

# LEGAL ASPECTS OF WHALE WATCHING IN NORTH AMERICA

by

Mark J. Spalding, J.D., M.P.I.A.<sup>1</sup>

and

Jared E. Blumenfeld, LL.B., LL.M.<sup>2</sup>

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<sup>1</sup> **Mark J. Spalding** is an international environmental policy and law consultant/attorney in Del Mar, California. He is the Chair of the California State Bar, Environmental Law Section's International Environmental Law Committee. Mark is an Adjunct Professor at the University of San Diego's School of Law, a Guest Lecturer at the Graduate School of International Relations and Pacific Studies at UCSD, and a Guest Scholar at the Center for US-Mexican Studies at UCSD. He is the Executive Editor of the *Journal of Environment and Development* at UCSD. His research has been widely published at the international level and in local publications.

<sup>2</sup> **Jared E. Blumenfeld**, is International Legal Counsel with the International Fund for Animal Welfare (IFAW).

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by Mark J. Spalding and Jared E. Blumenfeld<sup>3</sup>

## **1. Introduction**

This paper will examine the current laws, regulations and guidelines governing whale watching in North America (Canada, Mexico and the US ), and will compare these legal regimes to the international guidelines set by the IWC. The paper will also examine the history and application of the North American laws, regulations and guidelines governing whale watching. Based on this analysis, this paper proposes a model whale watching code which might be adopted by any nation. Finally, a bibliography of reference materials is provided.

Whale watching has become a major industry around the world. Whale watching, as a non-consumptive practice, can be a model of sustainable development, which does not reduce the available natural resource for present or future generations. Unfortunately, the human interest can be too much and some efforts to get close result in harassment of the whales. There are potential short term (changes in behavior), medium term (changes in distribution and migratory routes) and long term (changes in reproductive success) effects which may result from this human attention (Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, 1997 at 4). Because of this, we have begun to see the development of regulations and guidelines related to whale watching which are intended to protect the whales which are being observed.

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Whale watching is conducted in 295 communities in 65 different jurisdictions worldwide; in 1994 an estimated 5.4 million people spent more than \$700 million on this kind of ecotourism. Growth in the number of whale watchers has been estimated at 10% per year and growth in revenues at over 16% per year. Whale watching plays a substantial economic role in several North American communities, including among others, Provincetown, Massachusetts; Tofino, British Columbia; Telegraph Cove, British Columbia; and Friday Harbor, Washington. The main species watched are Humpback Whales, Gray Whales, Northern and Southern Right Whales, Blue Whales, Minke Whales, Sperm Whales, Short-finned Pilot Whales, Killer Whales, and Bottlenose Dolphin (Hoyt, 1995 at 3). Commercial whale watching began in the US, where two-thirds of all whale watching still takes place. It is for this reason that this paper demonstrates a heavier emphasis on the US. However, whale watching in South and Central America has been growing at rates of over 100% per year (Hoyt, 1995 at 4).

## TABLE - A Few Definitions

In order to illuminate certain common terms of art related to whale watching, and to select and clarify legal terms that bridge the differences between civil law and common law systems, we provide the following few definitions.

whale watching	watching cetaceans in the wild, includes watching from a platform (e.g. a ship, cliff, or an aircraft), or swimming with cetaceans
commercial whale watching	watching whales from a commercial, rather than private/recreational platform
research whale watching	the conduct of non-lethal whale research, includes behavior observation and photo identification
laws	legislation, usually passed by a legislative branch and approved by an executive branch which must be obeyed and followed by citizens subject to sanctions or other legal consequences
regulations	specific proscriptions of human conduct issued by government agencies to implement laws
guidelines	similar to regulations, sometimes without an underlying basis in law, and usually without the requirement that they be obeyed and followed except by voluntary compliance
harassment	any act that results in an indication that a whale has been disturbed in pursuing its natural functions or prior activities (e.g. turn aways, long silences, interrupted dive sequences, discontinuance of mating)

## 2. Whale Watch Law in North America

The legal aspects of whale watching vary by species and by jurisdiction. Unfortunately, the laws, regulations and guidelines focus on commonly watched baleen and smaller, toothed whales, and sometimes do not have a solid scientific basis. In some jurisdictions there are simply no codes of conduct; in others there are unwritten

ad-hoc rules of behavior (Montecastello Di Vibio Workshop Report, 1996). Generally speaking all of the laws, regulations and guidelines seek to avoid instances of threatening orientations of approach, rapid approaches, disturbing noises, or any sudden changes in noise or direction of the whale watching platform. The rationale for this paper is to make whale watching safe for whales for the long term so that whale watching may be enjoyed by present and future generations. If harassment occurs, feeding may be disrupted, anxiety may be caused, and if mating is disturbed, conception may not occur.

## **2.1. The United States of America**

Whale watching in the US occurs on both the Atlantic and Pacific coasts and in the Gulf of Mexico. Whale watching is also frequent in the Hawaiian Islands. In other words, a number of different whale habitats and species are found within US waters. This has complicated the quest for a unified statute relating to whale watching.

