Stopping the use, sale and trade of whales and dolphins in Canada

How protection is consistent with WTO obligations

Prepared by
Leestefy Jenkins, Attorney at Law
219 West Main St., P.O. Box 634
Hillsborough, NH  03244-0634
Phone (603) 464-4395

For

ZOOCHECK CANADA INC.
3266 Yonge Street, Suite 1417
Toronto, Ontario  M4N 3P6
(416) 285-1744 (p)
(416) 285-4670 (f )
zoocheck@zoocheck.com
www.zoocheck.com

This legal analysis was commissioned by Zoocheck Canada as part of a research initiative looking into how trade laws impact the trade and use of whales and dolphins in Canada, and to educate the public about the same.
April 25, 2003

QUESTION PRESENTED

Whether a Canadian ban on the import and export of live cetaceans, wild-caught, captive born or those caught earlier in the wild and now considered captive, would violate Canada's obligations pursuant to the World Trade Organization (WTO) Agreements.

CONCLUSION

It is my understanding that there is currently no specific Canadian legislation banning the import/export of live cetaceans. Based on the facts* presented to me, however, it is my opinion that such legislation could be enacted consistent with WTO rules. This memorandum attempts to outline both the conditions under which Canadian regulation of trade in live cetaceans may be consistent with the WTO Agreements, as well as provide some guidance in the crafting of future legislation.

PEER REVIEW & COMMENTS

Chris Wold,  
Clinical Professor of Law and Director  
International Environmental Law Project  
Northwestern School of Law  
Lewis and Clark College  
10015 SW Terwilliger Blvd  
Portland, Oregon, U.S.A. 97219  
Tel.: (503) 768-6734/ Fax: (503) 768-6671  
e-mail: wold@lclark.edu

Steve Shrybman, Esq  
Sack, Goldblatt, Mitchell  
20 Dundas Street West, Ste 1130  
Toronto, Ontario M5G 2G8  
Tel.: (416) 979-2235  
Email: shrbman@gattlaw.com

* Factual Research and data prepared by Zoocheck Canada Inc.
# TABLE OF CONTENTS

**QUESTION PRESENTED & CONCLUSION** ........................................................................................................... Page 1

**EXECUTIVE SUMMARY** ................................................................................................................................. Page 4

**I. BACKGROUND** ........................................................................................................................................... Page 6
   A. History of Captivity .............................................................................................................................. Page 6
   B. Canadian Attitudes Towards Cetaceans and Their Use .............................................................. Page 10
   C. Target stocks and their status .......................................................................................................... Page 13
      1. Southern Resident Killer Whale Population ........................................................................ Page 19
      2. Icelandic Killer Whales ........................................................................................................... Page 22
      3. Russian Sea of Okhotsk Belugas ........................................................................................ Page 23
      4. Western Hudson Bay Beluga ................................................................................................ Page 24
      5. Russian Black Sea Bottlenose Dolphin ............................................................................... Page 26
      6. Mid-Atlantic Bottlenose Dolphin (Tursiops truncatus) ........................................................ Page 28
   D. Environmental Factors ....................................................................................................................... Page 31
      1. Chemical Pollution .................................................................................................................... Page 31
      2. Habitat Degradation ................................................................................................................ Page 33
      3. Noise Pollution ........................................................................................................................ Page 34
      4. Global Climate Change ............................................................................................................ Page 35
      5. Over-Fishing/By-Catch ............................................................................................................. Page 35

**II. HYPOTHETICAL LEGISLATION** ............................................................................................................. Page 37
   A. Hypothetical A ................................................................................................................................ Page 37
   B. Hypothetical B ................................................................................................................................ Page 37
   C. Hypothetical C ................................................................................................................................ Page 37

**III. WTO ANALYSIS** ................................................................................................................................ Page 38
   A. Article III -- National Treatment ............................................................................................ Page 38
      1. Application of the Article III requirements to the three hypothetical ................................ Page 39
         a) Hypothetical A .................................................................................................................. Page 39
         b) Hypothetical B ................................................................................................................ Page 42
         c) Hypothetical C ................................................................................................................ Page 45
   B. Article XI .......................................................................................................................................... Page 45
   C. Article XX ....................................................................................................................................... Page 46
1. History of Article XX Exceptions ................................................................. Page 46
2. Dispute Panel and Appellate Body Interpretations of Article XX ............ Page 51
3. Scope of Article XX(a) ............................................................................. Page 53
   (a) History of Debate of Article XX(a) .................................................. Page 53
4. Scope of Article XX(b) ............................................................................. Page 57
5. "Necessity" as Applied to Paragraphs (a) and (b) ..................................... Page 61
6. Application of Article XX(a) and (b) to Hypotheticals ........................... Page 64
   (a) Hypothetical A ............................................................................. Page 65
   i. Article XX(a) ............................................................................. Page 65
   ii. Article XX(b) ............................................................................. Page 71
   (b) Hypothetical B ............................................................................. Page 73
   i. Article XX(a) ............................................................................. Page 73
   ii. Article XX(b) ............................................................................. Page 74
   (c) Hypothetical C ............................................................................. Page 74
   i. Article XX(a) ............................................................................. Page 74
   ii. Article XX(b) ............................................................................. Page 78
7. Legal Analysis of Article XX(g) ................................................................. Page 79
   (a) Exhaustible natural resource ........................................................ Page 80
   (b) Relating to Conservation of an Exhaustible Natural Resource ... Page 81
   (c) Made Effective in Conjunction with ........................................... Page 82
8. The Chapeau Requirements ........................................................................ Page 83
9. Application of Article XX(g) and the Chapeau to the Three Hypos .......... Page 88
   (a) Hypothetical A ............................................................................. Page 88
   (b) Hypothetical B ............................................................................. Page 89
   i. Relating to Conservation ............................................................... Page 89
      (1) WAPPRIITA Provides a Legal Mechanism ....................... Page 90
      (2) Science Supports Need for Conservation Efforts ............. Page 93
      (2) Live Capture has Increased Dramatically ...................... Page 95
      (3) Cetacean Captivity Trends World-wide........................... Page 98
   ii. In Conjunction With Restrictions on Domestic Use .......... Page 100
   iii Application of the Chapeau Requirements ......................... Page 101
   (c) Hypothetical C ............................................................................. Page 102
IV CONCLUSION ........................................................................................................ Page 103
EXECUTIVE SUMMARY

Currently there is no specific Canadian legislation banning the import/export of live cetaceans in Canada. There are, however, factual data and policy arguments which would support passage of such legislation consistent with the World Trade Organization (WTO) rules.

Live capture of cetaceans is a relatively recent phenomena in Canada and the world. It began in earnest in the late 1950s and until the late 1980s was limited to few countries. The last decade, however, has seen the rapid growth of new entrants into the captive facilities market, primarily in Asia, Mexico, and the Caribbean Islands, which has resulted in an increase in wild-caught species. At the same time, countries such as the United States and the United Kingdom, who once dominated the captive cetacean market, have severely curtailed trade in wild-caught species (the United Kingdom has effectively eliminated captive facilities altogether) due to ethical and environmental concerns.

Surveys indicate that many Canadians are concerned with animal captivity for ethical or animal welfare reasons. There have been no new captive cetacean facilities constructed in Canada since 1985. In addition, scientists have reported that currently there are no facilities in Canada which can meet the basic welfare requirements of cetaceans, namely, freedom from stress, considerations of pool acoustics, recognition of cetaceans typical social conditions and the inclusion of elements of the animal’s natural environment into its maintenance.

In addition, several of the target stocks commonly utilized in Canada for captivity, are subject to cumulative adverse environmental factors such as chemical pollution, habitat degradation, noise pollution, global climate change, fisheries interaction, among others, which have had, or may have, an adverse affect.

WTO rules permit countries to choose their own levels of environmental and social protection. This means Canada has several options it can pursue consistent with its WTO obligations. For instance, it could, 1) impose immediate ban on the sale, use, import and export of live cetaceans within Canada; 2) phase-in a permanent ban; or 3) regulate the conditions of sale, including trade, within Canada. Each of these scenarios could be found consistent with WTO rules -- specifically Article III (a total immediate ban) or Article XX(a), (b) or (g), depending the scope of the regulation.
Recent WTO case law emphasizes the case by case nature of WTO analysis. Careful review of recent decisions regarding *like products* and Article XX demonstrates the parameters under which countries can pursue even unilateral trade-related regulations consistent with the WTO.

If Canada chooses to enact something less than an immediate total ban on the use and trade of live cetaceans within Canada, it would either need to demonstrate that any trade-related provisions were *necessary* for Canada’s policy goal – namely to protect public morals or the life and health of cetaceans, or alternatively, were related to the conservation of cetacean species. In addition, irrespective of whether the *purpose* of the legislation were to protect public morals, animal life or health, or conservation, Canada would need to demonstrate that there were no less trade restrictive options available to achieve its policy goal and that the proposed regulation was not simply a disguised restriction on trade.

Ample factual evidence exists to demonstrate the need for regulation. Adequate minimum welfare requirements are not currently technologically feasible, nor economically practical in the captive facilities in Canada. In addition, government and independent surveys demonstrate that many Canadians consider cetacean captivity morally repugnant. Lastly, there is some indication that utilization of wild-caught species for captivity may have an adverse impact on cetacean stocks due to cumulative stressors. Invoking the precautionary principle means taking any and all available steps to protect cetacean stocks before further declines occur.

In conclusion, Canadian legislation *either banning or regulating* the use of and trade in live cetaceans can be drafted consistent with the WTO. The legislation must be non-discriminatory and must restrict trade only so far as necessary to achieve Canada’s policy goal. Evidence of the humane, welfare and environmental aspects at issue should be well documented in the legislative history so that a WTO dispute panel can ascertain Canada’s policy objectives. Notification of proposed legislation should be given to WTO countries that may be affected and adequate opportunity for country comment is critical.
I. BACKGROUND

As there is currently no Canadian legislation pending which would govern the sale, use, import or export of live cetaceans, this analysis depends upon a series of hypotheticals set forth in Section II, below.

Hypotheticals are drawn from different factual combinations, so as a first step, I have attempted to set forth all relevant background details which may be at issue in a particular hypothetical. In addition, because WTO case law has emphasized the case by case nature of Article XX analysis, I have tried to include the types of details upon which past WTO panels have focused.

A. History of Captivity

The live-capture of cetaceans is a relatively recent phenomena in Canada and other parts of the world with most occurring in the last 50 years. At least nine species of cetaceans have been live-captured and/or captive in Canada including killer whale (Orcinus orca), beluga (Delphinapterus leucas), narwhal (Monodon monoceros), harbor porpoise (Phocoena phocoena), short-finned pilot whale (Globicephala melaena), white beaked dolphin (Lagenorhynchus albirostris), Pacific white-sided dolphin (Lagenorhynchus obliquidens), Dall's porpoise (Phocoenoides dalli) and bottlenose dolphin (Tursiops truncatus). Most captures in Canadian waters have been of beluga or killer whale.

Canada presently has no specific legislation governing the import or export of live cetaceans typically utilised by the captivity industry (i.e., killer whale, beluga whale, bottlenose dolphin). However, the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) enacted in Canada through the Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act (WAPPIITA) requires the use of a

1 Lien, Jon, A Review of Live Capture and Captivity of Marine Mammals in Canada, March 31, 1999 (A report prepared for the Department of Fisheries and Oceans, Ottawa.) at 4.

“permit system” to restrict trade in some cetacean species. For example, great whale species such as the blue, sperm and Right whale are listed on CITES Appendix I, and thus require both an import and export permit should trade occur. The species typically utilised by the captivity industry, such as bottlenose dolphins, are listed on CITES Appendix II, which only requires an export permit for trade to occur, though some CITES member countries have adopted stricter domestic measures provided for by CITES Article XIV for Appendix II species (for instance, the European Union requires both import and export permits). ³

Canada too, has enacted some stricter measures for Appendix II species by banning the capture of killer whales, and beluga whales for export (see below). However, there is some concern among Canadian Non-Governmental Organizations (NGOs) that Canada is not meeting even its most minimal CITES obligations. Specifically, Canadian NGOs are critical of the fact that the Canadian CITES authorities in the Department of the Environment (DOE) and the Department of Fisheries and Oceans (DFO) accept export permits from cetacean importers without independent verification that such export permits were lawfully obtained or authentic. ⁴

Although Canada has no legislation governing trade in all live cetaceans, other than WAPPRIITA, it has banned the capture of killer whales in Canadian waters since 1975. In addition, since 1992, Canada has pursued an administrative policy of banning the capture of beluga whales for export (this action was formally registered with the CITES Conference

³ See pages 93-95 for discussion of countries who have made use of stricter domestic measures on cetacean imports and exports.

⁴ For example, on September 24, 2000, Marineland of Canada imported six bottlenose dolphins, assumed to be from the Black Sea in Russia. They imported an additional four confirmed Black Sea bottlenose dolphins in late 2001. A decision passed at CITES CoP11 led to a request for Black Sea exporting states (such as Russia) to make ‘non-detriment findings’ (i.e. providing evidence that the export of bottlenose dolphins will not harm the Black Sea stock) before issuing any CITES export permits. In a related issue, the Russian cetacean exporter, L.M. Muhamelevtov does not agree with International Air Transport Standards (IATA) and continually transports cetaceans against IATA standards. This action led to the Argentinian government seizing two Black Sea bottlenose dolphins (two other dolphins having died in transit) imported from Russia, and taking the decision to ban any similar trade. Despite being made aware of the requirement to verify and report upon the ‘non-detriment finding’, and to check transportation methods, the Canadian government has failed to do so.
headquarters in Geneva through Notice to the Parties No. 723, March 1, 1993,) and there has been no live-capture of cetaceans for captive maintenance in Canada since 1992. In recent years, however, wild-caught belugas and bottlenose dolphins have been imported from Russia by Marineland of Canada.

There are presently three facilities in Canada that hold captive cetaceans (see Appendix C for cetacean inventories). One of these facilities, the West Edmonton Mall, has indicated that they will phase out the dolphin show and not replace the dolphins upon their deaths. The Vancouver Aquarium has announced that it will no longer acquire cetaceans from the wild, nor display killer whales. Tu, J.I. Whale of a Show Ends. Seattle Times. April 18, 2001 (“... pledged that the Aquarium wouldn’t capture a wild orca, and the Vancouver Parks Board forbid the facility from keeping any killer whale captured after 1996”). Only Marineland of Canada in Niagara Falls, Ontario, continues to both import wild-caught and breed cetaceans for possible export.

5 See supra, Note 1 at 5.

6 Fourteen beluga whales and six bottlenose dolphins were imported with export permits from Russia by Marineland of Canada in 1999 and 2000 (Russian CITES Export Permits No. 00RU001245, 99RU001090, 99RU001049, 99RU000370, 99RU000157). Four additional bottlenose dolphins from the Black Sea in Russia were imported in late 2001 (Jean Robillard, CITES Scientific Authority, Environment Canada - Canadian Wildlife Service. Personal Communication. February 15, 2002).

7 Lien supra., Note 1 at Table 1.

8 Edmonton Sun, August 31, 1996 ("In hindsight would we do it again? It's a clear answer - no"); Edmonton Journal, August 13, 2000 ("The show will be phased out after the others die")

9 The Vancouver Board of Parks and Recreation. Parks Control Bylaw, Section 9(e),"No person shall bring into any park ... any aquatic mammal ... which has been captured or otherwise taken from its natural wild habitat...". November 4, 1996.

10 See supra., Note 6 for recent imports. For following comment on breeding for possible export, see Appendix C listing births at Marineland of Canada, and Woodyer, Julie. Personal Communication based on September 6, 2001 Zoocheck Canada inspection of Marineland of Canada
In addition, there were several previous facilities that are now defunct. Seasonal displays of bottlenose dolphins with animals 'rented' from U.S.-based Marine Animal Productions were present at Canada's Wonderland amusement park, north of Toronto until 1993, and the Niagara Falls-based National Marine Aquarium in the 1970s. The Montreal Aquarium held dolphins until 1980 when a municipal employees' strike led to the deaths of several bottlenose dolphins. Sealand of the Pacific in Victoria, British Columbia closed its whale show in 1992, following the drowning death of a trainer who had been held underwater by killer whales. Several other facilities have been proposed over the years, but none have materialised.

In the late 1970s and early 1980s, Canadian marine parks became holding facilities for wild-caught killer whales, who were later re-exported as “already captive” to the U.S. which has laws governing the capture of cetaceans for captivity, and as one of the largest markets for captive cetaceans, regulates the importation of wild-caught species. To circumvent this U.S. law, wild-caught cetaceans were on occasion housed for short periods of time in Canadian facilities such as Marineland of Canada, before being moved to the U.S. or another country. While this so-


12 Niagara Falls Review, Local Aquarium May Avert Bankruptcy with Acquisition of Dolphins and Sea Lion, May 17, 1975.

13 Vancouver Sun, Victoria's Sealand Aquarium Closes after 25 Years, November 2, 1992.


15 The U.S. Marine Mammal Protection Act of 1972 as amended at 6, states, “… moratorium on the taking and importation of marine mammals…no marine mammals may be imported into the U.S. except in the following cases…permits may be issued by the Secretary for the taking and importation for purposes of … public display ... first reviewed by the Marine Mammal Commission...”.

16 Comments by former Sea World employee, Dr. John Hall, in the film, A Fall from Freedom. Marine Mammal Fund, 1997. Dispensation of Marineland's killer whales is described in Appendix A.
called "laundering" activity has not occurred recently, the conditions that caused it (lack of Canadian legislation, combined with the presence of U.S. captivity regulations) are still present. Recent imports of 14 Russian beluga whales and 10 bottlenose dolphins, combined with an active cetacean breeding program, suggests that Marineland of Canada may again be considering such a role.

B. Canadian Attitudes Towards Cetaceans and Their Use

Surveys indicate that whales are the favorite animal group of North Americans.\textsuperscript{17} Whales are perceived as intelligent, highly social and "like us."\textsuperscript{18} Early public display of captive marine mammals, especially whales, may have been an important event in popularizing cetaceans. According to one Canadian scientist, Canadian interest in cetaceans extends far beyond the importance of this group of animals in the ocean ecosystem.\textsuperscript{19} Whales have become a totem species who now hold symbolic significance for the public. Richard Ellis, a well-known whale photographer and writer, describes whales as myths and deities that became commodities, and now, once again, have become myths.\textsuperscript{20} According to Ellis,

\begin{quote}
We have now elevated one animal to near-devine [sic] status...In the new religion of environmental conservation, we have elected the whale as our flag-bearer, the symbol of everything that is wrong or right with our planet.\textsuperscript{21}
\end{quote}

Canadians are not just interested in wildlife and conserving them, they are increasingly concerned about the treatment and use of animals.\textsuperscript{22} A 1989 survey of American adults showed

\begin{itemize}
  \item \textsuperscript{17} Lien, supra., Note 1 at 19.
  \item \textsuperscript{18} Id.
  \item \textsuperscript{19} Id. at 27
  \item \textsuperscript{20} Id. at 15
  \item \textsuperscript{21} Id.
  \item \textsuperscript{22} Id. at 16
\end{itemize}
that the public is significantly more sensitive about the use of relatively small numbers of animals used in research than they are about killing much larger numbers of animals for food.\textsuperscript{23} Other surveys conducted over the past several decades demonstrate a marked shift in Canadian attitudes regarding specific uses of animals with an increased emphasis on animal welfare.\textsuperscript{24}

In addition to broader publicized concerns regarding animal research and testing, growing numbers of the Canadian public are concerned about the inhumaneness of keeping cetaceans in captive facilities.\textsuperscript{25} A March 1995 McIntyre and Mustel poll found that 63 per cent of 312 respondents “strongly” or “somewhat” oppose keeping captive whales at the Vancouver Aquarium\textsuperscript{26} These concerns in part, have lead to the decision of at least one Canadian facility to phase out cetacean captivity altogether.\textsuperscript{27} As previously stated, there have been no new cetacean captivity facilities constructed in Canada since 1985 and two of the three Canadian marine parks have stated that they will not live-capture cetaceans.\textsuperscript{28}

Further indication of the Canadian public’s sentiment regarding cetacean captivity is the Montreal Biodome’s decision in 1995 to not acquire beluga whales for display, citing as its reason


\textsuperscript{24} Id; \textit{See also}, Dept of Justice. \textit{Crimes Against Animals}. (Ottawa 1998) (“When stories of animal abuse and neglect appear in the news, there is always a public outcry and a huge number of letters written to governments, media and other organisations, denouncing the acts and demanding more effective deterrents and punishments. Many people react with concern and even anger, often directed at what they consider the law's inability to deal adequately with conduct that seems obviously wrong. Existing penalties appear to do little to deter people who abuse animals; the result may be a loss of public confidence in the law... some argue that one source of the problem may be the way the Criminal Code regards animals.”)

