

SUMMARY OF PROHIBITED ACTS UNDER THE SPAW PROTOCOL RELATED TO SMALL CETACEANS

This paper reviews the compliance, since 2000, of the seventeen parties¹ to the SPAW Protocol with their legal obligation under the Protocol to ensure the "total protection and recovery" of small cetaceans (small whales, dolphins and porpoises).

Based on published reports and data, a total of nine parties are not meeting their legal obligation to prohibit the taking, possessing, killing and commercial trade of small cetaceans: eight parties have allowed the hunting or live capture of small cetaceans since 2000 and five have permitted the export of parts and products for commercial purposes. None has reported these incidents as violations of the Protocol.

For three parties, hunting occurs on a large scale and is unregulated. Although a discussion

of the biological status of the individual species targeted is beyond the scope of this review, small cetaceans are known to be especially vulnerable to overexploitation. The pressure of direct hunting and capture of live animals for captive display is magnified by a wide range of human-caused threats in our rapidly changing oceans, including accidental injury or drowning in fishing gear (bycatch), contamination by chemical pollution, habitat degradation and disturbance from coastal development and depletion of their prey caused by over-fishing and climate change.

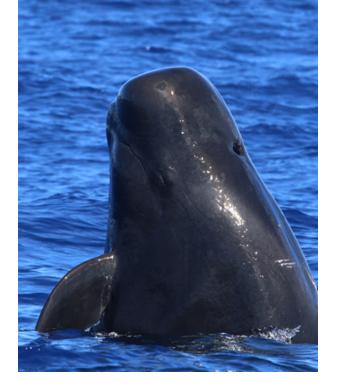
^{1.} Current parties (and territories): The Bahamas, Barbados, Belize, Colombia, Cuba, Dominican Republic, France (Guadeloupe, Martinique, Saint Martin, French Guiana), Grenada, Guyana, Honduras, Netherlands (Aruba, Curacao, Bonaire, Saint Eustatius and Saba, Sint Maarten), Panama, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, United States (Puerto Rico, United States Virgin Islands), and Venezuela.

BACKGROUND

The SPAW Protocol takes a progressive and precautionary approach to the protection and maintenance of the Wider Caribbean's fauna and flora. Specifically for small cetaceans, which are listed on Annex II of the Protocol, Article 11 requires Parties to ensure their "total protection and recovery" by adopting cooperative measures and by prohibiting: i) the taking, possession or killing (including, to the extent possible, the incidental taking, possession or killing) or commercial trade in such species, their eggs, parts or products; and ii) to the extent possible, the disturbance of such species, particularly during periods of breeding, incubation, estivation or migration, as well as other periods of biological stress.

Article 11(2) permits Parties to adopt exemptions to these prohibitions "for scientific, educational or management purposes necessary to ensure the survival of the species or to prevent significant damage to forests or crops". However, such exemptions "shall not jeopardize the species and shall be reported to the Organization in order for the Scientific and Technical Advisory Committee to assess the pertinence of the exemptions granted". Similarly, Article 14 permits Parties to "provide exemptions, as necessary, to meet the traditional subsistence and cultural needs of its local populations" but such an exemption "to the fullest extent possible" shall not cause "a substantial risk to, or substantial reduction in the number of, individuals" within "any ecologically inter-connected species or population, particularly migratory species and threatened, endangered or endemic species."

To date, the Secretariat has received no notifications of exemptions claimed from any Party for the direct take or killing of small cetaceans, or commercial trade in parts or products of small cetaceans.



SUMMARY OF DATA ON HUNTING FOR CONSUMPTION AND TRADE

The following section (and Table 1) presents a summary of published data relating to the taking and killing of small cetaceans, and exports of parts or products for commercial purposes since 2000. Primary sources relating to hunting are Robards and Reeves (2011), Altherr and Hodgins (2018)², and Fielding (2018). The primary source of international trade data is the database maintained by UNEP-WCMC3 of international trade in species protected by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).4 Where relevant, additional information is provided from the United States' Fish and Wildlife Service Law Enforcement Management Information System (LEMIS)5 which documents confiscation of wildlife products imported illegally into the United States.