### **2.1.1. Federal Laws**

The two key federal statutes that apply to whale watching activity are: the Marine Mammal Protection Act of 1972 (“MMPA”) and the Endangered Species Act (“ESA”), both of which prohibit the “taking” of certain species (marine mammals, including all whales, in the case of the MMPA, and designated species of whales in the case of the ESA). “Take” is defined under the MMPA to include harass, hunt, capture or kill, or any attempt to do so; “take” is further defined by regulation to include “the restraint or detention of a marine mammal, no matter how temporary”; and “the negligent or intentional operation of an aircraft or vessel, or the doing of any other negligent or intentional act which results in the disturbing or molesting of a marine mammal.” While exemptions to the prohibition exist under the MMPA, the National

Marine Fisheries Service (“NMFS”) asserts that whale watching is not an exempt activity. Under the ESA, “take” is defined to include harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to do so. Prohibitions on harassment and pursuit should limit the activity of whale watching vessels.

Several years ago, the NMFS attempted to promulgate standardized regulations governing whale watching on a national level; however it met with such opposition that it withdrew the proposed regulations and is now dealing with the issue regionally. This opposition asserted that a single regulation would be overbroad given different conditions, and different species’ responses to whale watch approaches. The remarkable observation, however, is that the regional guidelines and regulations are all very similar, indicating that a general national standard might have been possible afterall.

### **2.1.2. Regulations and Guidelines**

NMFS has promulgated regulations specifically to protect Humpbacks in Hawaii and North Atlantic Right Whales along the coast of New England. Regulations, rather than guidelines, have been implemented for these specific areas because the Right Whales in the North Atlantic are still an extremely endangered species, and because of numerous reports regarding vessels interfering with Humpback mothers and their calves around the Hawaiian Islands. NMFS otherwise deals with whale watching through guidelines.

With fewer than 350 individuals remaining in the North Atlantic, the northern Right Whale is the most endangered of all the large whale species. As of July 5, 1994, three key areas of the Right Whales' range within US federal jurisdiction have been

designated as critical habitat under the Endangered Species Act which affords them greater federal protections. The designated regions are:

- Cape Cod Bay, Massachusetts, a primary feeding ground and nursery used from late winter until early spring;
- Great South Channel, 45 miles southeast of Cape Cod, a primary feeding ground used from spring until early summer; and
- The Atlantic coastline and adjacent waters from the mouth of the Altamaha River in Georgia to Sebastian Inlet (south of Cape Canaveral) in Florida, the only known calving grounds, which are used from late November until early March (Corn, 1995).

In October 1994, NMFS was petitioned to establish a protection zone of 500 yards around each Right Whale. It is surmised that vessel activity, including engine noise and wakes, disturbs the whales and may adversely alter their behavior. The suggested restriction would prevent ships and individuals from approaching the whales and reduce the risk of disturbance and injury from propellers and fishing gear. The proposal is similar to, but somewhat broader than rules already in place concerning Humpback Whales. . . . However, it will likely face criticism from several sources. Commercial whale watching operators may object to a no-approach zone, since it would interfere with their ability to observe the animals. Also, shipping interests may be concerned about the zone's effect on vessel transit as well as any economic burdens created for mariners who would have to adjust their boats' courses to maintain a 500-yard distance from the whales. In addition, the practicality of obeying and enforcing such a regulation is open to question. (Corn, 1995)

The Hawaiian Humpback regulations prohibit operation of an aircraft within 1000 feet, or approach by any other means within 100 yards of any Humpback Whale; they also prohibit “disruption of the normal behavior or prior activity of a whale.”

National Marine Fisheries Service has drawn up specific guidelines for Gray Whale watching off the California Coast. These include boat and aircraft avoidance suggestions, as well as a definition of harassment as any action that “substantially disrupt[s] the normal behavior pattern of a Gray Whale” such as “a rapid change in direction or speed; escape tactics such as prolonged diving, underwater course changes, underwater exhalation; or evasive swimming patterns such as swimming away rapidly

at the surface; attempts by a female to shield a calf from a vessel or a human observer by tail swishing or by other movements to protect her calf.” (Hoyt, 1984 at 150).

Other than these geographic location and species specific regulations and guidelines, NMFS recommends a 100 yard approach limit for whale watching vessels and a 1000 feet limit for aircraft. These guidelines address only the conduct of vessels and aircraft approaching whales and do not address the situation where a whale unexpectedly appears within the limit.

In the early 1970s, Glacier Bay National Park and Preserve became widely known as the summer home of a large number of Humpbacks. By the late 1970s, the whales disappeared and are not seen as often or as consistently. For this reason the National Park Service has elaborated detailed limitations on permits and activities of vessels within Glacier Bay (Hoyt, 1984 at 135-6 and Hierta, 1991 at 26-29). These regulations prohibit approaches of less than 1/4 mile, or the pursuit of whales. They designate avoidance seasons, vessel channels, and speeds within Glacier Bay.

The US regulatory enforcement and guidelines compliance experience is limited. NMFS is not capable of watching each and every vessel at all times, and thus must rely on self regulation and reporting. It places its greatest efforts on education and making sure all would-be whale watchers know about the laws, regulations or guidelines.