\textsuperscript{25} Id. at 24

\textsuperscript{26} \textit{No’ to Captivity: But Poll Finds Aquarium Should Keep Whales it Has}. The Province. March 24, 1995.

\textsuperscript{27} Id at 7.

\textsuperscript{28} Id.
the strong opinions of groups whose environmental goals “in the end matched it's own.”\textsuperscript{29} More recently, DFO turned down a request by Marineland of Canada to live-capture beluga whales from the Churchill River Estuary on Hudson Bay in 1999. The rejection letter from then DFO Minister David Anderson notes that he believes that the live capture of marine mammals for educational purposes should be discontinued.\textsuperscript{30} Following public outcry, in December 2001 the Granby Zoo in Quebec announced that it would not be building a proposed swim-with-the-dolphin facility.\textsuperscript{31} These actions reflect the impact engendered by the growing concerns of Canadians about cetaceans in captivity.

Of greatest concern to the public is the fact that basic welfare of captive cetaceans includes the requirements of freedom from stress, considerations of pool acoustics, recognition of the animal's typical social conditions and inclusion of elements of the animal's natural environment into its maintenance\textsuperscript{32}—none of which is adequately addressed by Canada’s current captive facilities. Furthermore, there is some indication that limitations in the development of technology and techniques inhibit the practical implementation of these basic welfare standards for cetaceans in the future.\textsuperscript{33} Almost all instances of early captive maintenance efforts isolated animals and most captive facilities still do not permit adequate social housing.\textsuperscript{34}See also, Hoyt, E., \textit{The Performing Orca - Why the Show Must Stop}, A report issued by. Whale and Dolphin Conservation Society (Bath, U.K. 1992). Scientists have noted that stereotyped behavior in


\textsuperscript{30} Letter from then DFO Minister David Anderson to John Holer, President of Marineland of Canada, dated June 22, 1999.


\textsuperscript{32} Lien, \textit{supra}. Note 1 at 18

\textsuperscript{33} Id.

captive dolphins is common. This is abnormal behavior typically interpreted as the result of stress and boredom.\(^{35}\) And almost all facilities cannot incorporate natural elements within pool facilities.\(^{36}\)One scientist noted that he knows of no marine mammals kept in captivity in natural conditions, stating, “there is an inherent contradiction in using the term natural to refer to captive circumstances”.\(^{37}\) Other scientists have warned that “[m]anagers of captive species should never fool themselves with the belief that they can replicate nature in a captive setting. To expect this outcome would demonstrate ignorance of the intricacies and complexities that characterise natural ecosystems.”\(^{38}\)Even veterinarians who work for the captivity industry acknowledge that, “[h]usbandry problems of marine mammals in captivity often come directly from exhibiting animals in enclosed environments.”\(^{39}\)

In conclusion, there is strong evidence that Canadians are concerned about, among other things, the welfare aspects of cetacean captivity.

**C. Target stocks and their status**

There have been over 20 species of cetacean used in captivity world-wide.\(^{40}\) The three


\(^{36}\) *Lien, supra.* Note 1 at 19.


most common species used in Canada are killer whale, beluga whale and bottlenose dolphin. In
the wild, these three species are divided into separate populations that are often referred to as
stocks.

The U.S. Marine Mammal Protection Act defines a stock as, "[a] group of marine
mammals of the same species or smaller taxa in a common spatial arrangement, that interbreed
when mature". Scientists are increasingly recommending management of species at the stock
level as compared to the species level. One scientist provides an example of a hypothetical species
with a worldwide population of one million animals:

If all a manager knew about the direct harvest or incidental take in fishing nets of that
species was that 2,000 animals per year were killed, the manager may be excused for not
showing undue alarm. After all, 2,000 out of one million represents a reduction of only 0.2
per cent, a level that is likely to be far less than the level of recruitment for a healthy
species or population. However, if it was found that 900,000 occupy and interbreed in just
one geographic area and the other 100,000 animals exist in 10 geographically and
genetically isolated groups of animals (that is, 10 separate stocks), and if, the take of 2,000
animals per year comes from just one of the small stocks, then the possible extinction of
one of the small stocks may be imminent.

Several of the target stocks for captivity have been depleted relative to their original
population, including the Mid-Atlantic Coastal Migratory stock of bottlenose dolphins between
New Jersey and Florida, the Southern Resident killer whale stock off Puget Sound, Washington,
the Icelandic killer whale stocks, the Western Hudson Bay beluga stock in Canada, the Sea of
Okhotsk beluga stock, and the entire Black Sea population of bottlenose dolphins (the latter two
stocks in Russia). The reasons for stock depletion are numerous but may include, excess

43 For example, 48 individuals were removed by the captivity industry from the Southern
Resident killer whale stock off Puget Sound, that population is now being evaluated by NMFS
for endangered status, and was listed as endangered in Canada in December 2001. The beluga
removal, removal as fisheries by-catch, chemical pollution, habitat degradation, noise pollution, global climate change, depletion of food supply, among other causes.  

In addition, the chase and capture process practiced by the captivity industry may have an important adverse effect on wild cetacean populations. In 1984, the U.S. Marine Mammal Commission and Committee of Scientific Advisors expressed concern about the impact that chase during capture may be having upon bottlenose dolphin populations. The Commission asked the National Marine Fisheries Service (NMFS) to contact each individual designated as "collector of record" to provide estimates of the numbers of animals that may be chased, encircled, and/or brought on board a capture vessel during authorised collections. One captor responded that, "One-third of those chased and encircled satisfy acceptable criteria and are retained". Another estimated that, "for every animal taken, three to four are encircled, handled, evaluated and released."

These ratios have since been verified. For instance, during the 1984 joint captures by Mystic and New York Aquariums, 14 belugas were captured to obtain four. The Mystic stock from Russia's Sea of Okhotsk has been a source of animals for the captivity industry (i.e., 14 belugas imported by Marineland of Canada in 1999 and 2000) and is considered depleted from historic periods. The Russian Black Sea bottlenose dolphin stock is current being considered for up-listing to CITES Appendix I, and is listed as endangered in the UNEP Global Action Plan on Marine Mammals. This stock has long been targeted by the captivity industry, most recently with the import of six animals by Marineland of Canada in September 2000, and four additional dolphins in December 2001 (See, infra. Section C, Target Stocks and Their Status.)

44 See, infra, Section D, Environmental Factors.

45 Letter to NMFS from John Twiss, Executive Director, US Marine Mammal Commission, dated, May 16, 1984


48 Spotte, S., Capture and Transport, Mystic Marinelife Aquarium, October 25, 1984.
Aquarium captured ten belugas in 1985 to retain two.\textsuperscript{49} In 1987, the National Aquarium in Baltimore and New York Aquarium captured 10 belugas to obtain three. Two were chased for more than an hour.\textsuperscript{50} Sea World captured, retained and released 18 belugas in 1988 to obtain four.\textsuperscript{51} The Shedd Aquarium captured, retained and released 24 belugas from the Western Hudson Bay stock before selecting four in 1992. Shedd's post-collection report noted:

> It seemed that the degree of evasive tactics exhibited by each beluga may have depended on that animal’s previous exposure to the live-capture efforts. Whales that may have been previously chased would exhibit quicker and tighter turns accompanied by bursts of speed.\textsuperscript{52}

Another report outlines the stressful capture methods used for Atlantic bottlenose dolphins, here referred to here as porpoises:

> On a high tide porpoises may move into the narrow creeks and channels leading off the waterway. The Marineland collecting crew learned to look for schools of porpoises feeding in the upper reaches of such tidal creeks. When they found one, they quickly stretched a net from bank to bank, cutting off the only escape route. The porpoises were then induced to stampede into the large-meshed capture net, either by compressing the space they occupied or by splashing the water with oars. Once entangled in the net they had to be boated very quickly before they drowned.\textsuperscript{53}

The same report describes the technique used to capture pelagic species of dolphins, such

\begin{flushleft}


\end{flushleft}
as spotted dolphin and the common dolphin:

In going after the pelagic species, the collecting crew took advantage of their habitat of swimming at the bow of a boat, something the Atlantic bottlenose dolphin does only rarely or briefly. Captain Gray's capture device was a "tail-grabber" resembling a set of large, blunt ice tongs mounted at the end of a long pole. A line was attached to the spring-laded tongs which when thrust down on the tailstock of a porpoise closed and put a loop of rope around the porpoise's tail just in front of the flukes. The animal was then hauled into the boat. Later, the head grabber was developed, a device that, as the name indicates, grabs the dolphin by the head instead of the tail. 54

While the methods for capturing cetaceans in the United States may have changed since this description was prepared, captures in other jurisdictions such as Russia continue to be particulary brutal. 55

Capture methods in Japan are equally disturbing. Scientists state that a total of 1,135 individuals from 16 species were collected in Japanese waters from 1974 to 1984. 56 The Japanese dolphin drive fishery is described by the Japanese NGO, the Elsa Nature Conservancy, as follows:

[The drive] begins by locating a school of dolphins at sea. Fishing boats emit loud noises into the water, which confuses the echolocation of the dolphins and throws them into a panic. Boats and nets are used to cut the dolphins off from their escape route, and to herd them slowly toward the narrow recess of a fishing port. The port's entrance is then walled off with a net, thereby impounding the dolphins inside. Once impounded in the port, the dolphins are again confused with loud sounds and moved with boats and nets in groups of 30-odd animals to a pier near shore that is suitable for landing them, while gradually

54 Id.


making the enclosure smaller. After the dolphins have nowhere to flee, their captors punch sharp fireman's hooks into the animals' bodies to draw them near the boats, and then tie ropes to their tails. A crane lifts the dolphins out of the water tail-first to land them, loading them several to a vehicle in trucks waiting at the pier.57

The Elsa Conservancy also claims that the fishers took over three times the allotted quota and approximately 50 false killer whales (for which there was no quota at all) were offered for sale to aquariums, in addition to slaughtering and butchering them for sale as meat".58

An additional report by the Elsa Nature Conservancy describes the equally disturbing capture of ten killer whales in 1997. Following that capture, the Japanese government received thousands of letters of protest from individuals and 103 environmental/animal protection organisations from 22 countries. The international protest led the Japanese government to rule that the captured killer whales would not be used in entertainment shows, and resale would not be allowed.59

Methods used to capture beluga whales suggest the potential of great disruption to the social groupings, due to the proximity of newborn calves observed with their mothers as large numbers migrate into the shallow estuaries where captures take place. Beluga cows guard and protect calves. The chaotic beluga round-ups (characteristic of those in the Churchill River estuary with the Western Hudson Bay stock of beluga whales) increase risks of separating mother/calf pairs, spontaneous abortion of pregnant females, and beaching of individuals. Studies in Western Hudson Bay have shown up to 54 per cent of females examined were pregnant,

57 Aquarium supports Japanese dolphin slaughter and imports a new dolphin, Press Release by 2001 Coalition for No Whales in Captivity, dated July 31, 2001. (The Vancouver Aquarium had acquired a Pacific white-sided dolphin from Japan.)


lactating, or both. Newborn calves with umbilical cords attached, have been found close to their mothers following forced strandings in tagging studies.  

A scientist studying killer whales described the effects of capture and removing individuals from wild populations:

Analysis indicates rather surprisingly, that the population is more sensitive to removals of juveniles than mature animals. This is due to the high reproductive value of juveniles compared to mature females. Moreover, the removal of one animal may adversely affect the likelihood of the death of the dependent offspring.

The above evidence suggests that capture methods may affect discrete stocks and that relative stock discreteness is an important factor in considering the health of different cetacean populations targeted by the captivity industry. A closer examination of the population status of cetacean stocks targeted by the captivity industry follows with examples from six such stocks.

1. **Southern Resident Killer Whale Stock**

Beginning in 1965 and continuing until 1976, the Southern Resident killer whale community pods were captured on 13 separate occasions in the Puget Sound, Washington, U.S.A. area resulting in at least 48 killer whales removed for public display purposes.  

Bigg, M.A. and A.A. Wolman. Live-Capture Killer Whale (*Orcinus orca*) Fishery, British Columbia and Washington, 1962-1973. J. Fish, Res. Board Can. Vol. 32(7), 1975. This resulted in a change in the age structure of the population, as a large proportion of calves produced in the 1960s were removed by marine parks. Only one of the 48 killer whales captured for marine parks is alive

60 Sergeant, D. *Biology of White Whales (Delphinapterus leucuas) in Western Hudson Bay*. 30 J. Fisheries Research Board of Canada (1973) at 1080-82.


62 *Id*
Of all calves born from 1959-1970, 57 were captured for public display. Of that number, only 11 were alive in 1974. Furthermore, 23 of the 35 known-sex individuals were male, causing the sex ratio of the population to be skewed. The change in the age and sex structure of the population has been implicated in the current decline in the Southern Resident population. Delayed effects from the capture era, such as a possible gap in reproductive age females, and an insufficient number of males available to breed, may be contributing to the current decline.

This population was reduced to only 71 individuals post-capture in 1976. From a high of 97 whales in 1996, the 2001 population census included only 79 individuals - a decline of approximately 19 per cent. This information has led at least one scientist to predict that there is a 95 per cent chance that the Southern Resident killer whale stock may be extinct in 33 to 121 years.

In addition to effects from the captivity industry, other known stressors include ongoing degradation of the whales' habitat, and a sharp reduction in salmon stocks, the preferred food of this species. As a result, this population has been forced to hunt bottom fish which tend to have greater contaminant loads, combined with hunting further from home, thereby increasing energy

63 Howard Garrett. The Orca Conservancy. Personal E-mail Communication. February 18, 2002 (Lolita is still alive at the Miami Seaquarium.)

64 Centre for Biological Diversity. 2001 at www.biologicaldiversity.org.; See also, Status and History of the Southern Resident Killer Whale Community. Center for Whale Research. (Friday Harbour, Washington, June 16, 2001.)

65 Id.

66 Id.

67 Id.

requirements and the risk of death from fishing nets and gear.\textsuperscript{69} In addition, the Southern Resident killer whale population also suffers from high body burdens of organochlorine pollutants such as PCBs, from industrial dumps throughout the area. These pollutants depress immune function, disrupt reproduction, and leave the whales open to microbial diseases.\textsuperscript{70} Harbour seals sharing the same food types as the killer whales in the Puget Sound/Strait of Georgia area were found to be at risk for immunotoxicity, with blubber concentrations at or above those observed in seals from the extremely contaminated Baltic Sea. This may result in diminished immune system resistance and an increased incidence and severity of infectious disease.\textsuperscript{71}

Scientists predict that the expansion of oil facilities in Puget Sound will expose whales to greater risks of death from oil spills.\textsuperscript{72} In addition, in recent years, there has been a sharp increase in unregulated whale watching and other shipping traffic which makes this species more vulnerable to noise pollution and ship strikes.\textsuperscript{73}

The Canadian government listed this stock as endangered in 2001.\textsuperscript{74} The United States National Marine Fisheries Service (NMFS) is currently reviewing a petition to list this killer whale stock under the Endangered Species Act as endangered.\textsuperscript{75}

\begin{flushleft}
\textsuperscript{69} \textit{Id.}
\textsuperscript{70} \textit{Id.}; \textit{See also,} Holloway, M., \textit{Sea Sick: Killer Whales that Live near Seattle are Dying Too Soon and Too Often. Are they Harbingers of an Oceanic Collapse - and are We Next?}, Discover Magazine, February 2001 at 45-51.
\textsuperscript{72} \textit{Id.}
\textsuperscript{73} \textit{Id}
\textsuperscript{75} \textit{Id.}
\end{flushleft}
2. **Icelandic Killer Whales**

Killer whales were caught in and near Icelandic waters by Norwegian small-type whalers between 1955 and 1972. In addition, between 1976 and 1989, 59 orcas (20 male, 31 female, eight sex unknown) were captured from the population for the public display industry, 48 of whom were exported, with eight released, and three dying in holding pools before shipment.

Scientists have noted that marine parks appear to have preferred female animals in the lower size ranges (less than 4 m). This may be because males reach greater maximum size and have a higher rate of growth than females. Most Icelandic killer whales captured were two years of age or less, which means that exported animals were sexually immature at time of capture.

Based on earlier surveys and increased use of photo-identification techniques, the 1988 total Icelandic population of killer whales was estimated to be between 4,000 - 6,487 whales. Scientists have not yet definitively determined whether there are distinct stocks of killer whales in Icelandic waters, making an evaluation of the impact of captures on a single stock, problematic.

Although capture permits were applied for as recently as 1994, the Government of Iceland has refused to re-open the killer whale capture fishery.


77 Id.

78 Id.

79 Id.

80 Id.

3. **Russian Sea of Okhotsk Belugas**

Scientists are split on the stock differentiation of beluga whales in the Sea of Okhotsk. One Russian scientist states that the belugas in this area should be considered one stock, distinct from the near-by belugas of the Bering Sea and Arctic Ocean. The Scientific Committee of the International Whaling Commission (IWC) believes there may be three separate stocks in the Sea of Okhotsk - Shelikhov Bay, Sakhalin Bay-Amur River Estuary, and Shantar Sea. The two sources agree that the stocks are depleted relative to historical abundance.

In addition, in a recent resolution on small cetaceans, the IWC noted the depleted or unknown status of many beluga stocks. As a result, the IWC urged Governments to:

> “Take all appropriate measures to prevent, minimise, and mitigate by-catch of small cetaceans in fisheries operations, and supports the recommendations of the Scientific Committee that beluga range states continue studies to resolve the structure of beluga stocks, conduct contaminant analysis and health assessments and provide relevant scientific data to the Scientific Committee“.

A Russian source estimates that between 1989-99, 49 beluga whales were exported for the captivity industry (specific stocks unspecified.) Another source suggests that about 15 belugas


85 Statement made to the relevant parties by the Russian captors upon the transfer of four bottlenose dolphins and a beluga whale from Russia to Argentina in 1999. L.M. Mukhametov, Svertsov Institute and Prof. Zemsky, Chairman of the Marine Mammal Council in Russia. December 24, 1999. Moscow.
per year are live caught for display in oceanariums.\textsuperscript{86} This number may be under-estimated as Marineland of Canada imported a total of 14 belugas (assumed to be from the Sea of Okhotsk) in 1999 and 2000 alone, and the Government of the Russian Federation has approved the capture of 700 beluga whales in 2003.\textsuperscript{87}

Belugas in the Sea of Okhotsk were one of several species nearly driven to extinction by commercial hunters in the early twentieth century. One Russian scientist reports that in the 1930s, large-scale beluga whaling operations in the Sea of Okhotsk used sweep nets to catch significant numbers of belugas. He estimates the current number of beluga whales in the Sea of Okhotsk as between 18,000 and 20,000 individuals. This number seems to be stable, with little change in recent decades, despite a cessation of commercial whaling. He surmises that the Sea of Okhotsk beluga population may perhaps be only a tenth of what it was in the 1930s.\textsuperscript{88}

In October 1999, 13 tonnes of beluga meat was exported from Russia to Japan (representing approximately 36 animals from the Sea of Okhotsk population). In addition, belugas are threatened across their Arctic range by oil and gas development, over-hunting, over-fishing, vessel traffic, industrial development and pollution.

4. \textit{Western Hudson Bay Beluga}

Between 1967 and 1992, 68 belugas (44 female, 20 male, 4 unknown sex) were captured for aquaria from the Western Hudson Bay stock in the waters of the Churchill River estuary in

\textsuperscript{86} \textit{See supra.}, Note 76 at 8.

\textsuperscript{87} \textit{Government of Russian Federation Enactment Since 24th of December 2001, No. 1702-p.} Appendix 1, Table 28. Goverment of Russian Federation. Note the captures are allocated as follows: 400 individuals from the Northern Okhotsk Sea Zone; 100 individuals from the Western Kamchatka Subzone; and 200 individuals from the Eastern Sakhalin Subzone.

\textsuperscript{88} \textit{Id.} at 1 and 8.
Canada by the captivity industry. A license was required to capture belugas, which limited captures to immature belugas (females 245-290 cm, males 245-390 cm). Taking weaned and reproductively immature (especially female) beluga allowed for easier handing and acclimation of the sub-adult beluga. Single or small pods of gray sub-adult beluga were selected for capture, so that pregnant beluga cows with calves, and mature males were avoided during the live capture. The beluga were probably 3-6 years old when live-captured.

In 1987, the Canadian Department of Fisheries and Oceans (DFO) conducted a survey and concluded that the population estimate for the Western Hudson Bay stock was 23,000 beluga whales. These figures may be affected by the degree to which neighboring populations of Hudson Bay belugas mix together in different seasons, particularly winter and early spring. These estimates are likely conservative because they were not corrected for submerged whales, or for belugas outside of the survey area.