^{2.} Imports were not included in the review since most relate to live specimens traded between SPAW parties and are thus covered under

 $[\]ensuremath{\mathtt{3}}.$ This report reviewed multiple primary sources. Where relevant the original sources are cited here.

^{4.} UN Environment World Conservation Monitoring Centre. Database available at: https://trade.cites.org/

^{5.} The database was searched for trade in "cetacea" reported to CITES from 2000-2018 by importing and exporting countries for all sources and purposes. Screenshots of captured data are available on request.

THE BAHAMAS

No hunting of small cetaceans is reported by Robards and Reeves (2011) or Altherr and Hodgins (2018).

BARBADOS

No hunting of small cetaceans is reported by Robards and Reeves (2011) or Altherr and Hodgins (2018).

BELIZE

Although Robards and Reeves (2011) report the hunting of manatees, neither they, nor Altherr and Hodgins (2018), report the hunting of small cetaceans.

COLOMBIA

Altherr and Hodgins report that the hunting of small cetaceans is common practice both in the Amazon and off the Pacific coast. In the Colombian Amazon botos (*Inia geoffrensis*) and, on a smaller scale, tucuxi (*Sotalia fluviatilis*), have been hunted since at least the late 1980s for use as aphrodisiacs, amulets and traditional medicine (Trujillo et al. 2010). The main driver of recent increases in kills is to use the meat and blubbers as bait to facilitate the catch of dwindling fish stocks in the Amazon River and its tributaries (Salinas et al. 2014; Robards & Reeves 2011).

According to interviews in 2015-2016 with 122 longline fishers in Bahía Solano, Chocó, 37.3 percent used dolphin meat as bait. Pantropical spotted dolphins (*Stenella attenuata*) are the preferred target (Avila et al. 2008). Fishers tend to focus on mother-calf pairs, as they make an easier target and allow them to catch two dolphins in one hunt. Some industrial longline vessels also hunt small cetaceans, taking an average of 10-20 dolphins in one hunt (Avila et al. 2008).

CUBA

Although Robards and Reeves (2011) report the hunting of manatees, neither they, nor Altherr and Hodgins (2018), report the hunting of small cetaceans for consumption. However, hundreds of bottlenose dolphins (*Tursiops truncatus*) have been live-captured by Cuba, including since it ratified SPAW in 1998.

Cuba has reported the export of 230 live, wild-sourced bottlenose dolphins for commercial, educational, circuses/travelling exhibitions and captive breeding purposes since 2000. Importing countries were Mexico, Argentina, Spain, Dominican Republic, Portugal, Malta, British Virgin Islands, Antigua and Barbuda, Jamaica, Israel, Venezuela, The Bahamas and Turkey. Another 13 captive-bred dolphins were exported for commercial purposes in 2012/2013.⁶

DOMINICAN REPUBLIC

Although Robards and Reeves (2011) report the hunting of manatees, neither they, nor Altherr and Hodgins (2018), report the hunting of small cetaceans.

The United States reports that Dominican Republic exported 1,920 small cetacean "carvings" (species and origin unknown) to the United States, most for commercial purposes, in 2004. LEMIS data for this year details six separate imports (and confiscations) of 1,930 cetacean "hair products" that year, all at the United States port of San Jose. While the four imports of smaller quantities were recorded to be for personal use (and may have been items brought by passengers), the two imports of large quantities (1,126 and 792 units) were both imported by companies and stated to be for commercial purposes.

FRANCE

GUADELOUPE

No hunting of small cetaceans is reported by Robards and Reeves (2011) or Altherr and Hodgins (2018).

MARTINIQUE

No hunting of small cetaceans is reported by Robards and Reeves (2011) or Altherr and Hodgins (2018).

SAINT MARTIN

No hunting of small cetaceans is reported by Robards and Reeves (2011) or Altherr and Hodgins (2018).

FRENCH GUIANA

Robards and Reeves report the taking of unspecified delphinids between 1990-2009 but no numbers are given.

GRENADA

No hunting of small cetaceans is reported by Robards and Reeves (2011) or Altherr and Hodgins (2018).

GUYANA

No hunting of small cetaceans is reported by Robards and Reeves (2011) or Altherr and Hodgins (2018).