**TABLE - Federal Laws and Regulations**

Marine Mammal Protection Act, 16 U.S.C. § 1361 <u>et seq</u> : 16 U.S.C. § 1371 (moratorium on taking of marine mammals; exception includes permitting for scientific research, public display, photography for educational or commercial purposes) 58 Fed. Reg. 53320, 53326 (NMFS believes the permissible exceptions to the moratorium do not include whale watching, and that such activity must be conducted so as not to “take” the animals) 16 U.S.C. § 1362 (take defined) 50 C.F.R. § 18.3 (expanded definition of take)
Endangered Species Act, 16 U.S.C. § 1531 <u>et seq</u> :

16 U.S.C. § 1532 (take defined)  
 16 U.S.C. § 1538 (unlawful to take any endangered species)  
 50 C.F.R. § 17.11(h) (Blue, Bowhead, Finback, Gray, Humpback, Right, Sei and Sperm listed as endangered or threatened)

NMFS Regulations:  
 50 C.F.R. § 222.31 (Hawaiian Humpbacks)  
 50 C.F.R. § 222.32 (North Atlantic Right Whales)

### 2.1.3. State Laws

Several coastal states have enacted endangered species laws which, paralleling the federal statute, prohibit the “taking” of designated species of whales. The definition of “taking” under these laws may similarly include not only the more obvious activities of hunting, killing and harming, but also pursuit and harassment of whales. California also expressly prohibits the taking of marine mammals except in conformity with the MMPA and federal regulations. Thus, whale watching activity may be regulated by state endangered species laws, as well as the federal MMPA, ESA and NMFS regulations or guidelines.

Only one state appears to have promulgated regulations specifically directed at the impacts of whale watching on whales. Massachusetts has a 500-yard no-approach regulation in place (322 Code of Massachusetts Regulations 12.01-12.05). Massachusetts also requires avoidance measures and imposes a general prohibition on the “harassment” or “harm” of any Right Whale. “Harassment” includes approach, pursue, chase, follow, interfere with, observe, threaten, harm in any fashion, turn in any manner to intercept, or attempt to engage in any such conduct.

**TABLE - State Laws and Regulations**

California	Cal. Fish & Game Code § 2080 (no person shall take any endangered species) Cal. Fish & Game Code § 86 (take defined to include hunt, pursue, catch, capture or kill, or attempt to do so)
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	<p>Cal. Fish &amp; Game Code § 4500 (unlawful to take any marine mammal except in conformity with MMPA and federal regulations)</p> <p>Cal. Fish &amp; Game Code § 4700 (Pacific Right Whale is protected and may not be taken at any time)</p> <p>Cal. Penal Code § 653p (violation of ESA or MMPA or any federal regulation is violation of California law)</p>
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Hawaii	<p>Haw. Rev. Stat. 195D-4(a) (reference to list of endangered species under federal ESA)</p> <p>Haw. Rev. Stat. 195D-4(e)(2)(prohibiting the take of endangered species)</p> <p>Haw. Rev. Stat. 195D-2 (take defined to include harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect)</p>
Maryland	<p>Md. Nat. Resources Code Ann. § 10-2A-05 (unlawful to take endangered species)</p> <p>Md. Nat. Resources Code Ann. § 10-2A-01(j) (take defined to include harass, harm, pursue, hunt, shoot, wound, kill, rap, capture, collect, or attempt to do so)</p>
Massachusetts	<p>Mass. Ann. Laws ch. 131A, § 1 (take defined to include harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to do so)</p> <p>Mass. Ann. Laws ch. 131A, § 2 (prohibits taking of any endangered species)</p> <p>321 Code Mass. Regs. § 10.60 (Sperm, Fin, Sei, Blue, Humpback and Northern Right Whales are endangered species)</p> <p>322 Code Mass. Regs. § 12.00 <i>et seq.</i> (protection of northern Right Whales from vessels and aircraft)</p>
New Jersey	<p>N.J. Stat. § 23:2A-6 (unlawful to take species identified under state or federal law as endangered)</p> <p>N.J. Stat. § 23:2A-3 (take defined to include harass, hunt, capture, kill, or attempt to do so)</p> <p>N.J. Admin. Code § 7:7E-3:38 (Sperm, Blue, Fin, Sei, Humpback and Right Whales are endangered species)</p>
South Carolina	<p>S.C. Code Ann. § 50-15-40 (unlawful to take endangered species)</p> <p>S.C. Code Ann. § 50-15-20 (take defined to include harass, hunt, capture or kill)</p> <p>S.C. Code Regs 123-150 (Atlantic Right, Blue, Bowhead, Finback, Humpback, Sei and Sperm Whales are endangered species which are unlawful to take)</p>

## **2.2. Canada**

As in the US, whale watching in Canada occurs on both the Atlantic and Pacific coasts. In addition, whale watching takes place in the far North.