The Western Hudson Bay belugas are also hunted by Aboriginal peoples. The DFO estimates that on average, 300-400 belugas are landed annually Nunavut-wide. The DFO codes its Nunavut harvest statistics by region; those for beluga that live in the Western Hudson Bay region include landings from Arviat, Whale Cove, Rankin Inlet, Chesterfield Inlet, Coral Harbour and Repulse Bay. Their combined average annual harvest between 1990-2001 was about 180 belugas, however the relationship between belugas in western and northern Hudson Bay is still unclear. Studies in Western Hudson Bay (Arviat hunting site) estimate that 33 per cent of


90 E-mail from P.A. Hall, Fishery Management Coordinator (marine mammals). Canadian Department of Fisheries and Oceans, Central and Arctic Region. September 25, 2001.


92 See supra., Note 90.

93 E-mail from P.A. Hall, Fishery Management Coordinator (marine mammals). Canadian
females killed during hunts were pregnant.\textsuperscript{94} The DFO considers a 20 per cent loss rate during hunting to be representative of beluga hunts from Western Hudson Bay communities.\textsuperscript{95}

It has been suggested that within the Eastern Hudson Bay beluga stock, traditional beluga concentrations at Great Whale and Little Whale Rivers have disappeared, suggesting immigration from the Western Hudson Bay stock, if it occurred, was not sufficient to buffer these two concentrations of philopatric estuarine female-calf stocks. Canadian DFO scientists state that if estuarine stocks are genetically distinct then there is indeed concern for their conservation, when they are hunted or captured at the estuary.\textsuperscript{96} If this were the case, then historic and possible future removal of belugas from the Churchill River estuarine group (traditional removal location for the captivity industry) may pose similar threats.

Other threats to this beluga stock include chemical and acoustic pollutants, hydro-electric developments affecting the flow, temperature and water levels in estuaries, elevated levels of mercury, and a potential increase in the commercial shrimp fishery, possibly affecting the beluga's food supply.\textsuperscript{97} The diversion of the Churchill River for a hydro-electric project directly impacts belugas using the estuary for calving in the summer.\textsuperscript{98}

5.  \textbf{Russian Black Sea Bottlenose Dolphin (Tursiops truncatus ponticus)}

\textit{Tursiops truncatus ponticus} is a subspecies of bottlenose dolphin that is endemic to the Black Sea, forming a distinct population from other populations in the Mediterranean Sea. On the
whole, between 1931 and 1966, 1.6 million dolphins (harbour porpoise, bottlenose dolphin and common dolphin) were removed from this area.\textsuperscript{99} Taking into account the Turkish harvest between 1953 and 1982, the total removal over such a brief time was over 3.5 million dolphins.\textsuperscript{100} The original number for the dolphin population for all three species was estimated at 1.5 to 2.0 million individuals.\textsuperscript{101} There is no reliable population number for the Black Sea bottlenose dolphin population, nor is it understood whether the dolphins are divided into distinct stocks within the Black Sea. It is estimated that the population may have numbered 30-50,000 animals in the early 20th century. Current estimates range from 4,000 to 67,000 animals\textsuperscript{102}. Recent mass mortalities have been associated with the degraded state of their environment, including coastal development, disturbance caused by extensive vessel traffic, over-fishing, exposure to chemical pollutants, and the impacts of introduced species such as the comb jelly (\textit{Mnemiopsis leidii}) which now dominates the ecosystem.\textsuperscript{103}

One scientist estimates that since the 1960s, up to 1,000 bottlenose dolphins were taken alive in Russia and Romania for military, commercial and scientific needs.\textsuperscript{104} Between 1990 and 1998, at least 92 bottlenose dolphins were documented as being exported alive.\textsuperscript{105} Of 70 dolphin exports documented in detail by the Whale and Dolphin Conservation Society, more than 30 of


\textsuperscript{100} Id.

\textsuperscript{101} Id.


\textsuperscript{103} Black Sea Bottlenose Dolphin, A Report and Background Information Prepared for the 16\textsuperscript{th} Meeting of the CITES Animals Committee. Whale and Dolphin Conservation Society. 2001.

\textsuperscript{104} See note 101.

\textsuperscript{105} See note 102.
these animals are now confirmed dead. One of the six Black Sea bottlenose dolphins imported by Marineland of Canada in 2000, one has since died, as has a calf born in captivity shortly after the dolphins’ arrival at Marineland. In addition, unknown numbers of Black Sea dolphins are removed each year for domestic use such as human therapy, military purposes, and to replace animals dying in Russian captive display facilities that have capacity for 150 animals.

There appears to be a growing trend in captures from this population for use in marine parks. Between 1990 and 1994, 38 dolphins are reported to have been exported (average 7.6 animals per year), while between 1995 and 1998, 54 dolphins were exported (average 13.5 animals per year). It is also likely that current reproduction in the Black Sea population is not keeping pace with current mortality from all sources, and removal of live animals for the captivity industry, which traditionally targets young females.

This dolphin is listed as endangered in the UNEP Global Action Plan on Marine Mammals. The IUCN lists the dolphin as vulnerable on its Red Data List. Import into the European Union for commercial purposes is banned by EC Directive 92/43/EEC. Range States being signatory parties to the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Areas (ACCOBAMS) have banned the deliberate taking of cetaceans, including live specimens. Efforts are also underway to have this species up-listed to Appendix I of CITES.

6. **Mid-Atlantic Bottlenose Dolphin (Tursiops truncatus)**

The species most commonly held in marine parks worldwide is the Atlantic bottlenose

106 Id.

107 See Appendix C for Inventory of Bottlenose Dolphins at Marineland of Canada.

108 See Note 102.

109 Id
dolphin. Because of unregulated captures before the passage of the U.S. Marine Mammal Protection Act in 1972, the number of bottlenose dolphins captured in U.S. waters is uncertain. According to the U.S. Marine Mammal Commission, capture of bottlenose dolphins for purposes of public display began early in the 1900s and as many as 1,800 animals appear to have been taken from coastal U.S. waters prior to 1972. Since that time, another 573 permits have been issued resulting in the collection of approximately 2,400 Atlantic bottlenose dolphins.  

In mid-1987, large numbers of bottlenose dolphins began washing up on the beaches from New Jersey to Florida. Between June 1987 and March 1988, more than 740 dolphins were found dead. The NMFS estimated that the 1987-88 mass mortality may have reduced the mid-Atlantic coastal migratory population by over 60 per cent. In 1990, 297 dolphins stranded in the Gulf of Mexico. In 1992, a further 609 dolphins stranded on the Atlantic and Gulf coasts. From February to April 1994, 220 dolphins were found dead on the beaches of Texas. It should be noted that the numbers of stranded animals represents only recovered carcasses and does not reflect those unrecovered, which some have estimated to be as much as six times higher. Scientists believe that human interactions have caused the death of at least 28 per cent of all dolphins found stranded along the coast of North Carolina. The deaths of three pygmy sperm


113 Id.

114 Id.

115 Id.

whales through stranding on Hutchinson Island along Florida’s Treasure Coast were the third stranding that same week, reflecting a growing trend that saw 30 cetaceans strand themselves in this part of Florida in 2001.¹¹⁷

On March 14, 1990, the U.S. government enacted a voluntary moratorium on the capture of bottlenose dolphins in the Gulf of Mexico because of the extraordinarily high strandings that had occurred. No captures of bottlenose dolphins have occurred anywhere in U.S. waters since 1989.¹¹⁸ On April 6, 1993, the mid-Atlantic coastal stock was listed as depleted under the Marine Mammal Protection Act.¹¹⁹

The NMFS stock assessment lists the Mid-Atlantic Coastal bottlenose dolphin as a single stock from Florida to New Jersey. There is a current proposal to subdivide the stock into at least four distinct coastal migratory stocks with additional resident stocks in bays and estuaries. Scientists state that there are over 25 different resident stocks in the Gulf of Mexico alone.¹²⁰

Within the Mid-Atlantic Coastal bottlenose dolphin stocks, dolphins found in the Gulf of Mexico have been most targeted by the captivity industry. Scientists estimate the Gulf of Mexico bottlenose dolphin stock size at 33,740 animals, inshore of the 100 fathom contour (3,554 in bays/sounds, 7,690 in coastal waters, and 22,496 in waters of the continental shelf) and advise that for conservation and management purposes, it is important to differentiate between individual stocks of bottlenose dolphins, some of which may be as small as the tens to hundreds in specific bays, inlets and sounds up and down the south-east coast of the United States.¹²¹


¹¹⁸ See supra., Note 111, at 45.

¹¹⁹ Id.

¹²⁰ Sharon Young, Pers. Comm. August 28, 2001; See also supra Note 39.

¹²¹ See supra., Note 39 at 178-180.
D. Environmental Factors

There are numerous environmental factors that also may impact the species most commonly targeted for captivity. These factors include chemical pollution, habitat degradation, noise pollution, global climate change, and depletion of food supply. The World Wide Fund for Nature recently issued a report summarizing the effects of these environmental factors upon cetaceans.

1. Chemical Pollution

Evidence obtained over the last few decades suggests that toxic chemicals, in particular the Persistent Organic Pollutants (POPs) and Endocrine Disrupting Chemicals (EDCs), pose a serious threat to some marine mammal species and populations. There is evidence that persistent organic chemicals, such as PCBs and DDT have increased susceptibility to disease and decreased fertility by interfering with the hormonal systems of whales and dolphins.

Research indicates that some cetaceans have detectable and sometimes extraordinarily high levels of contaminants such as PCBs, DDT, chlorinated pesticides, brominated flame retardants and tributyl tins (TBT). Biologists have reported a range of effects of these contaminants on cetaceans.


chemicals on cetaceans including immunosuppression, cancer, skin lesions, secondary infections and diseases, sporadic die-offs, and reduced reproductive success. 125 “Nearly One-Third of Indian River Lagoon Dolphins Have Skin Disorders”. January 31, 2002. Associated Press. For example, as noted above, there have been a series of mass die-offs of marine mammals since the 1980s, including: bottlenose dolphins along the Atlantic coast of the United States in 1987 and 1988; striped dolphins in the Mediterranean in the early 1990s; and harbour porpoises in the Black Sea, among other species. Scientists have linked immune system function and greater susceptibility to viruses to high levels of PCBs found in the dead animals. 126 The endangered beluga whales of the St. Lawrence estuary are now amongst the most contaminated animals on earth, with tumors, reproductive problems and heavy metal poisoning. A petition has been provided to NMFS requesting emergency status to list the St. Lawrence River beluga whales as endangered, a status already in place in Canada. 127

Many scientists believe that the current status of contamination of the marine environment by organochlorines has reached crisis level, with the higher predators being most at risk. Cetaceans are among the most vulnerable of all organisms to the long-term effects of these chemicals. 128 For example, cetaceans have large fatty reserves in proportion to their body size that


128 For example, scientists are attempting to determine why 21 Atlantic bottlenose dolphins died
are ideal repositories for high concentrations of chemicals (such as DDT and PCBs.) Their foetuses and nursing calves are exposed to pollutants during critical periods of growth when endocrine, immune and nervous systems are developing. There can be substantial transfer of contaminants via the fat rich milk from nursing mothers.\(^{129}\)

*Scientists have warned that if these alarming trends continue, it is possible that some apparently stable populations could suddenly crash with very little warning.*\(^{130}\)

2. **Habitat Degradation**

Dam construction, irrigation projects, coastal and riverbank development and vessel traffic pose particular problems for coastal cetacean species, such as bottlenose dolphin, resident killer whale populations, and belugas who summer in estuarine ecosystems – species commonly targeted for captivity. Agricultural run-off, industrial effluents, and sewage disposal damage coastal habitats. In tropical areas, mangrove swamps, which act as essential fish nurseries, have been cleared for development or destroyed by chemical changes in the water regime, thus reducing the prey base for cetaceans and causing a dwindling food supply.\(^{131}\)

---

in June/July, 2001 in a 25 kilometre stretch of the Indian River lagoon in Florida (U.S.A.) waters. The dolphins in the area have suffered from fungal disease, cancer, hepatitis, meningitis, and heart lesions. An average of four dolphins were found dead during the two month period of June-July from 1991-1995, but that number jumped to 12 during the same two months between 1996 and 2000. *See Associated Press, Rash of Dolphin Deaths Around Florida Puzzling Scientists*, July 11, 2001.


130 *See supra* note 121.

131 Kemp, N.J., *Habitat Loss and Degradation*, The Conservation of Whales and Dolphins: Science and Practice. (Simmonds, M.P. and Hutchinson, J.D. (eds)) ( J. Wiley and Sons, Chichester, United Kingdom, 1996.)
3. Noise Pollution

All toothed species of whales, including the five species of cetaceans mentioned above, depend on sound for navigation and communication, and use echolocation to find their food. Increased underwater noise levels from vessel traffic and industrial activity may seriously affect the ability of cetaceans to communicate or echolocate. Both oil drilling ships and seismic surveys are strongly suspected of having particularly severe effects on cetaceans. Australian Associated Press. Whale Death Sparks Call for Seismic Testing Controls. October 22, 2001.

In addition, there is evidence that the NATO's use of low frequency/mid-frequency sonar may have caused strandings of Cuvier's beaked whales in 1996 in Greece's Kyparissiakos Gulf. A report by the U.S. Navy and the National Marine Fisheries Service confirmed that standard mid-frequency tactical sonar tests led to the mass stranding of 17 cetaceans in the Bahamas in 2000. Seven of the animals died, ten other animals were returned to the water alive. Based upon necropsies of the dead animals it was preliminarily determined that they had experienced some sort of acoustic or impulse trauma that led to their stranding and subsequent death. Since 1996, the Navy has conducted as many as four sonar tests every year, spread around the Gulf of Mexico, the Mediterranean, and off the coast of the Carolinas, New York, Oregon, and most recently Japan.


133 Sakhalin Environment Watch Press Release, E-mail dated September 6, 2001. (Scientists studying gray whale populations off Sakhalin Island in Russia have asked that Exxon Oil stop seismic testing is seriously affecting feeding patterns, leaving the whales unfit for over-wintering in the cold climate. Sakhalin Island is in the Sea of Okhotsk, nearby habitat frequented by the Sea of Okhotsk beluga whale stocks that have been targeted for captivity); See also, Comtex News Service. The Ministry of Nature Stood up for Whales, September 10, 2001. (The Russian government has halted Exxon's seismic explorations.)


135 eiss, K.R., Navy is Sued Over Coastal Sonar Tests: Environmental Groups say Program
4. **Global Climate Change**

There is evidence that global climate change is causing severe perturbations in ocean currents and that these perturbations in turn, are likely to affect whales and dolphins, among other marine species. Evidence indicates that global warming already has had some effect on the ecology of both the Arctic and Antarctic feeding grounds of many cetacean species. In addition, there is evidence that changes in ocean temperature may result in a shift in the distribution of plankton and fish species, disrupting the feeding patterns of cetaceans that consume them. For example, recent research shows increases in surface water temperature off the Californian coast was linked to a significant decline in zooplankton, a food source on which many cetacean and fish species are dependent.\(^{136}\)

5. **Over-Fishing/By-Catch**

There are an increasing number of sources that suggest over-fishing is playing a primary role in the degradation of cetacean populations. One group of scientists go so far to say that historically and currently, over-fishing at a global scale is the main cause of ecosystem breakdown and ecological extinction of a number of species, including vast populations of whales, manatees, dugongs, monk seals, sea turtles, swordfish, sharks, giant codfish and rays.\(^{137}\) Another group of scientists fear that the entire North Atlantic is being so severly overfished that it may collapse by 2010.\(^{138}\)

---


Scientists studying several populations of harbour porpoise identify fishing as a primary stressor: In the Celtic Sea, southwest of Great Britain, some 2,200 porpoises per year have been estimated to be killed in bottom-set gillnets. Scientists estimate that this is approximately six per cent of the population and that this level cannot be sustained. The same scientists note that pelagic trawlers operating to the south and west of Great Britain and France are catching unacceptable numbers of dolphins, noting hundreds of dead dolphins washing up on beaches in this area, suggesting a total death toll in the thousands of dolphins.\textsuperscript{139} Conservationists state that around 7,500 harbour porpoise are being killed each year in North Sea fishing gear. They too note that this causes an unsustainable annual mortality rate.\textsuperscript{140} In 2000, 421 cetaceans had been stranded in the U.K. including 45 whales, 120 dolphins, and 190 porpoises, and by August, 2001 that number had already been exceeded - overfishing was cited as a primary cause.\textsuperscript{141} Irish research on a trial pelagic pair trawler fishery for albacore tuna recorded 30 dolphins being caught in a single haul.\textsuperscript{142}

New Zealand has recently banned set netting along areas of the North Island coastline to protect the North Island Hector's dolphin, believing that all three recent deaths of the dolphin are due to fishing in a population estimated at only 100 animals.

In conclusion, capturing whales and dolphins for the captivity industry may not on its own have led to conservation problems for targeted species (although some stocks influenced by captures appear to be at conservation risk), the cumulative effect of all stressors discussed above are of serious concern. Taking action to eliminate the captivity stressor would appear to be a concise and relatively immediate response to conservation concerns, and in keeping with the

\begin{flushleft}
\end{flushleft}

\begin{flushleft}
\end{flushleft}

\begin{flushleft}
\end{flushleft}

\begin{flushleft}
\end{flushleft}
II. Hypothetical Legislation

Legislation governing the sale and use of live cetaceans within Canada can be written in a variety of ways. The options, however, fall into three basic categories or a combination thereof. The three categories are (1) a total ban on the sale or use, (2) a partial ban, or (3) regulation of capture, transport and sale. I will refer to these three categories as Hypothetical A, B and C.

A. Hypothetical A.

Under Hypothetical A, Canada bans the sale and use of all live cetaceans within Canada. This would include captive-bred, wild-caught and previously wild, but now considered captive. It would also include a total ban on the importation and exportation of all live cetaceans.

Such legislation may or may not limit the use of cetaceans currently held in captivity. Whether Canada could permit continued commercial use of cetaceans now in captivity, but eliminate expansion and future entry of market participants consistent with its WTO-obligations, is a legal issue which would require further research.

B. Hypothetical B

Under Hypothetical B, Canada bans the sale, importation and exportation of all wild-caught species, including those previously wild-caught but now in captivity. Under this hypothetical, Canada would define captive either as born in captivity or individuals that have lived in captivity for a specified number of years (preceding passage of the Canadian legislation.) Under this hypothetical, Canada would permit the continued commercial use within Canada of previously wild-caught individuals (not meeting the definition of captive-bred), but not the importation and exportation of such individuals.

C. Hypothetical C
Under Hypothetical C, Canada permits the importation and exportation of all live cetaceans, but subjects the sale, use, importation and exportation to specific regulation. Such regulations could take many forms, but for the sake of analysis, under hypothetical C, Canada regulates capture methods, captivity conditions, breeding parameters, shipping requirements, end usage, and requirements for public comment.

III. WTO Analysis

Under all three hypotheticals, Canadian legislation could affect international trade in goods, i.e., live cetaceans, and would be subject to WTO obligations.

Initial inquiry would focus on whether the legislation was an internal measure regulated by GATT Article III or a quantitative restriction governed by GATT Article XI. Several WTO/GATT panels have held that when an import measure qualifies as an internal measure under Article III, Article XI is not applicable. The first issue therefore, is whether any of the hypotheticals could be drafted consistent with the obligations of Article III. If not, WTO consistency will depend upon whether the hypothetical fits within the exceptions enumerated in Article XX.

A. Article III -- National Treatment

Article III of GATT prohibits a country from granting preferential treatment to domestic producers at the expense of foreign producers. With certain enumerated exceptions, Article III.1 provides:

---

143 See, e.g., Canada - Administration of the Foreign Investment Review Act, GATT BISD 30S/140, para 5.14 (Feb. 7, 1984); United States - Section 337 of the Tariff Act of 1930, GATT BISD 36S/345, para 5.10 (Nov. 7, 1989); Canada - Import, Distribution and Sale of Certain Alcoholic Drinks by Provincial Marketing Agencies, GATT BISD 39S/27, para 5.28 (Feb. 18, 1992).
...internal taxes and other internal charges, and laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of products...should not be applied to imported or domestic products so as to afford protection to domestic production.

Article III:4 provides (in relevant part):

The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favorable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use.

The Interpretive Note at Article III provides:

Any internal tax or other internal charge, or any law, regulation or requirement of the kind referred to in paragraph 1 which applies to an imported product and to the like domestic product and is collected or enforced in the case of the imported product at the time or point of importation, is nevertheless to be regarded as an internal tax or other internal charge, or a law, regulation or requirement of the kind referred to in paragraph 1, and is accordingly subject to the provisions of Article III.

At issue therefore, is (1) whether legislative provisions regarding the sale, importation, exportation and use of live cetaceans in Canada can be crafted in such a way that they may be characterized as an internal regulation, and (2) if crafted as an internal regulation, can the provisions be made non-discriminatory?

1. Application of the Article III requirements to the three hypothetical.

(a) Hypothetical A.

