliance with IWC quotas and regulations. Observers report directly to the IWC. *See* text accompanying note 82 *supra*.

vention itself, coupled with restrictions on the ability of nations to relieve themselves of the duty to comply with IWC regulations.²²⁵ Finally, certain proscriptions on IWC activity should be abolished, such as those requiring consideration of the interests of the consumers of whale products and the development of the whaling industry.²²⁶ These steps would increase the viability of the IWC as a conservationist organization.

The Informal Composite Negotiation Text of the Law of the Sea Conference²²⁷ also needs improvement. Specifically, the provisions of Article 247 dealing with marine scientific research should be substantially revised. Paragraph two of this Article requires coastal state approval for any scientific research activities within the exclusive economic zone and on the continental shelf of the coastal state. While paragraph three requires coastal states to give their consent "in normal circumstances," this language is sufficiently vague to leave room for much discretion. Moreover, estimates indicate that the approval process may take as long as one year.²²⁸ Article 247 should therefore be amended to provide that no approval is necessary in the exclusive economic zone or on the Continental Shelf for marine research activities performed exclusively to increase scientific knowledge.²²⁹

Another essential revision would involve reorganizing various provisions of the ICNT in order to improve the protective status of marine mammals. Presently, Article 65 of the ICNT permits coastal states or international organizations to require more protective standards for the taking of marine mammals than that of optimum economic utilization. Marine mammals, however, are treated under Article 64, which employs the consumption-oriented concept of optimum economic utilization. It is recommended, therefore, that marine mammals be excluded from Article 64. They should also be specifically exempted from the provisions of Article 119, dealing

225. See text accompanying note 91 *supra*.

226. See text accompanying note 87 *supra*.

227. See text accompanying note 197 *supra*.

228. Vysotsky, *Freedom of Scientific Research in the World Oceans*, 6 GA. L. REV. 7, 19 (1976). See also A. PARDO, *THE EMERGING LAW OF THE SEA* 51 (1976).

229. Consent would still be necessary to conduct such activities in the territorial waters of the state. Furthermore, the coastal state would have the right to inspect vessels conducting such activities in its exclusive economic zone and continental shelf, and to require compliance with reasonable regulations designed to insure that the research does not involve the exploitation of resources.

with the conservation of living resources of the high seas, which presently carries the concept of maximum sustainable yield.²³⁰

Furthermore, a new article should be added between Articles 64 and 65 establishing an International Commission on Marine Mammals, which would have as its purpose the conservation and protection of marine mammals on a global basis. According to this new article, each state that is a party to the Law of the Sea Convention would have one representative on the Commission. Within one year after the Convention enters into force, the Commission would make recommendations to the contracting parties, and in doing so it would consider both high and low consumptive uses, recognizing economic as well as aesthetic, recreational, and social values of marine mammals.²³¹ No more than one year after such recommendations are submitted to the parties, their representatives should convene in order to discuss and adopt measures that would accomplish the Article's goal.

The present Article 65 should be amended to reflect this additional article. The first sentence of the revised Article 65 should read that, "[n]othing in the present Convention restricts the rights of a coastal State or international organization to *adopt stricter provisions to prohibit, regulate and limit the exploitation of marine mammals than are required by any provisions adopted pursuant to this Convention.*"²³² Article 120 dealing with marine mammals found on the high seas should either be deleted or written to refer merely to the proposed Article.

If the new article establishing the International Commission on Marine Mammals is established and its recommendations adopted by the contracting parties, a provision should be included in the Law of the Sea Convention prohibiting the importation by a contracting party of any marine mammal or product derived therefrom, from any noncontracting party. Alternatively, another article

230. MSY, as mentioned in note 95 *supra*, is not an ecologically sound concept.

Article 61, para. 4 should be further revised to require that all states use the best available methods in harvesting species in order that incidentals kills of marine mammals might be reduced.

231. If a new article is not adopted, it is suggested that a provision be added to the ICNT requiring those contracting states that are not members of the International Whaling Convention to adhere to the quotas and prohibition of that Convention. In addition, the Whaling Convention should be amended to include jurisdiction over small cetaceans, and perhaps all marine mammals.

232. The underlined segments signify amended and additional language.

could be added prohibiting any contracting party from importing any marine mammal or products derived therefrom if the animal or product had been taken in violation of any law established by any coastal state or any international organization for the protection of marine mammals. The boycott would apply whether or not the violating state recognizes the authority of the international organization. Finally, an article to the Convention draft should be added requiring each state to adopt legislation making it an offense for any of its flag vessels or nationals: (1) to violate any law or regulation established by any coastal state for the protection of marine mammals in waters under its jurisdiction; (2) to violate any regulation adopted by any appropriate international organization for the protection of marine mammals; and (3) to violate any provision of the Law of the Sea Convention or regulation promulgated pursuant thereto established for the protection of marine mammals.

Human dominion over the Earth is not a license to destroy with impunity, but rather a trusteeship for future generations and a responsibility to all life. The international community has failed in its responsibility to marine mammals. It has viewed them merely as an economic resource, and even in this limited realm it has used them unwisely. The establishment of one international organization with full responsibility for marine mammal conservation and a larger perspective than economic gain, is an ecological, economic, and moral imperative.

AUTHORS' NOTE

After this article was completed, the International Whaling Commission met in London. One result of this July, 1979 meeting was a development that is both important and encouraging. An indefinite moratorium was imposed upon all pelagic whaling, with the single exception of the Minke Whale. This moratorium effectively precludes any IWC member nation from killing any species of whale, except the Minke, through factory ship operations on the high seas.

The only votes cast against the moratorium were by Japan and the Soviet Union, the only nations engaging in large scale factory ship operations. While both nations have the power under the treaty to formally object to the moratorium within 90 days after its adoption, and thereby relieve themselves of their obligation to comply, they have not, as of October 1, 1979, done so. Furthermore, Maxine McCloskey, a member of the U.S. delegation to the

IWC thinks it is unlikely that they will object, fearing the invocation of sanctions by the United States under the Pelly Amendment, which has been further strengthened since this article was written by amendments currently awaiting Presidential signature. *WHALE CENTER NEWSLETTER*, Fall 1979, p. 1, 10.

The moratorium, however significant as a first step, does not resolve the problem of international whaling, let alone the depletion of marine mammals generally. The existence of whaling by non-members of the IWC, the transfer of technology and ships from IWC members to non-members, and the purchase of whale products from such non-members are still of grave concern. Further, the moratorium does not prohibit coastal whaling operations which may be increased to compensate for the loss occasioned by the factory ship moratorium. Thus, the force of the suggestions and recommendations made in this article is not lessened by this admittedly significant achievement.