### **2.2.1. Federal Laws, Regulations and Guidelines**

Section 7 of the Canadian Fisheries Act prohibits hunting cetaceans except in limited circumstances (mostly related to indigenous subsistence practices). In June 1982, the Department of Fisheries and Oceans (“DFO”) promulgated “Cetacean Protection Regulations” which purport to govern whale watching. In these regulations, the definition of hunt is made similar to “take” under US law and thus is interpreted to prohibit disturbance or harassment.

Based on the authority in the Fisheries Act as modified by the protection regulations, DFO has also formulated guidelines regarding harassment of cetaceans related to whale watching which advises against chases and against splitting up groups of whales, or mother-calf pairs. The guidelines set forth recommended distance limitations for approaches by boats and aircraft by region and species. Thus separate guidelines have been issued for the Pacific Coast, the far North and for a number of Atlantic coast regions. Approaches of up to 100 meters can be made by boats toward Killer, Humpback and Northern Right Whales, and up to 400 meters toward Beluga Whales. In addition, advice is provided on the duration of interaction, direction of approach, speed, and maneuvering of vessels when in the vicinity of whales.

Unfortunately, it has been argued that non-consumptive use does not really fit into the Fisheries Act, so neither the Act, nor DFO, have a very strong mandate for the regulation of the whale watching industry. For this reason, some additional regulation

is accomplished through Provincial business license requirements (Interview with Brian Wong of the DFO, October 1997).

Canada has no federal endangered species act and thus there is no express protection for any endangered or threatened whale population which could be used to regulate whale watching activities (Harvey, 1994).

**TABLE - Canadian Laws and Guidelines**

Fisheries Act, § 7
Department of Fisheries and Oceans Whale Watching Guidelines for Barkley Sound and Clayoquot Sound Watching whales without harassment Atlantic Regions Beluga Whales Pacific Region
Johnstone Staight Killer Whale Joint Management Committee Johnstone Straight Whale Watching Guideline

**2.3. Mexico**

Mexico rightly takes great pride in its whale protection measures. The nation was one of the first to call for protections of cetaceans in the 1930s. It also created the world's first whale sanctuary for the Pacific Gray Whale in the lagoons of the Baja California Peninsula where the grays winter, procreate and give birth to their young. Whale watching in Mexico occurs on both the Atlantic and Pacific coasts and in the Gulf of Mexico. In addition, whale watching is becoming more common in the Sea of Cortez. The greatest concentration, however, involves the congregation of hundreds of whales in the Baja California Peninsula lagoons which provide a tremendous opportunity to observe the whales close to the coast. However, the concentration of so

many whales in so little space also means that a large quantity of whales could be harassed by even a single boat (Sánchez Pacheco).

### **2.3.1. Federal Laws and Regulations**

Mexico's whale watching legislation is derived from its 1988 General Law of Ecological Equilibrium and Environment. In addition, its Fisheries Law establishes the methods necessary for the protection of marine mammals (Ley de Pesca, artículo 3, fracción V), and Mexico's penal code prohibits any harm to marine mammals (Código Penal Mexicano, artículo 254 bis) (Sánchez Pacheco).

In addition, Official Mexican Standards ("NOMs") establish regulations governing whale watching activity. The most important of these is NOM-EM-074-ECOL-1996, which revised a 1994 law on the same subject. While the new NOM covers a number of different issues, it establishes the rules regarding Gray Whale observation in the whale lagoons of Baja California Sur, including Ojo de Liebre, San Ignacio, and Magdalena Bay, as well as the protection and conservation of Gray Whale habitat.

In Baja California Sur, whale watching is limited to those companies which have applied for and been given permits. The permittees are required to comply with a set of regulations enforced by inspectors from Mexico's office of the Attorney General for the Environment ("PROFEPA"). These regulations are based on historical studies conducted by SEMARNAP's National Institute of Ecology ("INE") of whale distribution, relative abundance, and behavior, as well as the experiences of whale watching operations in these lagoons, which are part of SEMARNAP's ongoing Vizcaino Biosphere Reserve Gray Whale Program (Sánchez Pacheco). The whale watch regulations include the following:

- Designated whale watching areas which include only those portions of the lagoon in which the percentage of solitary whales (generally the males and some juveniles) exceeds the percentage of mother-calf pairs.
- A limitation on the number of boats that can be on the water at one time, and regardless of the number of the boats, a prohibition against noise which causes changes in the normal behavior of the whales.
- Defined areas of transit to reach the whale watch areas.
- A maximum speed of 10km/h in the areas of permitted whale watching to avoid harassment and collisions with whales.
- A requirement that whale watch permittees are also expected to obey protections set for the islands and lagoon environment generally.
- A requirement that operators ensure the safety of passengers. (Sánchez Pacheco)

Overall, Mexico is in an early stage of development of its whale watching regulatory system. On paper, the regulations read well and some of the best in North America. In addition, enforcement officials have expressed a strong intent to see there is compliance.

### **2.3.2. State Laws**

In addition to the federal laws which provide general authority for the regulation of human activities related to marine mammals, the state of Baja California Sur has its own General Law of Ecological Equilibrium and Environment (La Ley Estatal de Equilibrio Ecológico y Protección al Ambiente de Baja California Sur) which grants the state government broad powers to protect animals and natural resources (Sánchez Pacheco). While the authority under this law is not currently used to govern whale watching, the law may become more important as federal deregulation and delegation to state authorities progresses.