Hypothetical A would ban the sale and commercial use of all cetaceans within Canada (leaving aside the issue of whether continued commercial use of current captive-held cetaceans
would be permissible). To further enforce this provision, the import and export of live cetaceans would also be banned. Because the ban is complete – no commercial class of producers, whether domestic or foreign, would be allowed to buy, sell or trade the product (live cetaceans) – such regulation would likely be found to meet the non-discrimination requirements of Article III.  

Hypothetical A (i.e., a complete ban on the sale and use of live cetaceans), therefore, would likely meet the requirements of Article III and be consistent with Canada's WTO obligations.

It is my understanding, however, that an immediate, complete ban on the use of dolphins for captivity would not be politically feasible at this time. The real question, therefore, is whether a complete ban phased-in over time, would satisfy WTO requirements.

Let's assume for the sake of analysis that legislation provides for a complete ban to take effect in 20 years. Let's also assume that the legislation requires specific phase-outs at certain intervals tied to technological feasibility. The phase-outs, by necessity, would be both product and production based. Would the duration of the phase out itself, change the characterization of the regulation from consistent to inconsistent with the requirements of Article III? Logically, the timing of a total ban should not affect its characterization as an internal measure, nor should timing itself per se be considered discriminatory.

A total ban, preceded by stages of incremental application based on both product and production standards would present a case of first impression before the WTO. While a formal reading of WTO jurisprudence might suggest that such a solution is inconsistent with WTO rules, recent changes in the focus of analysis by the Appellate Body suggests the opposite. In fact, in Shrimp Turtle, the Appellate Body found:

144 Any continued commercial "use" (i.e. display for profit) of live cetaceans would be limited to service providers (marine parks and captive facilities.) Therefore, research regarding the requirements of the WTO's General Agreement on Trade in Services (GATS) should be conducted prior to drafting of legislation.

145 For example, the phase-out could be defined by species (a product standard) or by whether dolphins are wild-caught or captive-bred (a production standard), or any combination thereof.
The length of the “phase-in” period is not inconsequential for exporting countries desiring certification. That period relates directly to the onerous nature of the burden of complying with the requisites of certification and the practical feasibility of locating and developing alternative export markets for shrimp. The shorter that period, the heavier the burdens of compliance, particularly where an applicant has a large number of trawler vessels, and the greater the difficulties of re-orienting the harvesting country's shrimp exports. The shorter that period, in net effect, the heavier the influence of the import ban.

The Appellate Body focused not only on the fact that in Shrimp Turtle different countries were permitted shorter phase-in periods to comply with US regulations, but also that a shorter phase-in period did not address the administrative and financial costs and the difficulties of governments in putting together and enacting the necessary regulatory programs and credible enforcement effort.

Under modified hypothetical A, the objective of the legislation would be to phase out the use of live cetaceans so that over time, a total ban is achieved without undue impairment of domestic and foreign captive industries. Industry would be given the necessary time to develop technological alternatives to captivity which meet consumer demand for interaction (virtual or otherwise) and conservation and humane concerns.

As previously noted, any phase out likely would be product specific (limitations on species) and production specific (limitations on capture or breeding). For instance, certain species may be phased out first, but also certain production methods, i.e., wild-capture, may be phased out while captive breeding is allowed for some duration until technological developments permit complete virtual or other interaction. One problem, however, is that at least two GATT panels have held that harvesting requirements are production standards (production and process method standard, commonly called "PPM"), not covered by Article III


147 See United States - Restrictions on Imports of Tuna, (Unpublished decision), GATT Doc. DS21/R (September 3, 1991); [Tuna-Dolphin I]; See also, United States - Restrictions on Imports of Tuna, (unpublished decision), GATT Doc.DS29/R, (May 23, 1996) [hereinafter, Tuna-Dolphin II].
The WTO Appellate Body’s emphasis on case-by-case analysis makes it difficult to determine whether a phase-out schedule based on production standards would be considered discriminatory under Article III, when the overall ban itself met the requirements of Article III. In *Shrimp-Turtle*, the Appellate Body found that the US shrimp turtle law was consistent with Article XX(g) but that US application of its law was not.\(^{148}\) Similarly, a panel could find a phase-out schedule based on production requirements discriminatory, even though a ban itself would be consistent with Article III.

If production-based phase outs were determined to either be discriminatory or to constitute a quantitative restriction, further analysis under Article XX would be appropriate.

**(b) Hypothetical B**

Hypothetical B would ban the sale, import and export of only a limited class of cetaceans. The class would be based on production characteristics (i.e. means of acquiring the individual) rather than on distinct product differences. As noted above, previous GATT panels have held that harvesting requirements are production standards (production and process method standard, “PPM”) not covered by Article III. In this case, cetaceans, whether wild-caught or captive-bred, would be considered ‘like’ products and any less advantageous regulatory differentiation between the two would be considered discriminatory.

Despite the previous jurisprudence regarding PPMs, however, the Appellate Body in *Asbestos* noted in *dicta* that there may be occasions when, "Members may draw distinctions between products which have been found to be ‘like’, without, for this reason alone, according to the group of ‘like’ imported products ‘less favorable treatment’ than that accorded to the group of ‘like’ domestic products."\(^{149}\) The Appellate Body declined to interpret the phrase "treatment no less favorable" but left open the possibility that there may be situations where a country may

---

148 *Shrimp Turtle AB*, supra., Note 131 at paras. 161-163.

distinguish between otherwise ‘like’ products without the distinction creating an Article III violation.

Furthermore, in Asbestos the Appellate Body made clear that a determination of what constitutes ‘like’ products must be determined on a case-by-case basis, after a thorough examination of all relevant factors.\textsuperscript{150} Citing to the Report of the Working Party on Border Tax Adjustments, the Appellate Body reiterated the four general criteria that have been used by past panels and the Appellate Body to determine ‘likeness.’\textsuperscript{151} The Appellate Body noted that these four criteria comprised four categories of ‘characteristics’ that the products might share: (i) the physical properties of the products, (ii) the extent to which the products are capable of serving the same or similar end-uses; (iii) the extent to which consumers perceive and treat the products as alternative means of performing particular functions in order to satisfy a particular want or demand; and (iv) the international classification of the products for tariff purposes.\textsuperscript{152} According to the Appellate Body, the term ‘like products’ as used in Article III:4 of the GATT 1994 is concerned with competitive relationships between and among products and these four categories of characteristics are probative of whether and to what extent, the products involved are or could be in a competitive relationship in the marketplace.\textsuperscript{153}

In Asbestos, the Appellate Body ruled that the dispute panel had not appropriately analyzed all four characteristics prior to determining that chrysolite asbestos fibers were ‘like’ PCG fibers. Of particular concern to the Appellate Body was the fact that the panel appeared to dismiss the issue of consumer preference, as well as failed to thoroughly examine the differences in physical properties between the products, particularly the health risk associated with asbestos.

\textsuperscript{150} Id. at para. 101.

\textsuperscript{151} Id. These include: (i) the properties, nature and quality of the products, (ii) the end-uses of the products, (iii) consumers' tastes and habits \textsuperscript{B} more comprehensively termed consumers' perceptions and behavior \textsuperscript{B} in respect of the products; and (iv) the tariff classification of the products; \textit{See also, Japan -- Customs Duties, Taxes and Labeling Practices on Imported Wines and Alcoholic Beverages, BISD 34S/83, (Nov. 10, 1987).}

\textsuperscript{152} Id.

\textsuperscript{153} Id. at para 103.
The panel had ruled that health risk was not an appropriate consideration in determining ‘likeness’ under Article III:4. The Appellate Body specifically overturned this ruling, finding that health risk is a relevant component (though not the only component) of a determination of ‘likeness’ under Article III:4.

The Appellate Body ruling, while narrowly tailored, is not insignificant. It suggests that in the future, panels will be required to view the issue of ‘like product’ more broadly than they have in the past. Not only are physical properties at issue, but the effect of the physical properties on human, and presumably animal health, as well as the environment.

Applying these criteria to Hypothetical B is by no means an easy task, nor is a definite analysis realistic. At best I can outline the type of evidence which might demonstrate that captive-bred and wild-caught species are not ‘like’ as that term is used in Article III:4; or if they are ‘like’, the type of evidence that would show that differential treatment nevertheless, does not create an Article III violation. The following would be probative:

**Product characteristics**

1. Are there genetic mutations that might be caused by the physiological limitations of captivity?

2. Are there physiological differences that develop in captive-bred individuals or individuals once wild, but kept in captivity for long periods of time?

3. Are there behavior differences that cause physical changes (i.e. dorsal fin flop)?

4. Are there behavioral differences between wild-caught and captive-bred that would indicate that the two groups of individuals do not function the same?

**Similar or Same End Use**

5. Do captive-bred individuals tend to live longer than those taken from the wild and held in captivity?
6. Are there behavioral differences in terms of reaction to training and display between captive-bred individuals and wild-caught?

7. Does one population of individuals interact with humans more predictably then the other?

**Consumer Preference**

8. Is there evidence that Canadians prefer, for ethical or other reasons, captive-bred versus wild-caught for display purposes?

9. Is there evidence of a growing trend in public opinion regarding captivity?

In conclusion, it is hard to make a dispositive prediction whether a future panel would consider captive-bred and wild-caught dolphins ‘like’ products as that term is used in Article III:4, or if ‘like’, whether regulatory differences would create an Article III violation. Previous panels have determined that measures which distinguish between products based on production methods do not fall under Article III, but rather under Article XI. The Appellate Body in Asbestos, however, has opened a small window under which this issue could be revisited, at least on a case by case basis.

**(c) Hypothetical C**

Hypothetical C would likely regulate the conditions of sale, including import and export, of cetaceans within Canada. Such regulations could include conditions on capture, breeding, transportation and other characteristics of commercial captivity. If conformance with these requirements are a condition of import or sale, they would be considered production standards rather than product standards. Even under the most optimistic reading of Asbestos it would be difficult to argue that this type of production criteria would pass muster under Article III. In all likelihood, if tied to import restriction, such measures would be considered a quantitative restriction under Article XI.

**B. Article XI**
As previously mentioned, a measure either falls under Article III or Article XI, but not both. Article XI provides:

No prohibitions or restrictions other than duties, taxes or other charges, whether made through quotas, import or export licenses or other measures, shall be instituted or maintained...on the importation of any product of the territory of any other contracting party or on the exportation or sale of export of any product destined for the territory of any other contracting parties.

As noted above, Hypotheticals B & C (and possibly components of modified hypothetical A) might be found to constitute a quantitative restriction, although it is more likely that A and B at least, would be found to be discriminatory provisions as defined in Article III:4.

C. Article XX

It is my opinion that Canadian legislation to ban the import and export of live cetacean, can be drafted consistent with the requirements of Article XX of the GATT. Each of the Hypotheticals will be considered in turn.

1. History of Article XX Exceptions

Trade agreement history reveals that the original framework of GATT trade principles and exceptions envisioned a dynamic system that could balance trade and domestic policy needs as well as global economic integration with national sovereignty.

GATT, the document reflects a theoretical balance of interests that has not (with recent exception) characterized interpretations by GATT, the institution (now the WTO.) That balance between trade and environment or certain other domestic policy interests is achieved by the general exceptions to GATT in Article XX.
The plain language of Article XX provides that subject to the safeguards in the preamble (or chapeau), "nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures" that are included in the list of general exceptions (emphasis added).

There are three general exceptions that are applicable to the question at issue. They include:

(a) necessary to protect public morals;

(b) necessary to protect human, animal or plant life or health; and

(g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption

Article XX dramatically protects the measures listed against conflict with every trade rule save the two safeguard tests written into the Article's preamble. By supplanting the sum of all other trade considerations, the safeguards play a crucial role in preserving the balance between trade and environment (and the other protected domestic policies). The preamble (or chapeau) required that protected measures:

...are not applied in a manner which would constitute a means of (1) arbitrary or unjustifiable discrimination between countries where the same conditions prevail; or (2) a disguised restriction on international trade.

This framework for balancing trade and non-economic interests was debated and designed well in advance of GATT 1947. There were two global trade documents that developed the approach of balancing trade rules on the one hand with general exceptions and a preamble with safeguards on the other. These documents never took effect. The first was the 1927 International Convention for the Abolition of Import and Export Prohibitions and Restrictions [1927 Convention], which was drafted by committees and conferences of the League of Nations. The second was charter for creation of the International Trade Organization [ITO Charter], which was sponsored by committees of the United Nations. While the ITO Charter was still being drafted
after 1947, the seminal proposals from the United States and other countries did predate the GATT, and they help to illustrate contemporaneous thinking.

As the first serious effort to promote global economic integration, the deliberations over Article 4 of the 1927 Convention yield the most extensive historical record regarding the structure and purpose of the GATT general exceptions and their preamble. From the start, the goal of the 1927 Convention was to develop a formula for abolishing import and export restrictions while preserving deference for legitimate non-economic policies.  

The League of Nations Economic Committee \(\text{[LoN Economic Committee]}\) went so far as to describe the Article 4 prohibitions or restrictions on trade as “outside the scope” of the Convention. \(^{154}\) It is clear from the discussion at several committee meetings that the delegates distinguished between "economic" or "financial" regulations as opposed to "non-economic" regulations. It was the former, not the latter, which the 1927 Convention was designed to govern.

As an example of this theme, the delegation of India expressed the view that only sovereign nations could determine the need for trade restrictions. \(^{156}\) In a similar vein, the Japanese delegate emphasized that "each country must be allowed sufficient liberty to take those measures of prohibition or restriction which it considered necessary for non-financial or non-economic reasons ..." \(^{157}\) In this context, the balance between sovereignty and economic integration was a

---


155 *Preliminary Draft Agreement Established by the Economic Committee*, 228. [Economic Committee, Preliminary Draft]

156 [The Indian delegate said that] “...the Government of a country was the only possible arbiter of the necessity for restrictions and that it could not afford to surrender the responsibilities placed upon it and submit the case to any foreign or extraneous body. * * * [The Indian Government ... would prefer to see all measures connected with prohibitions relating to national security, revenue, finance, health or morals removed altogether from the Convention.” *International Conference for the Abolition of Import and Export Prohibitions and Restrictions, Proceedings of the Conference [1927 Convention], Minutes of Preliminary Meetings [Minutes]*, A.559.M.201.1927.II[B] (October 17 - November 8, 1927), 228.

157 Comment by Mr. Ito (Japan). *1927 Convention - Minutes*, 84.
central issue for the 1927 Convention.

The delegates frequently asked whether particular laws of interest would be covered by the proposed general exceptions. These were most often questions about quasi-economic regulations, but non-economic laws were discussed as well. In response to the discussion of whether various quasi-economic trade restrictions would be protected by Article 4, the Austrian delegate raised the possibility of more detailed disclosure in order to "get rid of the skeletons." However, most delegations opposed developing a detailed list or a policy of strict construction. The committee eventually arrived at a consensus that generic exceptions would strike the best balance. The British delegate articulated the rationale upon which the committee reached consensus:

... if these non-economic prohibitions were not covered by the scheme of the Convention [that is, protected by general exceptions], there was ground for hope that the danger of abuse would ... not be serious. In pursuing this course the Conference would be taking the only step possible at this stage. It should not set up machinery relating to these non-economic prohibitions. *** The time has not yet come to include non-economic prohibitions and restrictions, for Governments had their special and peculiar obligations to their peoples in matters to which they

158 1927 Convention - Minutes. Examples of quasi-economic concerns included grading standards (United States, 82 and 86), import/export restrictions (India, 87), stabilization of currency (Greece, 83), and marks of origin (Britain, 80).

159 Examples of non-economic concerns included prohibitions on obscene materials (Ireland 108) and lottery tickets (Egypt, 110). Minutes of Plenary Meetings, 1927 Convention, at respective page cites above.

160 [The Austrian delegate said that] “... the sooner the skeletons were got rid of the better ... The danger was that, by discussing general formulas, the Conference might adopt exceptions more general than was desired, and therefore it must ascertain which were the points on which restrictions were necessary and leave for later discussion the way in which those restrictions could be expressed. The formulas finally adopted should be made as light as possible on account of the unavoidable exceptions which it was impossible to remove at present.” 1927 Convention - Minutes, 87.
related.\textsuperscript{161}

While generic exceptions would strike the balance with sovereignty concerns, the LoN Economic Committee also wanted to assure that such broad exceptions would not lead to abuses of the trade rules.\textsuperscript{162} At the same time, the committee wanted to avoid drafting the agreement "so strictly and with so little regard to local conditions as to make it impossible to obtain general adhesion."\textsuperscript{163} In this context the committee drafted the two safeguards for the preamble to Article 4. Thus did the 1927 Convention explain its framework of using general exceptions and preamble safeguards to preserve the balance between trade and non-economic policy interests.

The ITO Charter debates followed much the same pattern. India, among others, continued to express general concern about losing its sovereignty over non-economic matters, particularly resource conservation.\textsuperscript{164} The alternating concern was still the potential for abusing the exceptions, as was expressed by the delegates from France and the United Kingdom, among others.\textsuperscript{165}

Based on a proposal from the United States, the ITO committee that worked on general exceptions began with a list of exceptions, but no preamble with safeguards against abuse. The committee inserted the same structure of preamble safeguards that the 1927 Convention used.\textsuperscript{166}

\begin{footnotesize}
\begin{enumerate}
\item Comment by Sir Sidney Chapman. \emph{1927 Convention - Minutes of Plenary Meetings}, 1927 Convention, 84.
\item Economic Committee, \emph{7th Session Report}, 27.
\item Economic Committee, \emph{Report of the Economic Committee to the Council, 15th Session}, C.309(I)M.114.1925.II[B] (May 25 - June 3, 1927), 309. \emph{[15th Session Report]}
\item Comments by Mr. Gangudi (India), \emph{Minutes of the Preparatory Committee of the International Conference on Trade and Employment [Preparatory Committee II Minutes]} (November 13, 1946), 5.
\item Comments by Mr. Roux (France) and Mr. Rhydderch (United Kingdom), \emph{Preparatory Committee II Minutes}, 3 and 7.
\item Proposal by Mr. Rhydderch (United Kingdom), \emph{Preparatory Committee II Minutes}, 7.
\end{enumerate}
\end{footnotesize}
The ITO preamble stated that trade measures could not be "applied in such a manner as to constitute a means of arbitrary discrimination between countries where the same conditions prevail, or a disguised restriction on international trade."\textsuperscript{167}

While the exact language of GATT general exceptions continued to develop, the framework of exceptions with a preamble to safeguard against abuses carried through from the 1927 Convention to the ITO Charter to GATT 1947. That original framework for maintaining a balance between trade and non-economic concerns remains as a prominent feature of GATT architecture.

2. Dispute Panel and Appellate Body Interpretations of Article XX

It is difficult to predict with any degree of certainty how a WTO dispute panel (or the Appellate Body) will react to a Canadian regulation banning or limiting the sale, use, import and export of cetaceans for captivity. At best, one can demonstrate the basis on which a WTO dispute panel or Appellate Body could rule in favor of such legislation, if it so chose. While this may sound somewhat cynical, past dispute panels have obviated the original purpose of Article XX by disregarding the plain language of Article XX, particularly Article XX(g).\textsuperscript{168}

The Appellate Body in \textit{United States Regulations of Fuels and Fuel Additives Standards for Reformulated and Conventional Gasoline (RFG)}\textsuperscript{169} reversed this trend, at least with respect to Article XX(g), when it found that litmus tests devised by previous dispute panels was unsupported by the plain language of Article XX(g).\textsuperscript{170}

While the Appellate Body' decision in \textit{RFG} and its affirmation of its decision in \textit{Shrimp} 

\textsuperscript{167} UN Docs. E/PC/T/C.II/32, II and E/PC/T/C.II/50, 3-7.

\textsuperscript{168} See Tuna-Dolphin I and Tuna-Dolphin II, surpa., Note 132; See also, United States -- Standards for Conventional and Reformulated Gasoline, [hereinafter, \textit{RFG}], WT/DS2/R, (Jan. 29, 1996).


\textsuperscript{170} Id. at para. 3.13.
Turtle are in some sense a positive trend (at least with respect to Article XX(g)), the overall utility of the decision is somewhat limited for exceptions other than paragraph (g). First, the language of Article XX(g) is very different from the language in Articles XX(a) and (b). Articles (a) and (b) apply to measures which are necessary to protect public morals or the life and health of humans, animals and plants. Article XX(g) applies to measures which are simply related to conservation, etc. Prior to RFG, dispute panels had read into paragraph (g) a necessity requirement similar to that articulated in paragraphs (a) and (b).

Second, the Appellate Body in RFG, in effect, simply moved the "necessity" requirement from paragraph (g) to the chapeau. The implications of this decision with respect to paragraphs (a) and (b) are not entirely clear. The only Article XX(b) case decided since the RFG ruling is Asbestos, and in that case the panel gave only a cursory analysis to the chapeau, referring back in its conclusion with respect to the necessity requirements of paragraph (b).