**TABLE - Mexico's Regulatory Framework**

Mexico regulates whale watching through a number of programs, laws and regulations which fall under the jurisdiction of its environmental and tourism secretariats as set forth in the table below.

Ministry	Source/Date	Articles and Sections
Secretaria de Medio Ambiente, Recursos Naturales y Pesca (SEMARNAP)	Programa de Medio Ambiente 1996-2000 4-3-96	
SEMARNAP	Programa de Pesca y Acuicultura 1995-2000 3-13-96	
SEMARNAP	Programa de Conservación de la Vida Silvestre y Diversificación Productiva en el Sector Rural 1997-2000 2-97	
SEMARNAP	Ley General de Equilibrio Ecológico y Protección al Ambiente (LGEEPA) 2-28-97	Articles 5, Sections I, II, IV, VIII and XIII, 80. Sections I, II, VII and VIII, 69, 79 Sections I, II, III, V y VI, 80 Sections V y VII, 83, 86, 89 Section X, 94 and 96
SEMARNAP	Ley de Pesca 6-25-92	Article 1, 2, 3, Section V and VI.
SEMARNAP	Reglamento de la Ley de Pesca 7-21-92	Article 70 Section I
Secretaria de Turismo (ST)	Ley Federal de Turismo 12-31-92	
ST	Reglamento de la Ley Federal de Turismo 12-31-92	

Source: Ed Ranger 1997

## 2.4. A Comparative Summary

The chart below is a summary of sections 2.1. through 2.3. of this paper. In the chart, we have attempted to set forth in a comparative manner the current state of development of whale watching guidelines and regulations in North America.

**TABLE - A Summary of Legal Aspects of Whale Watching in North America**

	USA								Canada					Mexico
	Glacier Bay	Hawaii	Pacific Coast			Southeast	New England		Pacific Coast		Atlantic Coast		Arctic	Pacific Coast
	Humpback	Humpback	Gray	Killer	Humpback	Various	Right	Humpback	Killer	Humpback	Right	Humpback	Beluga	Gray
<b>Permits</b>	R						R							R
<b>Ltd Access</b>	R													R
<b>Approach</b>														
Distance	R400	R90	G100			G50	R500	G30	G100	G100	G100	G100	G400+	R30
Direction	R	R	G	G		G	R	G	G	G	G	G	G	R
Speed	R	R	G	G		G	R	G	G	G	G	G	G	R
Manuever	R	R	G	G		G	R	G			G			
Change	R	R	G	G		G	R	G	G	G	G	G	G	
Cow/Calf		R	G	G		G								R
Duration							R	G	G				G	R
<b>Vessel</b>														
Total	R			G100					G	G	G	G		R
Type	R	BAN												R
<b>No Behavioral Change</b>	R	R	G	G	R	G	R	R						
<b>Acoustic</b>														
Engine						G		G	G	G	G	G		
<b>Swim/Dive</b>														
Distance				G50			G		G					
Activity		BAN		G		G			G					R
<b>Aircraft</b>														
Distance	R300	R300	G100	G300		G100	G300	G300	G450	G300	G450	G450		
Helicopters														
Activity				G					G					
<b>Other</b>														
Food														
Debris														R
Nets														

Notes: R=Regulations; G=Guidelines. Distances are in meters; time is in minutes. Note: Some of these rules may apply to a wide variety of species and/or restricted areas.

Sources: This chart is an adaptation of that found in the Report of the Workshop on the Scientific Aspects of Managing Whale Watching, 1995. It has been updated through a review of the relevant Canadian, Mexican and US guidelines and regulations regarding whale watching. In addition, information from two sources was very helpful (Birnie, 1985 and Carlson(b), 1995)

## 3. The IWC Whale Watching Principles

The International Whale Watching Commission (“IWC”) first recognized the possible harassment problems inherent in whale watching in 1977. At its meeting that year, the IWC’s Scientific Committee took note of the potential harassment (particularly

in breeding areas), but the IWC took no action (Birnie, 1985 at 484). In 1993, the IWC decided whale watching was a sustainable use of cetacean resources. In 1994, the IWC resolved to provide advice on whale watching regulation, but recognized such regulation is the coastal states' responsibility (Dominica Workshop report, 1997 at 6).

In 1995, the IWC Scientific Committee was presented a report on the April 1995, International Workshop on the Scientific Aspects of Managing Whale Watching. The Workshop report contained a framework to guide the process of crafting new rules and modifying existing rules for whale watching, as well as a list of recommendations for further research, for consideration by the IWC and its member governments (Carlson(a), 1995). In 1996, the IWC Scientific Committee adopted a Resolution that underlined the IWC's desired role in monitoring and advising on the subject of whale watching regulation. The Scientific Committee agreed on the general guidelines for whale watching which are attached to this report as Annex 1. These guidelines provide suggested means to manage the development of whale watching to minimize the risk of adverse impacts to whales; design, maintain and operate platforms to minimize the risk of adverse effects on cetaceans, including disturbance from noise; and allow the cetaceans to control the nature and duration of interactions.