171 In RFG AB the Appellate Body ruled that the relevant inquiry under the Article XX chapeau was not whether the measure in question, in that case the baseline used by the United States, was inconsistent with another substantive provision of the GATT, but rather, whether the inconsistency was justifiable. Para. 4.4. In finding that the US baselines were not justifiable, the Appellate Body determined that "there was more than one alternative course of action available to the United States in promulgating regulations implementing the CAA." para. 4.10. In other words, according to the Appellate Body, the inconsistency was not necessary because there were alternative, and more GATT-consistent, courses of action available to the United States to further its policy objective.

172 See RFG supra., Note 153. In applying the chapeau, the dispute panel stated, "We have already found that the Decree was necessary to achieve a public health objective and did not, in its application, constitute arbitrary or unjustifiable discrimination. We recall that in [RFG ], the Appellate Body considered that the kinds of considerations pertinent in deciding whether the application of a particular measure amounts to arbitrary or unjustifiable discrimination may also be taken into account in determining the presence of a disguised restriction on international trade. Since we have not identified discrimination, we consider it is unnecessary to determine whether we are faced with discrimination that might constitute a disguised restriction on international trade." Id. at para 8.237. In other words, the panel concluded that the chapeau requirements were met, based on its determination that the measure in question was necessary to achieve France's desired health policy, the very inquiry made under paragraph (b)
Because the *chapeau* requirements apply,\(^{173}\) irrespective of whether the measure falls under (a), (b), or (g), a discussion of the *chapeau* will follow after an analysis of the three (3) substantive exceptions.

In addition, because the "necessity test" is the same whether a measure falls within paragraph (a) or (b), I will outline the scope of paragraphs (a) and (b), then the necessity test, then apply the requirements of paragraphs (a) and (b) to the three hypotheticals set forth above. This will be followed by a discussion of scope of paragraph (g) and the requirements of the *chapeau*. Lastly, the requirements of paragraph (g) and the *chapeau* will be applied to the three hypotheticals.

3. **Scope of Article XX(a)**

To date there have been no dispute panel decisions regarding Article XX(a), although this clause was briefly mentioned by at least two previous panels.\(^{174}\) As noted above, there are two relevant inquires regarding Article XX(a); (1) whether the regulation fits within the scope of the term "public morals", and (2) whether it is "necessary."

(a) **History of Debate of Article XX(a)**

The history of debate from the 1927 Convention through adoption of GATT 1947 confirms a common sense understanding that the scope of the public morals exception is broader than the other exceptions and that nation states were allowed to determine public morals within the context of their own culture.\(^{175}\) Moreover, moral convictions are inherently subjective.

---

173 *See RFG AB supra.*, Note 154 at para 4.1. (The Appellate Body found an analysis of the application of Article XX begins with a determination that the measure is justified under sub-paragraph (a), (b), or (g). If provisionally justified under a specific exception, then further analysis of the same measure is required under the *chapeau*.)


175 A narrow rule-based reading of public morals would lead to inconsistent or absurd results.
Different nations and cultures have different values which may be reflected in legislation such as a ban on dolphin captivity or a ban on the use and importation of pork. An analytical framework for Article XX(a) which required a reviewing WTO panel to second-guess a nation's moral decisions, and to pass judgment on whether a nation had legislated in a morally consistent manner, would not only place an untenable burden on WTO panels, it would also result in unconscionable intrusions upon national sovereignty which Article XX was intended to preserve.

The history of trade agreements since the League of Nations shows that protecting public morals has been a constant concern and that language has gradually evolved from specific to more generic terms. As noted above, Article XX(a) of GATT 1947 had two predecessor documents, which never took effect. The first was article 4(2) of the 1927 Convention of the League of Nations. The second was article 45(1)(a)(I) of the initial proposals for the ITO Charter, which

For example, one could argue that Article XX(a) is limited to measures which protect the public's morals, i.e. pornography. Assume for instance, that Canada passed a law banning the importation and use of products made from human body parts—such as lampshades made from human skin. The lampshades cannot harm the public nor can they incite the type of amoral behavior typically ascribed to pornography. Clearly, however, a WTO dispute panel would not deny a sovereign nation the right to ban a product which although not harmful to the public, nonetheless, is morally repugnant because it is made from human body parts. Although this is an extreme example, the extreme end of the spectrum often demonstrates the defectiveness of a particular rule.

Similarly, XX(a) could be construed to apply only to products which are somehow offensive to an entire public. Such an interpretation, however, is not only not supported by either the plain language of Article XX(a) or the legislative history of the GATT, it too would lead to dichotomous rulings. For instance, could a country ban the importation and use of pork or non-kosher products even if the entire country was not Islamic? If Article XX(a) could be asserted only by a religiously or morally homogeneous nation, most nations of the world would be excluded from its use.

Furthermore, any rule requiring absolute moral consistency in order for Article XX(a) to apply would effectively preclude any nation from taking the first step to institute measures addressing moral concerns. For instance, should a country be precluded from banning the use and importation of dog and cat fur when it nevertheless permits the sale and use within its territory of other furs? (The US Trade Representative has issued an opinion letter that a US law banning dog and cat fur is consistent with the WTO, even though the environmental concerns are de minimus and the United States permits the sale and use of other types of fur. See letter from Charlene Barshefsky to the Honorable Philip M Crane, Chairman of the House Ways and Means Committee, dated November 8, 1999.)
was sponsored by committees of the United Nations.

The 1927 Convention exempted "prohibitions or restrictions imposed on moral or humanitarian grounds."176 Like the other exceptions in Article 4, the Economic Committee reported that moral prohibitions or restrictions on trade were "outside the scope" of the Convention.177 The delegates frequently asked whether particular laws of interest would be covered by the proposed general language. Examples of morally based trade restrictions included prohibitions on obscene materials (Ireland)178 and prohibitions on lotteries (Egypt).179 The 1927 Conference ended with a morals exception close to what the Economic Committee originally recommended, except that the language on morals became even more general.

As drafted by the Economic Committee of the 1927 Convention, the morals exception covered trade restrictions for "moral or humanitarian reasons or for the suppression of improper traffic, provided that the manufacture of and trade in the goods to which the prohibitions relate are also prohibited or restricted in the interior of the country."180 The Conference shortened the entire section to read, "moral or humanitarian grounds."181 While there was no comment on why the

176 1927 Convention, art. 4(2), 8.
177 Preliminary Draft Agreement Established by the Economic Committee, 1927 Convention, 228.
178 Minutes, 1927 Convention, 108.
179 Minutes, 1927 Convention, 110.
180 Preliminary Draft, 1927 Convention, 224 (emphasis supplied).
181 1927 Convention, Official Instruments, 8. At one point, the "moral and humanitarian" exception had been deleted during the drafting process. When the Egyptian and British delegates moved to put it back in, the committee's rapporteur explained that the intent had not been to delete the moral exception, but to consider that it was included within the terms of a broader section that protected restrictions that applied to like national products. While the committee chose to reinset the moral exception, this episode illustrates the effort that the committee was making to develop the broadest possible generic categories. Minutes, 1927 Convention, 107-108.
Conference moved to shorten the section, its action was consistent with the policies of (1) using the most generic language, and (2) using the safeguards in the preamble to protect against discrimination or disguised trade barriers.

While there was no specific discussion that would explain whether a total or partial ban on the import, export and use of live dolphins is the type of regulation that would be considered a moral exception to the trade rules, it is worth noting that during the same period, another branch of the League of Nations was negotiating a convention that included a clause to prevent unnecessary suffering of animals during transport. This suggests that in 1927, international institutions recognized animal protection as both a moral issue and a sanitary or phytosanitary issue as they do today.

The morals exception within the ITO Charter was initially proposed by the United States as part of its comprehensive charter proposal. The proposed exception covered measures "necessary to protect public morals,"182 which is the same language as Article XX(a) of GATT 1947. When compared to its predecessor language from article 4(2) of the 1927 Convention, "moral or humanitarian grounds," the ITO proposal carried on the trend toward ever more general language.

There was literally no comment on the general exceptions recommended by the United States within the first ITO report (the London conference).183 Nor was there further comment on the "public morals" exception in later reports. It is clear that the drafters of GATT 1947 began their work with the pre-1947 ITO Charter drafts, which were based on the original U.S. proposal.184


183 ITO London Report, 32.

Without any further insight into the internal United States rationale for adopting "public morals" rather than its older 1927 cousin, "moral and humanitarian grounds," the most likely explanation remains the preference for using general terms rather than specific examples. For example, "humanitarian" concerns would be a type of "public morals" and therefore the broader term, "public morals," is all that is necessary.

4. Scope of Article XX(b)

There are two relevant inquires regarding paragraph (b): (1) whether it is within the scope of human, plant and animal life or health; and (2) whether it is necessary.

A dispute panel could interpret the meaning of "life or health" as parallel to the definition used in the GATT 1994 Agreement on the Application of Sanitary and Phytosanitary Measures (SPS), which is limited to "risks arising from the entry, establishment or spread of pests, diseases, disease-carrying organisms or disease-causing organisms." Annex A further specifically defines...
the term Sanitary and phytosanitary measure. Most importantly, this definition excludes quality of life issues as well as environmental threats to animal life or health such as loss of habitat, excessive hunting, pollution and other ecological imbalances caused by human commerce.

It is also worth noting that while the SPS Agreement provides that sanitary or phytosanitary measures which conform to the relevant provisions of the SPS are presumed to be in accordance with Article XX(b), this does not mean that Article XX(b) is synonymous with the requirements of the SPS Agreement. In Asbestos, the Appellate Body observed that,

although the TBT Agreement is intended to further the objectives of GATT 1994, it does so through a specialized legal regime that applies solely to a limited class of measures. For these measures, the TBT Agreement imposes obligation on Members that seem to be different from, and additional to, the obligations imposed on Members under the GATT 1994.

When GATT 1947 was being drafted, there was little discussion of the scope of Article XX(b), perhaps because it was so familiar from similar language from the International Trade Organization Charter, the 1927 Convention, and the bilateral treaties that it had become "boilerplate," in the words of a U.S. delegate. Prior to the 1927 Convention, the Economic

similar conditions prevail, including between their own territory and that of other Members....and shall not be applied in a manner which would constitute a disguised restriction on international trade.

4. Sanitary or phytosanitary measures which conform to the relevant provisions of this Agreement shall be presumed to be in accordance with...Article XX(b).

187 Agreement on Technical Barriers to Trade.

188 Asbestos AB supra., Note 134 at para 80.

189 UN Doc. E/Conf. 3/78 (1948).

190 1927 Convention, supra., Note 141
Committee of the League of Nations recommended a health exception that included protection from disease and "degeneration or extinction."\(^{192}\) This phrase was dropped from the text adopted by the Convention, but it was retained in an explanatory protocol to the Convention.\(^{193}\)

As noted above, the model for this GATT exception was established when the U.S. and British delegations proposed simplifying the 1927 exception even further into its present form.\(^{194}\) Sanitary and phytosanitary measures were clearly the foremost concern. However, there is no hint on the record that the simplification of Article XX(b) language was anything more than a decision to use the most general phrase possible to include the various health risks that were mentioned in predecessor documents. The movement away from detailed list-type definitions to generic definitions is consistent with a policy of GATT deference to sovereign articulation of policy purposes.

A much broader interpretation of Article XX(b) can be supported by both the plain language of the terms *life* and *health* as well as by the drafting history of this provision. Defining *life* and *health* as pertaining only to sanitary and phytosanitary measures focuses the inquiry on "impact" or harm to others (i.e., the spread of the disease.) The terms *life* and *health*, however, also have meaning in the context of the impact on the individual. For instance, in *Asbestos*, the health risk of *chrysotile asbestos* impacted a limited number of individuals, as opposed to being widespread or a sanitary or phytosanitary concern, yet the measure was found to be consistent with Article XX(b). In Addition, in *Asbestos*, the Appellate Body noted: "there is no requirement under Article XX(b) of the GATT 1994 to quantify, as such, the risk to human life or health. A risk may be evaluated either in quantitative or qualitative terms."\(^{195}\) Similarly, the term *life* itself

---

191 *Steve Charnovitz, Explaining the Environmental Exceptions in GATT Article XX, 25 J World Trade 44 (1991) (citing International Trade Organization, Hearings Before the Committee on Finance, part 1, U.S. Senate, 80th Congress, 1st Session, at 412.)*

192 *1927 Convention, supra.*, Note 141 at 224.

193 *Id.* at 18.

194 *UN Doc. E/PC/T/A/PV/30, at 7-13.*

195 *Asbestos AB, supra.*, Note 134 at para. 167.
may be evaluated quantitatively or qualitatively, i.e. in terms of likelihood of death or simply diminishment of quality of life.

In assessing Article XX(b) claims, previous dispute panels have held that the party invoking Article XX(b) has to establish that the policy in respect of the measures for which Article XX(b) is invoked falls within the range of policies designed to protect human, animal or plant life or health. The dispute panel in Asbestos further defined the scope of Article XX(b) when it reasoned that "the word protection implies the existence of a risk." In determining whether the asbestos products in question created a health risk, the panel noted that it "is not its function to settle a scientific debate" regarding the possible human health risks posed by asbestos. Rather, "[i]ts role, taking into account the burden of proof, is to determine whether there is sufficient scientific evidence to conclude that there exists a risk for human life or health and that the measures taken by France are necessary in relation to the objectives pursued."

The panel found that there was sufficient evidence to make a prima facie case for the existence of a health risk associated with the products in question, and that Canada had not rebutted this prima facie case.

The Appellate Body affirmed the panel's decision. In assessing the health risk to humans arising from the use of asbestos products, the Appellate Body noted that the risk to which the policy measure applied, in that case, a Decree banning the marketing of asbestos products, could either be stated in qualitative or quantitative terms. Although there was some evidence that the risk from asbestos products was relatively small in terms of number of people affected, those that were affected faced certain death and there was no known level at which exposure to asbestos was safe.

---

196 See RFG supra., Note 153 at para 6.20.
198 Id. at para. 8.182
199 Id. at para.8.194.
200 Asbestos AB, supra., Note 134 at paras 162-168.
Similarly, a dispute panel reviewing a Canadian law banning or limiting dolphin captivity could assess the risk posed to dolphin life or health in quantitative (risk to populations or species) or qualitative terms (risk to individual.)

5. "Necessity" as Applied to Paragraphs (a) and (b)

The term "necessary" is used in GATT Article XX(a) (b) and (d). Past panels have determined that the meaning of the term "necessary" is the same whether used in paragraph (b) or (d). In the context of both paragraphs (b) and (d) the term "necessary" has been interpreted to imply a "least trade restrictiveness" test. In other words, a contracting party cannot justify a measure inconsistent with other GATT provisions as necessary, "if an alternative measure which it could reasonably be expected to employ and which is not inconsistent with other GATT provisions is available to it." Stated another way, "a contracting party is bound to use, among the measures reasonably available to it, that which entails the least degree of inconsistency with other GATT provisions."

In Thai Cigarette, the principle health objectives advanced by Thailand to justify its import restrictions were to protect the public from harmful ingredients in imported cigarettes, and to reduce the consumption of cigarettes in Thailand. Thailand implemented its policy through an import ban on all cigarettes whatever their ingredients. The dispute panel ruled that Thailand could have met its quality related objectives through a non-discriminatory measure aimed at requiring full disclosure of ingredients, coupled with a ban on unhealthy substances. With respect to its objective to reduce demand, the dispute panel found that Thailand could achieve this goal by

201 Thai Cigarette, supra., Note 159 at para 74.


203 Id.; see also Thai Cigarette, supra., Note 159 and Appellate Body Report, Korea Measures Affecting Imports of Fresh, Chilled and Frozen Beef (Korea Beef), WT/DS161/AB/R, at para. 159 ff (10 Jan 2001.)
banning the advertisement of cigarettes both domestic and imported. The dispute panel further found that the Thai Government could further control the supply of cigarettes as long as it accorded imported cigarettes no less favorable treatment than domestically produced cigarettes. Because there were alternative means of achieving its policy goals which were consistent with GATT, the dispute panel ruled that the Thai regulations in question were not "necessary" as that term was used in paragraph XX(b). Other panels have used a similar rationale to determine that measures are not "necessary".\footnote{See, e.g., United States -Imports of Certain Automotive Spring Assemblies, L/5333, GATT BISD 30S/107, 128, para 68 (May 12, 1963); United States - Section 337 of the Tariff Act of 1930, 1/6439, GATT BISD 36S/345, 392-93, paras 5.25-5.27 (Nov 7, 1989); United States–Measures Affecting Alcoholic and Malt Beverages, DS23/R GATT BISD 39S/206, 282-83, paras. 5.40-5.43 (Jun 19, 1992.)}

Similarly, in RFG, the dispute panel addressed the issue of "necessity" noting:

[I]t was not the necessity of the policy goal that was to be examined, but whether or not it was necessary that imported gasoline be effectively prevented from benefiting from as favorable sales conditions as were afforded by an individual baseline tied to the producer of a product. It was the task of the Panel to address whether these inconsistent measures were necessary to achieve the policy goal under Article XX(b).\footnote{RFG, supra., Note 153 at para 6.22.}

The United States had argued that the inconsistent measures it had applied to domestic and foreign producers was necessary to achieve its policy goals for a variety of reasons.\footnote{Id. at paras 6.26-6.29. (The United States argued that allowing foreign producers to use individual baselines (an alternative available to domestic producers) was not feasible due to difficulties arising from verification. Second, permitting foreign producers to use individual baselines would result in gaming and the United States would be unable to insure that gasoline characteristics of foreign producers would remain at the 1990 level imposed by the Clean Air Act. Third the United States argued that the inconsistency was necessary to achieve adequate compliance of its policy goals.)}

The dispute panel rejected each of the United States arguments, finding that the
inconsistent baseline rules were not necessary to achieve the US policy objective and that the United States had not met its burden of proving that there were no alternative measures less inconsistent with its GATT obligations.207

In Asbestos the Appellate Body again addressed the issue of "necessity." The dispute panel had ruled that the French Decree regarding asbestos was exempted pursuant to Article XX(b) of GATT. Canada appealed this decision arguing that the dispute panel misapplied the "necessity" test under Article XX(b). In support of its appeal, Canada advanced four arguments. First, Canada contended that the facts did not support France's claim that the products at issue posed a human health risk. Second, the panel had the obligation to quantify the level of risk (rather than rely on the French authorities assertions). Third, the panel erred in postulating that the means (i.e. the Decree) would meet the ends (reduction of health risk.) Fourth, Canada argued that France had a less trade restrictive alternative available to it.

The Appellate Body rejected all of Canada's claims. First the Appellate Body found that there was ample evidence to support a possible health risk, even if that risk was small. Second, the Appellate Body held that a country is not required to quantify the risk to human health under Article XX(b), and that the risk may be evaluated either in quantitative or qualitative terms.208 Third, the Appellate Body held that "it is undisputed that WTO Members have the right to determine the level of protection of health that they consider appropriate in a given situation. France has determined...that the chosen level of health protection by France is a halt to the spread of asbestos-related health risks."209 Fourth, the AB held that "France could not reasonably be expected to employ any alternative measure if that measure would involve a continuation of the very risk that the Decree seeks to halt. Such an alternative measure would, in effect, prevent France from achieving its chosen level of health protection."210

207 Id.

208 Asbestos AB supra., Note 134 at para. 167.

209 Id. at para. 168.

210 Id. at para.174.
Regarding the fourth factor "a less restrictive alternative," Canada had argued that in \textit{RFG} the Appellate Body had ruled that an alternative measure is only excluded as a "reasonably available" alternative if implementation of that measure is "impossible." Rejecting this argument, the Appellate Body found:

[W]e do not agree with Canada's reading of either the panel report or our report in \textit{United States Gasoline}. In \textit{United States Gasoline}, the panel held, in essence, that an alternative measure did not cease to be "reasonably" available simply because the alternative measure involved administrative difficulties for a Member. The panel's findings on this point were not appealed, and thus, we did not address this issue in that case.\footnote{Id at para.169.}

Addressing the issue of what constitutes a reasonable alternative, the Appellate Body said that several factors must be taken into account in addition to difficulty of implementation. Citing \textit{Thai Cigarette}, the Appellate Body found that a Member would not be expected to employ an alternative measure that did not achieve its health policy objective.\footnote{Id. at para.170. Citing, \textit{Thai Cigarette}, supra., Note 159 at para. 75.} Citing \textit{Korea Beef}, the Appellate Body found that:

one aspect of the “weighing and balancing” process...comprehended in the determination of whether a WTO-consistent alternative measure is reasonably available is the extent to which the alternative measure `contributes to the realization of the end pursued’....The more vital or important [the] common interests or values pursued, the easier it would be to accept as necessary measures designed to achieve those ends.\footnote{Id. at 172. Citing \textit{Korea Beef}, supra., Note 188 at paras 162, 163 and 166.}

\textbf{6. Application of Article XX(a) and (b) to Hypotheticals}

From the above-mentioned cases the following can be gleaned:

\begin{footnotes}
\item 211 \textit{Id} at para.169.
\item 212 \textit{Id}. at para.170. \textit{Citing, \textit{Thai Cigarette}, supra.}, Note 159 at para. 75.
\item 213 \textit{Id}. at 172. \textit{Citing \textit{Korea Beef}, supra.}, Note 188 at paras 162, 163 and 166.
\end{footnotes}
1. Member countries have the right to adopt and implement social, environmental and health and safety policies of their choosing.

2. Such policies or goals may be qualitative rather than quantitative. In other words, the problem addressed need not be widespread.

3. Member countries may determine their own level of risk or tolerance.

4. Members must choose the least GATT- inconsistent measure available to meet its policy goals.

5. Administrative or enforcement difficulties do not make an alternative, less trade restrictive measure impossible.

6. A Member country is only required to choose a less trade-restrictive measure if it satisfies that Member's policy goal, including level of risk and the risk of non-attainment.

(a) Hypothetical A

i. Article XX(a)

As noted above, a complete and immediate ban on all sale, use, import and export of live cetaceans within Canada would likely satisfy the requirements of Article III, and thus Article XX exceptions are irrelevant.

Article XX(a) is relevant, however, to modified Hypothetical A (long phase-in of complete ban), wherein the policy goal is to ban the sale, use, import and export of cetaceans for captivity over an extended period of time.

(1) Scope

There is sufficient factual evidence supporting a plausible argument that such regulation could fall within the scope of a moral exception, at least as that exception is outlined in
legislative history. Because there has been no GATT/WTO dispute involving Article XX(a), it is difficult to determine exactly how a dispute panel or the Appellate Body would rule.

However, one would assume that the method of analysis followed by the Appellate Body in respect regarding Article XX(b), would be relevant to an Article XX(a) inquiry. The relevant scope inquiry regarding Article XX(b) is whether the policy supporting the measure for which the exception is invoked, "falls within the range of policies designed to protect [in this case, public morals]."\textsuperscript{214} As noted above, the dispute panel in \textit{Asbestos} further refined the scope of Article XX(b) when it found that "the word \textit{protection} implies the existence of a risk."\textsuperscript{215} Thus, the relevant query would be whether legislation which bans the use of cetaceans for captivity addresses an identifiable risk to public morals.

\textbf{(2) Canadian attitudes towards Captivity}

As noted above, the history of debate from the 1927 Convention through the adoption of GATT 1947 confirms that the scope of the public morals exception is broader than the other exceptions and that nation-states were allowed to determine public morals within the context of their own culture. The issue of public morals, therefore, is inherently subjective and dependent upon the attitudes expressed within the context of individual nation states. In this regard, the moral imperative of a ban or a partial or phased in ban on cetacean captivity, can only be determined in the context of Canadian society.

Surveys taken over the past few decades show there has been a marked shift in attitudes of North Americans in general, and Canadians in particular, regarding the use of animals for non-food purposes.\textsuperscript{216} This shift in attitude has resulted in broad public concern regarding the inhumaneness of keeping cetaceans in captive facilities. For instance, attendance at the

\textsuperscript{214} \textit{RFG}, supra., Note 153 at para 6.20.

\textsuperscript{215} \textit{Asbestos}, supra., Note 182 at para 8.184.

\textsuperscript{216} \textit{Lien} supra., Note 1 at 26.
Vancouver Aquarium dropped 20 per cent from 1990 - 1994, with a five per cent drop in attendance occurred in one year from 1993 and 1994\(^{217}\) – presumably a contributing factor to the aquarium’s decision to phase-out killer whales in captivity. In the United States, the top grossing aquariums in 2001 refused to hold captive cetaceans: Ripley’s Aquarium of the Smokies (two million visitors), and Monterey Aquarium (1.38 million visitors).\(^{218}\) At the same time, attendance declined for 18 months in a row at the Mystic Aquarium, a U.S. facility featuring captive dolphins. That facility had a $1.3 million budget shortfall at the end of 2001.\(^{219}\)

Public concern ranges from animal welfare concerns, such as consideration of pool acoustics, recognition of the animal's typical social conditions and inclusion of elements of the animal's natural environment into its maintenance, to outright opposition to captivity per se, based on moral and ethical grounds.\(^{220}\)

Canadian Department of Fisheries and Oceans staff made note of this in a memorandum to their Deputy Minister. The memorandum provides, "Public support for the live capture program was high until the late 1980s when animal activists became increasingly opposed to whales in captivity. There has been no live capture in Canada since 1992. In recent years, these groups are increasingly pressuring aquaria to free captive whales."\(^{221}\) A second departmental memorandum to the DFO Minister noted, "[g]enerally, animal welfare groups have had some success in influencing Canadian opinion. Capturing whales in the wild and placing them in long-term captivity in aquaria is now widely perceived as inhumane."\(^{222}\)


\(^{220}\) Lien supra., Note 1 at.18

\(^{221}\) Wong, Brian, Briefing Note for the Deputy Minister, Wayne G. Wouter. Application from Marineland to Live Capture Beluga Whales in 1998, Undated.

\(^{222}\) Wouters, W.G. (DFO Deputy Minister). Memorandum to Minister Herb Dhaliwal, Options on a DFO Live Capture Policy, Undated.
The strong Canadian public view on captivity is further evidenced by the fact that one of three captive facilities operating in Canada has announced it will phase out cetacean captivity altogether. A second facility has agreed to utilize only captive-bred animals, and will no longer display killer whales. Only one facility, Marineland, has made no effort to conform its business practices to reflect the public's growing moral and ethical concerns. It is interesting to note that these same types of concerns lead to the closure of captive facilities in the United Kingdom. In the 1960s, up to 40 facilities had held captive cetaceans; in 1985 there were six facilities holding 19 bottlenose dolphins and two killer whales; and the final facilities closed down during the 1990s.

Irrespective of whether the public's concern is moral/ethical or based on animal welfare considerations, given the current limitations of technology, without a ban on captivity, it will be difficult for officials and captive facilities to adequately address even the most minimal of the public's concerns. Currently, there is no technology available that can simulate a natural environment for cetaceans in captivity, thus limiting implementation of even the most listed animal welfare standards. In addition, there are separate ethical, animal welfare and environmental concerns arising from live capture of wild animals (as opposed to captive-bred individuals.) These include not only ethical and animal welfare considerations arising from current chase and capture methods, but also conservation concerns which may arise due to depletion of target populations.

Cetacean populations today, including the populations most commonly targeted for captivity, face a host of direct and indirect stressors which may adversely affect whole populations or sub-populations of a particular species. As noted in Section D above, these

223 Lien supra., Note 1.
224 Id.
226 Supra, Notes 32-39.
stressors include fisheries interaction, entanglement, ship strikes, contaminates, pollution, global warming, etc. Beluga whales, killer whales and bottlenose dolphins, in particular, have shown some decline in recent years.\textsuperscript{227} While the hunting of individuals for captivity has not \textit{per se} been shown to have a direct affect on cetacean populations, the cumulative affect of all known stressors, including live capture, could eventually jeopardize the health and ultimate survival of various cetacean species.\textsuperscript{228}

In summary, whether the public concern is based on ethical, animal welfare or environmental factors, there is ample evidence that the Canadian legislature could draw upon to conclude that cetacean captivity (including the attendant activities associated with capture) poses a risk to Canadian public morals.

\textbf{(3) Is a ban necessary to achieve Canadian policy goals?}

Whether these measures would be found "necessary" as that term has been interpreted by past panels and the Appellate Body, depends in large part on the details of the regulation.\textsuperscript{229} In the case of a dispute, Canada would be required to prove that there were no less trade restrictive measures that could have been taken to achieve the policy goal – that is – a phase-out of cetacean captivity. It should be noted that several WTO dispute panels have held that it is not the \textit{necessity} of the policy goal itself that is to be examined, but rather whether the trade-measure employed is necessary to effectuate the policy goal.\textsuperscript{230}

\begin{flushleft}
\textsuperscript{227} \textit{See supra.}, Section C
\end{flushleft}

\begin{flushleft}
\textsuperscript{228} \textit{Id.}
\end{flushleft}

\begin{flushleft}
\textsuperscript{229} Legislation should be structured to facilitate the ultimate policy goal of phasing out cetacean captivity. Incremental trade-related measures, whether based on production or product criteria would need to be applied consistently to both domestic and foreign producers. For instance, should the legislation ban the import or export of wild-caught individuals as a first step, use of wild-caught within Canada should also be banned. Similarly, if the importation or exportation of captive-bred individuals is banned, there would need to be a similar ban on the use of such individuals within Canada
\end{flushleft}

\begin{flushleft}
\textsuperscript{230} \textit{See e.g.} \textit{RFG supra.}, Note 153 at para 6.22 (The Panel noted that it was not the necessity of
\end{flushleft}
A policy goal to ban the sale and use of captive cetaceans within Canada due to the moral implications can only be effectuated by either an immediate or phased-in ban. Of course, final analysis will depend on the design and structure of the legislation. From the six criteria set forth above, the following can be gleaned. (1) The moral imperative of the legislation must be clearly set forth. (2) Canada can base its policy on a moral imperative irrespective of the degree of risk to Canadian morals posed to cetaceans in captivity. In other words, the humane or moral concern does not have to be so wide in scope as to encompass all or even a majority of Canadians. It is arguably sufficient that some Canadians find cetacean captivity morally so abhorrent that they demand regulation banning the practice of captivity. (3) While Canada must choose the least trade restrictive measures to implement its policy goal, a measure is only an alternative if in addition to being less trade restrictive, it also satisfies and does not defeat Canada's policy goal.

To these three conclusions, I would add that Canada would not be required to employ a less trade restrictive measure that fell outside the scope of the WTO rules. For instance, one alternative to a phased-in ban, is an immediate and complete ban on cetacean captivity.\textsuperscript{231} An immediate and complete ban, however, would not result in any net gain for a foreign producer. While such an economic analysis has not been employed in the context of Article XX, it has been used in the context of Article III. According to the Appellate Body in \textit{Asbestos}, the term "like products" as used in Article III:4 of the GATT 1994, is concerned with competitive relationships between and among products (i.e. that the products involved are, or could be, in a competitive relationship in the marketplace).\textsuperscript{232} An immediate complete ban, while less trade restrictive in the sense that it is consistent with other GATT provisions, nonetheless, eliminates the market altogether and thus is outside the scope of GATT rules. As such, it should not be considered a reasonable alternative.

\textsuperscript{231} Note, such a ban may conflict with the provisions in the General Agreement on Trade in Services (GATS). I have not addressed the issue of GATS in this opinion letter.

\textsuperscript{232} \textit{Asbestos AB surpa.}, Note 134 at para 103.
In conclusion, Canada could make a strong argument that a phased-in ban on cetaceans in captivity, which included both production and product criteria, is consistent with Article XX(a), as long as any such legislation contains equivalent domestic restriction on the sale and use of live cetaceans within Canada.

ii. Article XX(b)

Again, the relevant scope inquiry is whether the policy supporting the measure for which the exception is invoked, "falls within the range of policies designed to protect [in this case, animal health],”\(^{233}\) and whether policy measure addresses an identifiable risk poses a risk to animal health.

(1) Scope

As discussed above, to date Article XX(b) has been applied only to cases in which sanitary or phytosanitary health risks to animals have been identified. If a WTO dispute panel were to rule that Article XX(b) applied only to sanitary and phytosanitary concerns, it would be difficult to argue that captivity (or capture) \textit{per se} posed an identifiable health risk to cetaceans.\(^{234}\)

\(^{233}\) RFG supra., Note 153 at para 6.20.

\(^{234}\) It is my understanding that captive cetaceans currently housed in Canada’s three marine parks have no interaction with wild cetaceans. Because of the isolated nature of captivity, it would be unlikely that captivity would in any way pose health risks to other cetacean populations (other than those individuals also in captivity.) If captive cetaceans were housed in pools in which interaction with wild individuals could occur such as is the case in the Florida Keys of the Caribbean Islands, a sanitary or phytosanitary argument might be plausible. For instance, there is evidence that farmed salmon can pose health risks to wild species due to the frequency of farmed salmon that escape and intermingle with wild species. On January 2, 2002, 8,000 Atlantic salmon escaped from a Clayoquot Sound fish farm in British Columbia. Canadian Department of Fisheries and Oceans’ employees reported finding 90 Atlantic salmon in three of Clayoquot Sound’s major salmon spawning rivers in fall, 2001 [\textit{8,000 Atlantic Salmon on the Lam in Clayoquot Sound}, Media Release, Friends of Clayoquot Sound, January 3, 2002].
An argument can be made, however, that the terms "life" and "health", also have meaning in the context of the impact on individual animals. In this context, the relevant inquiry would focus on whether measures to ban captivity address legitimate animal welfare concerns.\textsuperscript{235}

Since this would present a case of first impression, however, it is difficult to predict how a panel addressing such an argument would rule. If the terms "life" and "health" in Article XX(b) were found to include animal welfare concerns, a phased-in ban on captivity would clearly fall within the range of policies designed to protect animal life and health.\textsuperscript{236} Furthermore, as noted above, there is currently no technology available which could address many of the most serious welfare concerns arising from cetacean captivity. Therefore, it can be argued that captivity \textit{per se} poses a risk to animal life and health, if those terms are construed in qualitative terms.

(2) Necessity

Regarding the question of "necessity," technological infeasibility would tend to show that there are no other means, less trade-restrictive or otherwise, to implement the policy goal of

\textsuperscript{235} Supporting this argument are the general policy considerations which a WTO dispute panel or Appellate Body should consider given the magnitude of public outcry the legitimacy of WTO intrusion into social policy. For instance, there are an estimated 10,000 animal welfare groups worldwide with combined donations from the public amounting to hundreds of millions of dollars. Animal welfare concerns have been addressed by legislatures worldwide. In Canada alone, there are an estimated 430 animal welfare organizations with an estimated 600,000 supporters (see http://worldanimalnet.org). The WTO simply cannot ignore that Member countries may, and do, legislate trade-related animal protection policies. These policies address the health and welfare of individual animals rather than the risk of disease. Furthermore, these policies enjoy widespread support from the public. It is therefore, reasonable for Canada to expect that a ban on cetacean captivity could be addressed by Article XX(b).

\textsuperscript{236} It is interesting to note that in terms of human life and health, Article XX(b) has not been limited to sanitary and phytosanitary concerns. To the contrary, as the Appellate Body noted in \textit{Asbestos AB}, it was not necessary for France to prove that asbestos caused widespread harm to the French public. It was sufficient that the evidence showed that harm to some individuals occurred and that France had chosen, as a matter of policy, a zero tolerance level. \textit{Asbestos AB supra.}, Note 134 at 167.
protecting the life and health of individual cetaceans, other than a phased-in ban on the sale and use of cetaceans for captivity.

Again, WTO-consistency will depend in large part on the details of the legislation. Incremental trade-related measures, whether based on production or product criteria would need to be applied consistently to both domestic and foreign producers. For instance, should the legislation ban the import or export of wild-caught individuals as a first step, use of wild-caught within Canada should also be banned. In addition, the policy rationale for banning wild-caught individuals as an initial step should be clearly articulated in the legislation, particularly any evidence regarding the adverse effect on the life and health of wild-caught cetaceans arising from chase and capture.

Again, it is not within the purview of a WTO panel to determine whether a chosen policy is itself necessary, dispute panels may only review whether the chosen means of effectuating that policy are necessary.

It is my opinion, that a plausible Article XX(b) argument can be made by Canada in support of a total ban phased-in over time.

(b) Hypothetical B

Under Hypothetical B, Canada bans the sale, importation and exportation of all wild-caught species, including those previously wild-caught but now in captivity. Under this hypothetical, Canada would define captive either as born in captivity or individuals that have lived in captivity for a certain number of years (preceding passage of the Canadian legislation.) In addition, Canada would permit the continued commercial use within Canada of previously wild-caught individuals (not meeting the definition of captive-bred), but not the exportation of such individuals

i. Article XX(a)

It is more difficult to make a strong Article XX(a) argument in the context of Hypothetical B, with respect to either scope or necessity.
In Hypothetical A, I noted that the moral imperative is that captivity *per se* is morally repugnant for a variety of reasons ranging from animal welfare concerns to ethics. In Hypothetical B, however, Canada would permit the continuation of captivity for captive-bred individuals, thus weakening, if not eliminating the humane/moral rational for regulation. If the moral imperative is that captivity *per se* is wrong, how is the policy objective met by eliminating only one class of captivity, that is, wild-caught individuals? Certainly from an environmental perspective banning wild-caught individuals serves an important environmental policy goal. However, it would be difficult to argue that banning only wild-caught individuals is a policy measure designed to fall within the scope Article XX(a). Therefore, it is my view that Hypothetical B legislation would be found inconsistent with the requirements of Article XX(a).

**ii. Article XX(b)**

For similar reasons as stated above, it would be difficult to prove that legislation banning only wild-caught species was either within the scope of Article XX(b) or necessary (as that term has been defined by WTO case law) to protect the "life" and "health" of cetaceans, whether those terms are defined quantitatively or qualitatively. It is, therefore, my view, that Hypothetical B legislation would be found inconsistent with the requirements of Article XX(b).

**(c) Hypothetical C**

In Hypothetical C, Canada permits the importation and exportation of all live cetaceans, but subjects the sale, use, importation and exportation to specific regulation. Such regulations could take many forms, but for the sake of analysis, would include regulation of capture methods, captivity conditions, breeding parameters, shipping requirements and end usage.

**i. Article XX(a)**

**(1) Scope**

Hypothetical C presents a very interesting array of issues. On the one hand, the
The moral imperative is arguably strong. Most, if not all, of the requirements of the regulation will address animal welfare concerns, primarily humane issues rather than health issues. It is likely, therefore, that a dispute panel could find Hypothetical C legislation to be within the scope of Article XX(a).

(2) Necessity

Without specific details regarding the types and structure of measures to be covered under Hypothetical C, it is difficult to assess whether Hypothetical C legislation would be considered "necessary."

For instance, if Canada banned the importation of cetaceans that were caught in the wild using methods other than those prescribed in Canadian legislation, a dispute panel would likely find that such measure was not necessary to implement a policy to protect Canadian public morals. Similarly, if the importation of captive cetaceans was limited to cetaceans from foreign facilities which met specified requirements, this too would likely fail the necessity component of Article XX(a).

GATT/WTO dispute panels in principle, loath the application of production standards as a condition of market access. There is a long line of case law beginning with *Tuna Dolphin I* where dispute panels or the Appellate Body have held (using a variety of rationales) that an importing country may not impose specific production requirements on an exporting country. For instance, in *Shrimp Turtle*, the Appellate Body stated,

Perhaps the most conspicuous flaw in this measures' application relates to its intended and actual coercive effect on the specific policy decisions made by foreign governments, Members of the WTO. Section 609, in its application, is, in effect, an economic embargo.

^{237} The moral imperative could be stated as follows: Canada has established requirements for all stages of captivity to ensure that each animal sold or used in Canada has received a threshold of care to ensure its individual health and well being. Canada wishes to insure that its market does not contribute to or directly or indirectly encourage practices (during any level of the life cycle of the product – capture to captivity) which are inhumane and unethical.
which requires all other exporting Members, if they wish to exercise their GATT rights, to adopt essentially the same policies and enforcement practices as the United States.\textsuperscript{238}

In seeming contradiction to this, the Appellate Body also found, however, that conditioning access to a Member's domestic market on whether exporting Members comply with, or adopt, a policy or policies unilaterally prescribed by the importing Member may, to some degree, be a common aspect of measures falling with the scope of one or another of the exceptions (a) to (j) of Article XX ...It is not necessary to assume that requiring from exporting countries compliance with, or adoption of, certain policies (although covered in principle by one or another of the exceptions) prescribed by the importing country, renders a measure \textit{a priori} incapable of justification under Article XX.\textsuperscript{239}

While the Appellate Body made these findings in the context of the Article XX \textit{chapeau} requirements, the general sentiment expressed is applicable in the context of a discussion of necessity under Article XX(a) and (b).

For instance, it is plausible, that if Canadian regulations were crafted to allow for some discretion by the exporting country in the implementation of production and product standards and policies, the measure may be viewed as consistent with the Article XX requirements. In \textit{Shrimp Turtle} the Appellate Body found that it was not the statute itself which created \textit{unjustifiable discrimination}, but rather the Administrative Guidelines implementing the statute. The Appellate Body stated that "viewed alone, the statute appears to permit a degree of discretion or flexibility in how the standards for determining comparability might be applied, in practice, to other countries." While this ruling was made in the context of the \textit{chapeau}, as noted above, the \textit{chapeau} analysis prescribed by the Appellate Body in \textit{Shrimp Turtle AB} is similar to the "necessity" analysis used in the context of Article XX(b) (and formerly in the context of Article XX(g).) The essential question under (a), (b) and the \textit{chapeau} is whether the discriminatory

\textsuperscript{238} \textit{Shrimp Turtle AB}, supra., Note 131 at para.161.