Even a passing comparison reveals that many of North America's whale watching regulations and guidelines are consistent with, but not as extensive as those contemplated by the IWC Scientific Committee's Resolution. For example, all three nations' law discuss the goal of managing whale watching to minimize impact, however, there is room for greater systematic analysis as suggested in the Resolution. While all three countries' guidelines or regulations deal with noise issues and vessel operation (direction and approach), none discuss vessel design and maintenance. Finally, only Mexico's regulations call for whales to control the nature and duration of

interactions. The US and Mexico have agreed to look to the IWC Resolution for guidance. However, because Canada is not a member of the IWC, it has not made such a formal agreement.

#### **4. History and Application of Whale Watch Law in North America**

The educational potential of whale watching is one of our most powerful tools in the effort to have the public know, respect and care about the environment. A little awareness and common sense dictates that human impacts on the environment should be a significant concern for everyone. But that reality is obviously not getting enough attention. (Rossiter, 1997)

Whale “watching” probably began many centuries ago when the first whale was observed by coastal indigenous people. Research whale watching began in the mid-1940s when Professor Carl L. Hubbs of Scripps Institute of Oceanography began his daily Gray Whale migration counts on the Institute’s rooftops in La Jolla, California. Hubbs also undertook some boat and aerial surveys. In 1950, an old US Army gun station at the Cabrillo National Monument in San Diego, California was made into the first public whale watching lookout point. During its first year of operation, 10,000 people visited the lookout to observe the Gray Whale migration (Hoyt, 1984 at 10 - 11).

Commercial whale watching began in 1955 when Chuch Chamberlin offered one dollar trips to see Gray Whales as they passed southern California on their way to Baja California. Raymond M. Gilmore took over the trips, which became something of a legend in California. For three decades, Gilmore’s incredibly popular whale watching tours were part science, part education, and part fun. During those three decades, whale watching grew as an industry, as did the public’s interest in whales, spreading throughout California, the west coast of North America, and then around the world (<http://www.physics.helsinki.fi/whale/usa/californ/californ.html>).

Unfortunately, human interest in close observation of whales became a matter of concern for scientists and others who observed abnormal behavior by the whales during certain whale watch encounters. This led to the development of the regulatory and guideline structures we have discussed above. The question we now address is whether those protective measures have worked.

Our review of relevant popular reports (a Lexis/Nexis search for all US newspaper articles on whale watching from 1989 to the present), combined with a limited number of interviews of whale watch tour operators (from the US and Mexico) and whale watching regulators (from all three nations), indicates a near unanimous conclusion that commercial whale watching vessel operators voluntarily abide by guidelines, and to comply with laws and regulations. Recreational boaters and aircraft, however, often fail to live up to similar standards. The perception is that recreational boaters are merely ignorant, rather than intentionally flouting the law (although there are reports of isolated instances of individual recreational boats which directly ignored the warnings of commercial platform operators)(Hierta, 1991 at 30). For example, a NMFS representative indicated that commercial whale watching vessel operators generally comply with guidelines and regulations, and that most of the complaints NMFS received have been about private boat operators interfering with whales.

The authors have observed that tour operators in Laguna San Ignacio were very cautious about speed, proximity, approaches and the number of boats in a whale interaction. This self regulation depends on cooperation and education. If the operators agree with, and understand the law, they will comply. As an example, it was reported that PROFEPA representatives on site in the Baja California lagoons during 1996 and 1997 spent much of their time observing tour operators and then suggesting ways to bring their activities more into compliance with the regulations.

There are no reported prosecutions in Mexico for violation of whale watching regulations. Canada only has guidelines, and thus there have been no prosecutions related to whale watching in that nation. In North America, only the US has prosecuted cases for the violation of whale watching regulations. However, it is estimated that less than ten prosecutions have been attempted in the US.

Prosecutions are few as a result of the scarcity of human and financial resources for enforcement agencies. In other words, regulators cannot be present on every boat and aircraft. In addition, regulators commented that prosecutions were made difficult because success would hinge on evidence that a whale watching boat or aircraft had caused a change in whale(s) behavior or had violated a proximity regulation. Producing solid evidence to prove up such harassment cases is often impossible.

## **5. Conclusion and A Proposal for Model Whale Watch Guidelines**

There is a clear need for caution to ensure that whales are not harassed and thus adversely affected by our desire to visit them up close in their natural habitat. Appropriate codes of behavior need to be developed for commercial and recreational whale watchers. Related to this need is the desire for consistency and coverage across jurisdictions for these codes. One jurisdiction's regulations may be inefficient to protect whales if an adjacent jurisdiction which shares the migratory species lacks similar regulations. For this reason, there is a need for model whale watch guidelines which could be adopted on a jurisdiction-by-jurisdiction basis. Such a model is set forth in Annex 2. We acknowledge that the guidelines will need to be altered by jurisdiction as there may be serious differences in the size of lagoons or other observation areas. Differences in guidelines or regulation should also reflect the substantial variation in susceptibility of particular species to harassment. Different rules for mother-calf pairs,

for whales while breeding, and for whales while giving birth should also be considered. Each jurisdiction should consider the number of vessels which should be allowed to operate at one time, taking into account cumulative impacts including noise. On the other hand, too much specificity may result in too many rules, too much complexity and thus confusion and a lack of effectiveness.