\textsuperscript{239} Id.
measure is necessary to effectuate the policy goal. If not, it is found *discriminatory, unjustifiable, a disguised restriction on trade or unnecessary*.

*Shrimp Turtle AB* provides some guidance regarding the crafting of legislation under Hypothetical C. The regulation at issue in *Shrimp Turtle* provided that the government of the shrimp harvesting nation had to provide documentary evidence that it had adopted a program governing the incidental taking of sea turtles that was comparable to the US program and that the average rate of taking by those foreign vessels had to be comparable to the US take.\(^{240}\) The statute did not specify how comparability was to be determined. The Guidelines, however, provided that the exporting country's program must include a requirement that all commercial shrimp trawl vessels operating in waters where there is a likelihood of interaction with sea turtles use TEDs comparable in effectiveness to those used in the United States.

In accordance with the Appellate Body ruling, the United States revised its Guidelines to permit more flexibility. Among other things, the revised Guidelines permit a country to demonstrate that some portion of its shrimp imported into the United States is taken from areas where sea turtle interaction is unlikely. It also permits countries to present factual information that shrimp is harvested in some other manner (than through the use of TEDs or other criteria set forth in the Guidelines) which does not pose a threat to sea turtles. Lastly, it allows for the importation of shrimp from vessels which use TEDs, but whose flag country has not implemented a comparable policy to protect sea turtles.\(^ {241}\) The dispute panel in its review of these measures found that the United States had remedied the provisions which resulted in *arbitrary and unjustifiable discrimination*, and that therefore, the revised Guidelines met the requirements of Article XX, including the *chapeau*.

If Canadian standards relating to the humane treatment of cetaceans intended for captivity were similarly flexible, it is possible that a panel would rule that they are consistent with Article XX(a) even if the measures required exporting nations, as a condition of import, to adopt policies

---

\(^{240}\) *Id* at para 162, fn 158.

relating to the humane treatment of captive cetaceans.

As a caveat to this conclusion, however, it should be noted that the species at issue in Shrimp Turtle, may have affected the outcome of the panel and Appellate Body's decisions. Overwhelming evidence exists to demonstrate that sea turtles, including those most commonly captured by shrimp trawlers, are highly endangered. It is possible that this fact, rather than any legal prescription, caused the Appellate Body to rule as it did. Similarly in Asbestos, the health implications of asbestos are widely known and undisputed. These cases, therefore, may not accurately reflect how a panel or the Appellate Body would rule in circumstances less pressing or otherwise, not universally accepted.

In any event, it may be that allowing exporting countries a degree of discretion in terms of implementing humane standards may itself defeat the objective of Hypothetical C legislation.

In conclusion, there is case law which would indicate that the regulations envisioned in Hypothetical C could be crafted in such a way that they are consistent with Article XX(a). Such an argument could be bolstered by evidence demonstrating that humane standards, per se, are universal, even though the application of such standards varies from country to country and species to species. Data can be gathered which demonstrates that humane standards are used by several countries as a condition of import, for among other species, food animals.242

ii. Article XX(b)

(1) Scope

Again, the relevant scope inquiry is whether the policy supporting the measure for which the exception is invoked falls within the range of policies designed to protect animal health, and whether policy measure addresses an identifiable risk to animal health.

242 See e.g., Gregory, N & Lowe, T., Expectations and Legal Requirements for Stunning and Slaughter in Slaughterhouses, submitted to the International Whaling Commission Humane Killing Workshop, IWC/51/WK1 (1999). (This report lists countries which have enacted humane killing legislation.)
As discussed above, whether a WTO dispute panel would determine that animal welfare regulations fall within the range of policies designed to protect animal health, will depend in large part of a panel's interpretation of the meaning of "life" and "health." If these terms are construed broadly to include impact on individuals (as they have been in the case of human health) the measures would likely be found within the scope of Article XX(b), given the strong evidence that captivity does adversely impact cetacean welfare.

If, however, "life" and "health" were construed narrowly to apply only to sanitary and phytosanitary concerns, the types of measures envisioned in Hypothetical C, would not likely be found to fall within the scope of Article XX(b).

At this point, it is impossible to predict with any degree of certainty how a panel would rule on this matter, although as I've indicated above, in Asbestos, the health risk at issue impacted a limited number of individuals, as opposed to being a sanitary or phytosanitary concern, and yet the measure at issue was found to be consistent with Article XX(b).

(2) Necessity

The necessity analysis under paragraph (b) is identical to that articulated above in the context of XX(a). As noted above, the greater flexibility given to exporting nations regarding the implementation of welfare standards, the more likely Hypothetical C-type legislation will be considered "necessary" by a dispute panel.

Unfortunately, as this is a case of first impression, the WTO case law is in a continual state of change and flux, and the Appellate Body has warned dispute panels that they must analyze each measure on a case by case basis, it is impossible to determine with any precision, whether a dispute panel would rule that Hypothetical C legislation is consistent with Article XX(b).

7. Legal Analysis of Article XX(g)

243 See e.g., Shrimp Turtle AB supra., Note 131 and Asbestos AB supra., Note 134.
WTO members may impose measures relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption.

There are four relevant issues related to Article XX(g): (1) is the natural resource in question exhaustible; (2) does the measure relate to conservation of that resource; (3) is it made effective in conjunction with restrictions on domestic production or consumption; and (4) does it meet the requirements of the *chapeau*? 244

(a) Exhaustible natural resource.

Cetaceans are undisputably an exhaustible resource. Similarly, previous panels have found tuna, clean air, herring and salmon, and sea turtles to be exhaustible natural resources.

As the Shrimp Turtle Appellate Body said:

One lesson that modern biological sciences teach us is that living species, though in

244 Although the *chapeau* applies to all of the Article XX exceptions, as noted previously, the inquiry under paragraphs (a) and (b) regarding "necessity" is similar in scope to the inquiry under the *chapeau*, and thus if a measure is found to be "necessary", it will likely meet the requirements of the *chapeau*.

245 United States – Prohibition of Imports of Tuna and Tuna Products from Canada, adopted February 22, 1982, BISD 29S/91, para. 4.9; Tuna Dolphin I supra., Note 132 at paras. 5.30-5.34; Tuna Dolphin II supra., Note 132, at para. 5.15.

246 RFG supra., Note 153 at para 19.


principle capable of reproduction and, in that case "renewable", are in certain circumstances indeed susceptible of depletion, exhaustion and extinction, frequently because of human activities. Living resources are just as "finite" as petroleum, iron ore and other non-living resources.  

(b) Relating to Conservation of an Exhaustible Natural Resource

To determine whether a measure is related to the “conservation of an exhaustible natural resource,” a WTO dispute panel must now look not only at the relationship of the trade measure to the conservation effort, but also at the overall design and structure of the measure as a whole as it relates to conservation.

For instance, in RFG, the dispute panel had reviewed the discriminatory trade provisions in the US Clean Air Act and determined that these measures were not primarily aimed at or necessary to clean air, and therefore, the US Clean Air Act was not related to the conservation of exhaustible natural resources. The Appellate Body reversed this decision reasoning that the language "primarily aimed at" was not itself treaty language and shouldn't be a litmus test for inclusion or exclusion of paragraph (g). Applying a "plain language" approach, the Appellate Panel found that the baseline rules used by the EPA were related to the conservation of clean air, even if they were discriminatory.

Similarly, in Shrimp Turtle, the Appellate Body reiterated that it must examine the "relationship between the general structure and design of the measure" and the policy goal it purports to serve. The Appellate Body found that the "general structure and design of Section 609 cum implementing guidelines", were "fairly narrowly focused." It found particularly

---

249 Shrimp Turtle AB, supra., Note 131 at para. 128.

250 RFG AB, supra., Note 154 at 19.

251 Id.

252 Shrimp Turtle AB, supra., Note 131 para 137.

253 Id. at para. 139.
instructive Section 609's exemptions from the ban, rather than the ban itself, and found that the exemptions were directly connected to the conservation of sea turtles. It concluded therefore, that Section 609 related to the conservation of sea turtles because it "is not disproportionately wide in its scope and reach in relation to the policy objective of protection and conservation of sea turtle species. The means are, in principle, reasonably related to the ends."

This change in analytical approach to Article XX(g) is not insubstantial. Whereas earlier panels had required a direct causal nexus between the trade provisions at issue and the conservation goal (i.e. the dispute panel in RFG had reasoned that paragraph (g) required a direct causal relationship between the discriminatory treatment and the conservation objective and such discriminatory treatment had to be necessary to achieve the conservation goal), in RFG and Shrimp Turtle AB, the Appellate Body focused on whether the general structure and design of the regulatory provisions were reasonably related to the conservation goal. Under the new approach, if a measure is found to fall within one of the enumerated exceptions but is inconsistent with the requirements of the chapeau, countries may maintain the basic premise of their legislation, even if some of the actual details of the legislation must be modified to be consistent with the WTO. The ultimate result is greater deference (relative to previous decisions) to sovereign nations to set non-economic policy and a greater likelihood that non-economic legislation will be found consistent with the WTO.

(c) Made Effective in Conjunction with Restrictions on Domestic Production and Consumption

The requirement of Article XX(g) to ensure that such measures are made "effective in conjunction with restrictions on domestic production or consumption" appears to require a low threshold of proof. In only one case has a dispute panel determined that the "in conjunction" requirements were not met. In United States-- Prohibition of Imports of Tuna and Tuna Products

254 Id. at para. 140
255 Id. at para. 141.
256 Shrimp Turtle, supra., Note231 at para 144.
from Canada, the GATT dispute panel found that although the purpose of the U.S. Fishery Conservation and Management Act of 1976 was to ensure that certain stocks of fish were properly conserved and managed, the United States only applied limitations to certain species of tuna (Pacific and Atlantic yellowfin and Atlantic bluefin and bigeye) with respect to its domestic fleet while it prohibited the importation of all tuna and tuna products from Canada. In such circumstances, the panel found that the requirements of paragraph (g) had not been met.

In RFG, the Appellate Body emphasized that the requirement of Article XX(g) to ensure that such measures are made effective in conjunction with restrictions on domestic production or consumption "is a requirement of even-handedness in the imposition of restrictions, in the name of conservation, upon the production or consumption of exhaustible natural resources." The Appellate Body, like previous dispute panels, have permitted a broad review of a Member country's overall regulatory regime. For example, in Shrimp Turtle, the Appellate body analyzed whether the Endangered Species Act as a whole imposed restrictions similar to Section 609 and made clear that the entire statutory scheme is relevant for determining whether an even-handed approach is taken.

8. The Chapeau Requirements

Once provisionally justified under one of the enumerated exceptions, the measure must also be consistent with the chapeau requirements of Article XX. As noted above, because the inquiry under the chapeau is similar in scope to the necessity inquiry made in connection with paragraphs (a) and (b), the chapeau has greatest impact on Article XX(g) claims.

The chapeau imposes three conditions:

257 See supra., Note 228.

258 Cf, e.g., Canada -- Measures Affecting Exports of Unprocessed Herring and Salmon, supra., Note 230 wherein the dispute panel noted that Canada maintains a variety of measures for the conservation of salmon and herring stocks and imposes limitations on the harvesting of salmon and herring. The panel found that the harvest limitations are "restrictions on domestic production" within the meaning of paragraph (g).

259 RFG AB supra., Note 154 at paras. 20-21.
1. The measure is not applied in a manner which would constitute a means of arbitrary discrimination between countries where the same conditions prevail;

2. The measure is not applied in a manner which would constitute a means of unjustifiable discrimination between countries where the same conditions prevail; and

3. The measure is not a disguised restriction on international trade.

The Appellate Body in *RFG* found that the general purpose and object of the *chapeau* is to prevent abuse of the Article XX exceptions. Particularly it found:

The *chapeau* is animated by the principle that while the exceptions of Article XX may be invoked as a matter of legal right, they should not be so applied as to frustrate or defeat the legal obligations of the holder of the right under the substantive rules of the General Agreement. If those exceptions are not to be abused or misused, in other words, the measures failing within the particular exceptions must be applied reasonably, with due regard both to the legal duties of the party claiming the exception and the legal rights of the other parties concerned.  

In *Shrimp Turtle*, the Appellate Body further elucidated the approach it would take to the *chapeau* requirements. It said that: a balance must be struck between the right of a Member to invoke an exception under Article XX and the duty of that same Member to respect the treaty rights of the other Members.  

It laid out the framework in which these three conditions are to be analyzed:

In order for a measure to be applied in a manner that would constitute *arbitrary or unjustifiable discrimination between countries where the same conditions prevail*, three

260 *RFG AB* supra., Note 154 at para 22.

261 *Shrimp Turtle AB* supra., Note 131 at para 156.
elements must exist. First, the application of the measure must result in discrimination.... Second, the discrimination must be arbitrary or unjustifiable in character...Third, the discrimination must occur between countries where the same conditions prevail.\footnote{Citing RFG, the Appellate Body stated that the nature and quality of this discrimination is different from the discrimination in the treatment of products which was already found to be inconsistent with one of the substantive obligations of the GATT 1994, such as Articles I, III or XI. Shrimp Turtle AB, supra., Note 131 at para 150. (Citing, RFG, supra., Note 153 at para. 23.)}

Turning first to the issue of unjustifiable discrimination, the Appellate Body found that the US law in terms of its application (as opposed to the statute itself) was unjustifiably discriminatory for five reasons. First, the most "conspicuous flaw" in the US application of its law was the "intended and actual coercive effect on the specific policy decisions made by foreign governments."\footnote{Id. at para 161.} The Appellate Body found that while the statute itself permitted foreign governments some degree of discretion in terms of policy approaches, the Administrative implementing guidelines eliminated that discretion.

Second, the Appellate Body found that:

it is not acceptable, in international trade relations, for one WTO Member to use an economic embargo to require other Members to adopt essentially the same comprehensive regulatory program to achieve a certain policy goal...without taking into consideration different conditions which may occur in the territories of those other Members."\footnote{Id. at para 163.}

Third, the Appellate Body objected to the fact that shrimp caught in conformity with US requirements was banned if its flag country had not implemented a conservation program comparable to the US program.\footnote{Id. at para 165.} In other words, the United States banned the importation of shrimp on a country basis rather than on a shipment-by-shipment basis.
Fourth, the Appellate Body found unjustifiable discrimination in the failure of the United Stated to engage in serious across-the board negotiations with the objective of negotiating a bi-
lateral or multilateral agreement regarding the protection of sea turtles.\footnote{266}

Fifth, the Appellate Body found unjustifiable discrimination in the fact that the phase-in period for the appellees was relatively short, as compared to the three year phase-in period for Caribbean countries.\footnote{267}

Lastly, the Appellate Body also determined that \textit{application} of the US law resulted in \textit{arbitrary discrimination} because of the lack of a "transparent, predictable certification process."\footnote{268}

The Appellate Body did not also address whether application of the US measure would also constituted a "disguised restriction on international trade."\footnote{269}

In a subsequent proceeding under Articles 21.5 and 22 of the WTO Dispute Settlement Understanding, the dispute panel reviewed steps taken by the United States to bring the application of its law into conformity with the Appellate Body ruling.\footnote{270}

Specifically, the dispute panel found that the United States had amended its Guidelines to permit more flexibility in terms of assessing differing conditions in importing countries. On this point, the dispute body noted that the US had permitted shipments of shrimp from Australia, despite differences in Australia's application of its TED program. The United States had reviewed the differences in the fisheries alleged by Australia and had verified that the technical differences in Australia 's TED program and its own did not render the Australian program less comparable

\footnote{266 Id. at paras. 166-172.}
\footnote{267 Id.}
\footnote{268 Id. at paras 179-183.}
\footnote{269 Id. at para 184.}
\footnote{270 See Shrimp Turtle Review supra., Note 224.}
in effectiveness to the US program.\textsuperscript{271}

Second, the United States amended its Guidelines to permit importation of conforming shrimp on a shipment-by-shipment basis rather than requiring that the flag country implement a comparable conservation regime.\textsuperscript{272}

Third, because of the passage of time, the dispute panel found that the phase-in period for Malaysia had been adequate.\textsuperscript{273}

Fourth, the US had engaged in substantive international discussions relating to a multilateral agreement for the protection of sea turtles. It had further shown its commitment to this process by paying a large portion of the costs of such meetings in order to insure that developing countries could attend. And it provided for the transfer of technology to these countries.\textsuperscript{274}

Fifth, the dispute body noted that the United States had made sufficient changes in its administrative process to ensure that Member countries were afforded both adequate notice and due process.\textsuperscript{275}

Lastly, the dispute panel addressed the issue of whether the US measure was a disguised restriction on international trade, even though this was not addressed by the Appellate Body. In this regard, the panel noted that "a law which has been narrowly tailored to achieve a bone fide conservation plan does not mean that when applied, it does not constitute a disguised restriction on trade."\textsuperscript{276} The panel found that "there would be an abuse of Article XX(g), if [compliance

\textsuperscript{271} Id. at paras 439-449.
\textsuperscript{272} Id. at paras 452-456.
\textsuperscript{273} Id. at paras. 458-491.
\textsuperscript{274} Id. at paras. 425-433 and 462-465.
\textsuperscript{275} Id. at paras 468-482.
\textsuperscript{276} Id. at para 485.
with Article XX(g) was] in fact only a disguise to conceal the pursuit of trade-restrictive objectives.” The panel found, however, that because the United States allowed exporting countries to apply programs not based on mandatory use of TEDS and offered technical assistance to develop the use of TEDs in third countries, the US demonstrated that its measure was not applied in a manner so as to constitute a disguised restriction on trade”.

As a result of all of the changes mentioned above, the dispute panel ruled that the United States, at least provisionally, had brought the application of its law into conformity with the chapeau requirements.

9. Application of Article XX(g) and the Chapeau to the Three Hypotheticals

(a) Hypothetical A

Hypothetical A would ban the sale and commercial use of all cetaceans within Canada. As part of the enforcement of this provision, the import and export of live cetaceans would also be banned.

As already noted, Hypothetical A, a complete ban on sale, use, etc. is consistent with the substantive provisions of the GATT and thus an Article XX(g) analysis is unnecessary. An Article XX(g) analysis, however, is necessary with respect to modified Hypothetical A -- long-phase-in with incremental implementation based on production and product standards.

As previously noted, a phased-in ban would likely have at least two parts (1) a prohibition on the sale and use, etc. of wild-caught cetaceans as a whole or on a species by species basis, and

277 Id. at para 487.

278 Id. at para 488.
While there is ample evidence upon which Canada could conclude that for conservation reasons, it can prohibit the sale, use, import and export of wild-caught species, such an argument would be difficult, at best, in the context of captive-bred individuals. Although cetaceans are undisputably an exhaustible natural resource, and the trade provisions would be made effective in conjunction with domestic regulations (i.e. a domestic ban), it less clear how a ban on the breeding of cetaceans for captivity would relate to the conservation of particular species. It fact, such an argument would seem counter-intuitive. It is likely, therefore, that a dispute panel would find that a ban on captive-bred species fell outside the scope of Article XX(g). Given this conclusion, an analysis of the chapeau requirements is unnecessary.

(b) Hypothetical B

Hypothetical B would ban the sale, import and export of only wild-caught species.

As mentioned, previous GATT/WTO dispute panel decisions indicate that cetaceans are an exhaustible natural resource. The two questions remaining under paragraph (g), therefore, are whether the regulations envisioned in Hypothetical B relate to conservation, and are made in conjunction with domestic regulations.

i. Relating to Conservation

As noted previously, to determine whether a measure is related to conservation one must examine the relationship between the general structure and design of the law and the policy goal it purports to serve.

Of course, in the instant case, there is no existing regulatory structure to examine. The WTO case law, however, provides guidance on how to craft of such legislation consistent with WTO rules.

Initially, there are two relevant issues.

(1) Does Canada currently have a legal mechanism for banning wild-caught cetaceans for
(2) Is there a need that can be supported by scientific evidence?

(1) WAPPRIITA Provides a Legal Mechanism.

Regarding a legal mechanism, the WAPPRIITA legislation would be the logical legal mechanism for a regulation banning trade in wild-caught cetaceans. The purpose of the Act is "to protect certain species of animals and plants, particularly by implementing the Convention and regulating international and interprovincial trade in animals and plants." While arguably WAPPRIITA is meant to implement Canada's CITES obligation, Canada has the ability to go beyond minimum CITES requirements by enacting tougher domestic measures as envisioned in CITES Article XIV. Other countries that are CITES Parties, in fact, have enacted more stringent provisions pursuant to CITES Article XIV.

The CITES regulations require only an export permit for Appendix II-listed species (i.e., bottlenose dolphins, killer whales, beluga whales), however the European Union now requires both export and import permits for all cetacean species, no matter whether the animal in question is listed on CITES Appendix I or II. The U.K. government does not normally allow the imports of cetaceans, other than in exceptional circumstances, and would not permit the import of cetaceans for strictly commercial purposes. The Government of Finland has stated that no additional import permits for wild-caught cetaceans will be issued.

_____________________

279 Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act.


282 Letter to Canadian Department of Fisheries and Oceans Minister Herb Dhaliwal, from Viivi Koomson, Finns for the Whales, March 22, 2000.
The Government of India has banned the export for commercial purposes of all wild-taken species, and will no longer allow dolphins to be imported into the country for amusement parks. The Government of Cyprus has banned imports of cetaceans and the operations of dolphinaria for shows or pleasure. The Government of Hungary does not permit the entry of any traveling shows with cetaceans.

The Government of Chile removed marine mammals from the list of animals deemed suitable for import. The Government of Canada banned the capture of live beluga whales for export to aquaria outside Canada. The Government of Israel permits the import of only captive-bred wild species, generally prohibits the export of its native wildlife, has banned circuses and traveling menageries, and does not permit the import of any animals, including CITES-listed species, associated with those operations.

The Government of Argentina enacted a temporary ban on the imports of dolphins from the Commonwealth of Independent States until further notice. Argentina has also banned the hunting and capture of killer whales all along the Argentine coast and Exclusive Economic

---


285 Letter to the Whale and Dolphin Conservation Society, from Dr. Pavlos Economides, Director of Veterinary Services, Ministry of Agriculture, Natural Resources, and Environment, Government of Cyprus, October 18, 1999.


287 Notification 1999/1930, Geneva, October 21, 1999


and the capture of all marine mammals is banned in Chubut Province. The Government of Portugal denied an application to import 10 wild-captured bottlenose dolphins from Guinea-Bissau (West Africa) into Portugal for public display by the Lisbon Zoo. Most recently, the Belgian government banned the capture, disturbance, transportation and sale of all species of seals, cetaceans, turtles and seabirds frequenting Belgian waters.

In addition to these country-specific efforts to pass stricter domestic measures, groups of countries have acted in tandem to pass agreements such as the international Agreement on the Conservation of Cetaceans in the Black Sea. Mediterranean Sea, and Contiguous Atlantic (ACCOBAMS), and the Protocol Concerning Specially Protected Areas and Wildlife (SPAW) to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region. The Convention on Migratory Species, and the Convention on Biological Diversity also fall into this category.

Other countries have taken steps to protect other wildlife such as Namibia that prohibit the exports of live wild animals, Vietnam, who have banned the export of all wild-caught animals, and South Korea who prohibited the export of 165 species of plants and animals, bringing the

291 “The hunting or capture of orcas using nets or intentional stranding methods is prohibited all along the Argentine coastline and Exclusive Economic Zone”. Argentine National Congress. December, 1998. Article I.


Finally, the U.S. government passed the Marine Mammal Protection Act (1972) requiring import permits for cetaceans, Endangered Species Act (1973) and the Wild Bird Conservation Act (1992) - all of which go beyond CITES minimum requirements and were not challenged by GATT/WTO.

(2) Science Supports the Need for Cetacean Conservation Efforts

Although captivity itself is only one of many factors affecting cetaceans today, as noted above, captivity nonetheless can contribute to the cumulative negative impact. Other negative factors affecting cetaceans today include a reduction in prey base, ship strikes, entanglement, oil spills, pollutants, among other causes. Again, as noted above in Section D, it is difficult, if not impossible, to tie a decline in a particular population to simply one cause.

Several cetacean stocks targeted for captivity including the Mid-Atlantic bottlenose dolphin, Southern Resident killer whale, and the Sea of Okhotsk beluga have been, or are in the process of being listed domestically. Uplisting of the Black Sea bottlenose dolphin from Appendix II to Appendix I status was discussed at the 2001 CITES Convention of the Parties.

During the 1960s a large number of calves and a disproportionate number of males were removed from the Southern Resident killer whale population. Some scientists believe that delayed effects from the capture era, such as a possible gap in reproductive age females and an insufficient number of males available to breed, may be contributing to the current decline of this population. \(^{298}\)

Similarly, Russian Sea of Okhotsk beluga whales are currently targeted by the captivity industry. \(^{299}\) The International Whaling Commission (IWC) has estimated that there may be at

---


298 See supra., Notes 61-67.

299 See note 86 for Russia’s 2002 Sea of Okhotsk beluga capture quotas
least three distinct populations of beluga whales in the Sea of Okhotsk and list these populations as likely depleted as compared to historical populations. Nonetheless, between May, 1999 and October, 2000, 14 belugas were imported into Canada by Marineland of Canada from Russian sources. While Marineland did not reveal the locale from which these belugas were taken, there is a high likelihood that they came from the Sea of Okhotsk. Directed takes, pollution, contaminants and entanglement are other negative factors that affect these stocks.

Canadian beluga populations are also an example of cetaceans that live with multiple threats. The St. Lawrence River beluga whales are one of the most endangered and contaminated cetaceans in the world. While other populations, such as the Western Hudson Bay stock, appear to have relatively high population estimates, these populations too face multiple threats including a directed take by Aboriginal peoples, chemical and acoustic pollutants, hydroelectric developments affecting flow, temperature and water levels in estuaries, elevated levels of mercury and a potential increase in the commercial shrimp fishery, possibly affecting food supply, and the possibility that the site of all captures in the Churchill River estuary may have more serious affects than earlier thought as this is the gathering place for mother-calf pairs.

The Russian Black Sea bottlenose dolphin is also a species that is regularly targeted for captivity. This dolphin has been listed as endangered in the UNEP Global Action Plan on Marine Mammals, due in large part to the high number of takes (from combined sources, including contamination by pollution) At least 92 dolphins were removed from this population for export to marine parks during the 1990's.

In addition to these particularized threats, cetacean populations as a whole face numerous other environmental threats including entanglement, chemical pollution, habitat degradation,

300 See Note 55.
301 See supra., Section C.
302 Cosens, supra., Note 92.
303 See supra., Section C
noise pollution, global climate change, among other threats.\textsuperscript{304}

The combined total threats facing cetacean populations targeted for captivity suggest that precaution should be taken, and impacts on cetaceans should be limited wherever possible. The Precautionary Approach, as articulated Principle 15 of Agenda 21 of the Rio Declaration on Environment and Development, has been subscribed to by a wide number of the world's governments.\textsuperscript{305} It provides:

In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

Eliminating the capture of cetaceans for captivity purposes is one cost-effective means of taking precautionary step to protect and safeguard cetacean species. While there is little dispositive evidence that capture for captivity \textit{per se}, is the sole cause of harm to populations, certainly it can be contributing factor, and one that can be easily rectified, given that the market is relatively small, though rapidly expanding.

\textbf{(3) Live Capture has Increased Dramatically in the Last Decade}

As noted in Section IA above, live capture of cetaceans is a relatively recent phenomena in Canada and other parts of the world, with most captures occurring in the past 50 years. The first cetaceans captured for exhibition in North America appear to have been six beluga whales from the St. Lawrence River, transported to P.T. Barnum's museum in New York in 1861 and 1862, of which only one survived transport\textsuperscript{306}

\textsuperscript{304} See supra., Section D for more in-depth discussion of these threats.

\textsuperscript{305} See European Communities-- Measures concerning Meat and Meat Products (Hormones), United States, WT/DS26/R (June 30, 1997) at para. 4.206.

The first marine park in the United States containing captive bottlenose dolphins was Marineland in St. Augustine, Florida in the 1930s. It remained the only aquarium until the construction of Marineland of the Pacific in 1954, a facility first holding bottlenose dolphins and pilot whales, and the first aquarium to capture a killer whale in 1961. Therefore, in North America during the 1950s there were few cetaceans in captivity, held at only two captive facilities.

The 1960s and early 1970s were a period of expansion in the marine park industry in the U.S. and Canada.

The Vancouver Aquarium captured its first killer whale in 1964 by harpooning a whale in the Tumbo Channel, towing it to Vancouver and displaying "Moby Doll" in the Burrard Inlet Drydocks. The Seattle Aquarium began displaying killer whales at the same time, also establishing a capture business to service other aquariums. Also during the early 1960s, Marineland of Canada in Niagara Falls, Sea World, and other parks were established, drawing cetaceans primarily from the Northern and Southern Resident killer whale stocks, and from the various Gulf of Mexico bottlenose dolphin stocks. From 1966 to 1973, Marineland of the Pacific alone captured 132 cetaceans of six species for public display.

In 1972, the U.S. passed the Marine Mammal Protection Act (MMPA). The regulations under the MMPA led to the abandonment of many small traveling and small aquariums, with the remaining captive cetaceans being dispersed to the larger marine parks in the U.S. such as Sea World, as well as other facilities overseas. Nevertheless, it is estimated that approximately 2,400 Atlantic bottlenose dolphins have been captured in U.S. waters since the early 1900s, including a documented 573 animals collected under permits issued by NMFS from 1972 to 1989. No


308 Id. at 85.

bottlenose dolphins have been captured in U.S. waters since 1989.\textsuperscript{310}

Accurate information on the numbers of facilities and cetaceans world-wide is difficult to obtain due to poor record-keeping and the absence of any central recording method. However, due to the U.S. MMPA's requirement for record keeping through the Marine Mammal Inventory Report (MMIR) system, U.S.-sourced whales and dolphins are more easily assessed.

A recent review of MMIR data (October 17, 2000 version) examined the number of cetaceans held alive at U.S. facilities (including U.S. Navy establishments, research institutes and marine parks) in 1993 ($n=433$) as compared to 2000 ($n=484$). During this time, the total number of facilities remained roughly the same (64 in 1993 as compared to 63 in 2000). This data provides evidence that the number of cetaceans currently held in U.S. marine parks is indeed increasing, despite stabilisation of the numbers of facilities.\textsuperscript{311}

Since 1990, 11 newly constructed aquariums in the U.S. have chosen not to display captive cetaceans, while during this same time period, 17 existing facilities chose to no longer display cetaceans.\textsuperscript{312} Only two new facilities have been established in the U.S. in the past decade (Sea World's Discovery Cove swim-with-the-dolphin facility in Orlando in 2000, and the John G. Shedd Aquarium in 1991.\textsuperscript{313}

While the number of marine parks may have declined in Canada, the U.S. and the U.K. in the past decade, it is important to note that the cetaceans held captive in those facilities were in most cases shipped to other facilities. Therefore, the total number of captive cetaceans did not decrease, and appears to be increasing significantly worldwide with the establishment of new

\begin{footnotes}
\item[311] Humane Society of the United States, Unpublished and undated Analysis of the October 17, 2000 Marine Mammal Inventory Data.
\item[312] Research conducted by Mark Berman, Earth Island Institute and Sharon Adams, Virginia Beach SPCA, using the U.S. Marine Mammal Inventory Report, November 8, 2000 edition.
\item[313] Dr. Naomi Rose, HSUS, E-mail Communication, August 25, 2001.
\end{footnotes}
facilities over the past decade, particularly in the Caribbean, Mexico, and Asia (see Appendix B).

(4) Cetacean Captivity Trends World-wide

While expansion in the number of facilities in U.S. and Canada has stabilised, growth in the marine park industry has advanced worldwide, particularly over the past decade.

In 2002, an estimated 193 facilities in over 50 countries worldwide held cetaceans (see Appendix A). Worldwide, the current estimate of cetaceans kept in captivity is over 1,000 animals. U.S. Checks on Cuban Dolphin Exports (“Worldwide, there are 1,000 dolphins in captivity). Montreal Gazette. February 18, 2002.

Since 1990, a minimum of 31 new facilities have been established in 14 countries. An additional 11 new facilities are proposed (see Appendix B). During the same period a number of existing marine parks undertook significant expansions (i.e., Marineland of Canada, Japanese marine parks - see Appendix C). The greatest growth has been in swim-with-the-dolphin facilities, particularly in Asia, and tourism resort locations such as Mexico and the Caribbean countries. If the captive market were to expand at the same rate demonstrated since 1990 for the next 50 years, the number of captive facilities would total 382, with a corresponding

317 Based on a search for information world-wide, Zoocheck Canada has determined that there are 193 existing facilities holding captive cetaceans as of February 27, 2002. This represents an increase of as much as 20 per cent on an estimated base of 159 facilities (193 existing in 2002 less 31 new facilities) in 1990 (note that this figure does not include facilities that closed in the 1990s in the U.K. and elsewhere). If the rate of 31 new facilities seen in the past ten years is maintained for another 50 years (at the time the research was conducted, there were already 11 new facilities proposed), an additional 160 facilities would be added, for a total of up to 351
increase in wild-caught individuals. The number of wild-caught cetaceans may in fact be an underestimate, given the difficulties with captive breeding and the fact that the captive breeding industry may not be able to keep pace with the expansion of cetacean display industry as a whole. Some believe that the gene pool of killer whales in captivity is far too small to ensure future genetic variability. If this is the case, then aquariums may move to resume further captures from the wild, in order to support a shrinking and non-viable gene pool.

Most of the new aquariums constructed since 1990 were stocked with live-captured cetaceans from Cuba, Mexico, the Caribbean, and Russia, but also from Thailand and Japan. The official figures reported by Cuba alone show 82 dolphins captured and exported from their waters from 1996 to 2001. These findings and information that Russia has recently approved the capture of 10 killer whales, and 1,000 beluga whales from their far eastern waters, suggest that live-captures are still possible total facilities by 2050.

318 See Tu, J.I., “Whale of a Show End,” Seattle Times, April 18, 2001. The Vancouver Aquarium has noted that demand for captive killer whales is high. Aquarium Director, John Nightingale is quoted as saying, "Sea parks around the world, including new ones in Europe and South America, would love to have killer whales in their shows. Orca are the star attractions of aquariums -- they're exceedingly rare. The folks that have them value them highly and weren't willing to part with them."); See also, Read, Nicholas, “Pool Plans to be Kept Secret Until Bjossa Gone,” April 10, 2000, Vancouver Sun (Vancouver Aquarium Director John Nightingale says, "At this time, we have no plans to bring in any [cetaceans] from the wild. But I can't say that's for good").

319 See Williams, Vanessa, Captive Orcas: Dying to Entertain You. (Whale and Dolphin Conservation Society, Bath, United Kingdom, April 30, 2001 version) at.61; See also, Canadian Association of Zoos and Aquariums. 2000. Position Statement on the Maintenance and Display of Cetaceans in Captivity. 2000 Annual Membership Directory (Canadian Association of Zoos and Aquariums supports the taking of additional cetaceans from wild stocks when required, in order to incorporate new genetic material into captive populations.)


321 See Note 314 supra.
the primary source of cetaceans for marine parks and aquariums.\textsuperscript{322}

However, as many scientists have noted, there is growing evidence of cumulative environmental impacts on cetaceans, which may threaten even stable populations at any time (See Section D). In addition, evidence gathered by the U.S. NMFS suggests that for every cetacean brought into captivity, many more are captured, some of whom may die from the stress inflicted by capture techniques. (\textit{See supra} p.14-15).

While there are no conclusive population estimates for many of the most commonly captured species, there is some evidence that several populations are declining (\textit{See} Section C, \textit{supra}.) Furthermore, recent research regarding large cetaceans suggests that within populations, there are distinct sub-groupings which are genetically distinct. Adequate research has not yet been conducted on all cetacean populations to determine whether such sub-groupings are common in species targeted for captivity.

While the captive market is still small as compared to the volume of world trade, the rise in numbers of cetaceans captured for captivity is alarming, given the cumulative threats they face. In their totality, these factors support a precautionary approach being taken to protect dolphins. Under such an approach, one of the most cost-effective steps to be taken initially, would arguably be the elimination of wild-capture for captivity purposes.

In conclusion, as long as a measure banning the use, import and export of wild-caught species were part of an overall conservation scheme such as WAPPRIITA, or otherwise crafted so as to clearly delineate the conservation purpose, (for instance, it could also be part of a fisheries management program wherein the government set forth provisions to reduce and eliminate fisheries interactions with cetaceans), a dispute panel reviewing the measure should determine that it is related to conservation, as that term is used in Article XX(g).

\textbf{ii. In Conjunction With Restrictions on Domestic Use and Production}

Any law banning the import and export of cetaceans, must also correspondingly ban the

\textsuperscript{322} \textit{See} Note 87 \textit{supra}.
use of wild-caught cetaceans in Canada. However, no permit for wild-capture for captivity purpose has been issued in Canada since 1992. Appropriate exceptions could likely be made for wild-caught individuals already in captivity in Canada.

iii. Application of the Chapeau Requirements

As noted above, the Appellate Body in Shrimp Turtle AB objected to six elements of the US ban on shrimp products and found that these six elements resulted in arbitrary or unjustifiable discrimination. Specifically, the United States: (1) required countries to adopt identical conservation regimes as the US; (2) failed to take into consideration different conditions which may occur in the territories of other Members; (3) banned shipments from countries who had not implemented conservation programs, irrespective of whether the shipment was caught in conformity with US law; (4) failed to engage in serious bi-lateral or multi-lateral negotiation to protect sea turtles; (5) established a discriminatory phase-in period with respect to certain Member countries; and (6) US administrative procedures resulted in arbitrary discrimination because they lacked transparency, predictability and failed to afford due process.

Hypothetical B, however, would present few of these problems.

First, importation of a secondary product is not dependent upon usage or enactment of a conservation regime, as was the issue in Shrimp Turtle. Hypothetical B would simply ban the importation, exportation and use within Canada of wild-caught cetaceans for captivity.\textsuperscript{323}

Second, regarding notice, phase-in periods and administrative procedures, due regard should be given to the Appellate Body's voluminous concerns, however, as long as sufficient notice were given to member countries, and the phase-in period was equally applicable to all Member countries, unjustifiable discrimination should not occur. The Administrative problems noted by the Appellate Body in Shrimp Turtle arose due to the fact that the United States had to certify whether imports had satisfied the various conservation requirements of the US law. This would not be an issue under Hypothetical B.

\textsuperscript{323} The trade measures at issue in Hypothetical B may also fall under Article XX(d)--Necessary to Secure Compliance with Laws and Regulations which has not been discussed herein.
Canada would likely be required to demonstrate that it had engaged in serious bi-lateral or multi-lateral negotiation to protect cetaceans. However, participation in multilateral or regional bodies whose mandate it is to protect cetaceans would likely be sufficient, as long as Canada actively engaged in discussions of captivity and other means of mitigating stress on cetacean populations. Otherwise, Canada would be required to enter into bilateral or multilateral discussions with Member countries regarding the elimination of wild-capture for captivity.

Of most concern is the requirement that Canada take into consideration different conditions that may occur in the territories of other Members. This requirement may be construed by a dispute panel or Appellate Body to require that Canada allow the importation of wild-caught species from Members who can demonstrate that there are no adverse environmental or other impacts on cetacean species taken in their territories. While most cetacean species are highly migratory, some targeted species are primarily coastal. Therefore, Canada would be required to make an exception for resident populations taken within the territories of Member countries that demonstrate that such populations are not at risk from any cumulative environmental factors.

In conclusion, Hypothetical B should be found consistent with Article XX(g), so long as Canada actively engages in bilateral or multi-lateral discussions regarding the conservation of cetaceans, provide for a ban on the domestic use and capture of wild-caught cetaceans, provide notice of its regulation to Member countries and a reasonable phase-in period, and lastly, possibly provides a mechanism in which to assess whether any exceptions to the ban should be permitted based on differing environmental conditions in Member countries.

(c) Hypothetical C

Under Hypothetical C, Canada permits the importation and exportation of all live cetaceans, but subjects the sale, use, importation and exportation to specific regulation. Such regulations may include regulation of capture methods, captivity conditions, breeding parameters, shipping requirements and end usage.

Most of the above-mentioned standards relate to animal welfare rather than conservation per se, and thus would not likely be found by a dispute panel to be within the scope of Article XX(g).
IV CONCLUSION

In conclusion, each of the three hypotheticals pose different issues with respect to WTO rules. Each of the hypotheticals, however, should be found to be consistent with one or more WTO provisions. It is only necessary that the hypothetical legislation conform with Article XX (a), (b) or (g) (or with Article III); it is not necessary, nor in fact probable, that legislation would comply with all three. (In other words, Article XX (a), (b) and (g) address different policy considerations, which in relevant part, may be mutually exclusive.) For instance, Hypothetical A (total ban on captivity) would likely meet the requirements of Article III, thus rendering Article XX immaterial. Modified Hypothetical A (long phase-in of total ban) would likely meet the requirements of XX(a) and possibly (b), but would not meet the requirements of Article XX(g). Similarly, Hypothetical B (ban on wild-caught cetaceans) would meet the requirements of XX(g), but not (a) or (b) or Article III. Lastly, hypothetical C (regulations governing captivity and import/export) may meet the requirements of XX(a) and (b), but not (g) and not Article III.