Every jurisdiction should first set initial, interim guidelines for whale watching, and then frequently review those guidelines on the basis of new information and specially commissioned research. Managers, scientists, operators, and other interested parties should be in regular and open communication about the effectiveness of the current guidelines.

Operators should have a mechanism for making suggestions for changes to the current guidelines or regulations, when they feel this is warranted. Operators should be involved in gathering data. Managers should commission regular scientific studies, and be kept aware of other relevant scientific developments. The links between new research data and new regulations should be made clear to the operators, other interested groups and the general public. Scientists should communicate with managers and operators when planning scientific studies, and make them aware of the results and implications of their research. They should also keep managers, operators and the public aware of any scientific developments relevant to whale- watching operations. Operators should be given the chance to review research results and suggest changes to the whale watching guidelines before information is released to the public (Dominica Workshop report, 1997 at 28-29).

## **Annex 1 - 1996 IWC Scientific Committee Resolution: IWC Whale Watching Principles**

(1) Manage the development of whalewatching to minimize the risk of adverse impacts: (i) implement as appropriate measures to regulate platform numbers and size, activity, frequency and length of exposure in encounters with individuals and groups of whales; - management measures may include closed seasons or areas where required to provide additional protection; - ideally, undertake an early assessment of the numbers, distribution and other characteristics of the target population(s) in an area; (ii) monitor the effectiveness of management provisions and modify them as required to accommodate new information; (iii) where new whalewatching operations are evolving, start cautiously, moderating activity until sufficient information is available on which to base any further development; (iv) implement scientific research and population monitoring and collection of information on operations, target cetaceans and possible impacts, including those on the acoustic environment, as an early and integral component of management; (v) develop training programs for operators and crew on the biology and behavior of target species, whalewatching operations, and the management provisions in effect; (vi) encourage the provision of accurate and informative material to whalewatchers, to develop an informed and supportive public; and to encourage development of realistic expectations of encounters and avoid disappointment and pressure for increasingly risky behavior.

(2) Design, maintain and operate platforms to minimize the risk of adverse effects on cetaceans, including disturbance from noise: (i) vessels, engines and other equipment should be designed, maintained, and operated during whalewatching, to reduce as far as practicable adverse impacts on the target species and their environment; (ii) cetacean species may respond differently to low and high frequency sounds, relative sound intensity or rapid changes in sound; - vessel operators should be aware of the acoustic characteristics of the target species and of their vessel under operating conditions; particularly of the need to reduce as far as possible production of potentially disturbing sound; (iii) vessel design and operation should minimize the risk of injury to cetaceans should contact occur; for example, shrouding of propellers can reduce both noise and risk of injury; (iv) operators should be able to keep track of whales during an encounter.

(3) Allow the cetaceans to control the nature and duration of interactions: (i) operators should have a sound understanding of the behavior of the cetaceans and be aware of behavioral changes which may indicate disturbance; (ii) in approaching or accompanying cetaceans, maximum platform speed should be determined relative to that of the cetacean, and should not exceed it once on station; (iii) use appropriate angles and distances of approach; species may react differently, and most existing guidelines preclude head-on approaches; (iv) friendly whale behavior should be welcomed, but not cultivated; do not instigate direct contact with a platform; (v) avoid sudden changes in speed, direction or

noise; (vi) do not alter platform speed or direction to counteract avoidance behavior by cetaceans; (vii) do not pursue, head off, or encircle cetaceans or cause groups to separate; (viii) approaches to mother/calf pairs and solitary calves and juveniles should be undertaken with special care; - there may be an increased risk of disturbance to these animals, or risk of injury if vessels are approached by calves; (ix) cetaceans should be able to detect a platform at all times; - while quiet operations are desirable, attempts to eliminate all noise may result in cetaceans being startled by a platform which has approached undetected; - rough seas may elevate background noise to levels at which vessels are less detectable.  
(<http://ourworld.compuserve.com/homepages/iwcoffice/Catches.htm#Sanctuaries>)

## **Annex 2 - Model Guidelines**

The development of guidelines (or regulations) for whale watching should be a transparent, participatory process. There should be a sufficient education campaign to create public awareness, and public consultation in which all stakeholders are involved (especially any existing commercial whale watch operators). The process of developing guidelines or regulations should include the following:

- Formulation and screening of policy alternatives
- Evaluation of alternatives, including consideration of long-term environmental and social impacts
- Selection of the "best" alternative
- Identification of local resources -- human, cultural, physical, financial, political, and vested commercial interests
- Identification of available regional, state, and federal government resources
- Setting of performance criteria
- Education, communication and capacity building throughout the process
- Follow-up evaluation (this should be planned at the beginning)

Regardless of the product of this process, it is suggested that any permit fees, or fines for violations should be fed back into management and research. Further, because regulators often have insufficient resources to enforce compliance, it should be made clear that commercial and non-governmental organizations can efficiently provide compliance vigilance.

### **I. Guidelines for whale watching operators in boats**

A. Swimming with whales, either single animals or groups, should be discouraged.

B. Approach strategy

1. Maintain a good lookout (in addition to the skipper) at all times when in the vicinity of whales; when 'above' single whales, or within a group of whales exercise particular caution. Maintain a good lookout ahead, reduce boat speed to 6 knots or less to minimize noise and ensure maneuverability.

2. Use extreme caution in approaching when within 400 meters of the nearest whale(s), especially:

- a) Reduce noise to a minimum.
- b) Make no sudden changes in speed or direction.
- c) Use an oblique line of approach.
- d) Do not reverse (except in emergency).
- e) Move no more than 2 knots faster than any whales.
- f) Never approach closer than 400 meters if any whale(s) is birthing calves, or mating.
- g) Where appropriate, remain in designated whale watch areas and do not enter sanctuary or whale conservation areas

3. When within 100 meters of the nearest whale(s), in addition to the guidelines in section 2 above:

- a) Stay within a 60-degree sector behind the whale(s).
- b) Do not exceed the speed of any whales.
- c) Never approach closer than 50 meters under any circumstances, only the animal may move closer.

- d) With foraging groups generally maintain a minimum distance of 100 meters
  - e) Never approach closer than 100 meters to a socializing group
4. Do not approach unaccompanied calves
  5. No more than 2 vessels should be within 400 meters of the whale(s) at any one time. Skippers should coordinate approaches from the same direction so that the whale(s) is not penned between boats and can swim away at the surface.
  6. If any whale approaches, the vessel should be stopped, with the engine in neutral
  7. If any whale shows signs of disturbance (for example, turn aways, long silences, interrupted dive sequences, discontinuance of mating), the vessel should stop or move away slowly.
  8. Do not spend longer than 30 minutes with socializing groups.
  9. Do not approach a whale under sail alone
  10. Do not drift towards whales with the engine switched off
  11. Keep the engine running (at idle)

### C. Departure strategy after a whale dives

1. If idling, or the engine is switched off, wait five minutes before starting the engine or engaging gear, and proceed slowly and cautiously for 400 meters.
2. If already moving, continue cautiously for 400 meters.

## **II. Guidelines For Boats And Equipment For Use In Whale Watching Operations**

### A. Boat Specifications

1. Whale watching vessels should allow passengers and crew a good view all around the boat, but especially forward.
2. The helmsman should have a good unobstructed forward view.
3. Passengers should be encouraged to use binoculars.
4. Vessels should be limited to 30 meters or less in length.

B. Propulsion System Whales are sensitive to noise. The noise production of a given engine can usually be reduced by:

1. Ensuring proper functioning of the engines and generators, i.e. adjustment of carburation or injectors; making sure there are no parts loosely mounted, and no modifications that may cause vibrations or overheating.
2. Effective silencing of exhaust which should be vented into air, and not underwater.
3. Silent blocks (shock-mount) between engines/generators and hull.
4. Sound insulation between engines/generators and hull.
5. Quiet engine-to-shaft connections.
6. Well maintained shaft, bearings and seals (straight shaft).
7. No damaged or bent propeller blades, which are bound to be noisy.
8. Installing slow turning engines, and less cavitating propellers.
9. Keeping all gear on board (including bilges) secured, in order not to generate uncontrolled noises.

C. Sonar Active sonar has not proved useful for finding whales. For navigation purposes only use sonar of frequencies of 50 kHz or above.

D. Passive Acoustic Equipment Directional hydrophones are of great value in helping to locate submerged whales, and may also be used to get an indication of the quantity and quality of noise generated by a particular vessel. Listening to whales can be a very rewarding part of a whale-watching experience.

### **III. Guidelines For Aircraft In Whale Watching Operations**

Aircraft are particularly likely to affect whales if they fly directly over the whales (because more sound then enters the sea) and/or if the aircraft's shadow passes close to the whales.

A. Altitude No aircraft should fly directly over whales (singles or groups) at altitudes lower than 300 meters.

B. Shadow The aircraft's shadow should be kept from passing close to whales.

### **IV. Guidelines for private or recreational boats and aircraft**

All guidelines for commercial operators set forth in sections I - III apply to private operators. In addition:

A. Interference Private or recreational vessels should never approach whale watching vessels.

B. Licenses Where appropriate, only permit holders may engage in whale watching.

[This model was adapted from the guidelines developed at the January 1996 Dominica Workshop on the Special Aspects of Watching Sperm Whales (Dominica Workshop

report, 1997 at 18-28), and from the current North American laws, regulations and guidelines on whale watching.]

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[http://www.rtis.com/nat/user/elsberry/marspec/ms\\_sub.html](http://www.rtis.com/nat/user/elsberry/marspec/ms_sub.html)

WhaleNet

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Whales Scratchpad

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