HONDURAS

Although Robards and Reeves (2011) report the hunting of manatees, neither they, nor Altherr and Hodgins (2018), report the hunting of small cetaceans.

NETHERLANDS

ARUBA

No hunting of small cetaceans is reported by Robards and Reeves (2011) or Altherr and Hodgins (2018).

CURACAO

No hunting of small cetaceans is reported by Robards and Reeves (2011) or Altherr and Hodgins (2018).

BONAIRE, SAINT EUSTATIUS AND SABA

No hunting of small cetaceans is reported by Robards and Reeves (2011) or Altherr and Hodgins (2018).

SINT MAARTEN

No hunting of small cetaceans is reported by Robards and Reeves (2011) or Altherr and Hodgins (2018). CITES records show the import (and confiscation) by the United States of 548g of pilot whale (*Globicephala macrorhynchus*) meat for commercial purposes in 2014.

PANAMA

Although Robards and Reeves (2011) report the hunting of manatees, neither they, nor Altherr and Hodgins (2018), report the hunting of small cetaceans.

ST. LUCIA

Pilot whales and a number of dolphin species have routinely been hunted for consumption since the early 1900's (Fielding 2018). The hunt is unregulated and no catch data are recorded by the government but is estimated to number in the hundreds a year (IWC, 2000 and Robards and Reeves 2011). Species targeted include the common dolphin (Delphinus delphis), pygmy killer whale (Feresa attenuata), killer whale (orcinus orca), Fraser's dolphin (Lagenodelphis hosei), melon-headed whale (Peponocephala electra), false killer whale (Pseudorca crassidens), pantropical spotted dolphin, Clymene dolphin (Stenella clymene), striped dolphin (Stenella coeruleoalba), Atlantic spotted dolphin (Stenella frontalis) and bottlenose dolphin.

A 2013 government brochure states that approximately 20 people operating out of Castries and Vieux Fort engage in small cetacean hunting using boats and equipment similar in design to those used by Yankee whalers. Meat and blubber "is consumed fresh or salted and corned and is cooked in stews or boiled with ground vegetables. The whale and the melon oil is used locally as a tonic, laxative or in medicinal potions used for the cure of a variety of ailments..." (Government of St. Lucia 2013).

St Lucia exported 0.9 kg of pilot whale meat to Antigua and Barbuda in 2005 for personal use. The United States has reported seven separate imports of pilot whale products from St. Lucia since 2007, including 1 (unit not specified) in 2007 that was reported to have originated in St. Vincent, 3 kg in 2009, 4.88 kg in 2010, 2.08 kg in 2015, 4 kg in 2016 and a total of 6 kg in 2018. Most were reported to be for personal use but imports in 2015 and 2016 were recorded to be for commercial purpose. All were confiscated by US authorities upon entry. Fielding (2018) notes export of pilot whale meat and blubber from St. Vincent to St. Lucia.

ST. VINCENT AND THE GRENADINES

According to Fielding (2018) small cetaceans have been hunted for their meat and blubber in St. Vincent and the Grenadines (SVG) since the early 20th century, exclusively out of the leeward village of Barrouallie. While short-finned pilot whales were originally the primary target, other dolphin species now represent the predominant take, with a peak of over 1,000 killed in 2009.

Recently published catch data from 1949-2017⁷ (Fielding, 2018) identifies the annual take of an average of 142.5 pilot whales and 210.6 "other dolphins" out of Barrouallie. No killer whales are recorded as killed before 2007 but since then 60 have been taken, including at least three in 2018 (iWitness News, 2018) and one in 2019 (Searchlight News, 2019). Species targeted (in order of magnitude) are spinner dolphin, pilot whale, Atlantic spotted, killer whale, Fraser's dolphin, False killer whale, Risso's dolphin (*Grampus griseus*), melon-headed whale, Clymene dolphin, striped dolphin, dwarf sperm whale (*Kogia sima*) and rough-toothed dolphin (*Steno bredanensis*).

Hunts are conducted from small boats, powered by gasoline engines, using hand-thrown harpoons and deck mounted harpoon guns (modified shotguns). The hunts are year-round and unregulated; no quotas are set and no catch records are maintained by the government.

The United States reports the import (and confiscation) of pilot whale meat from St.

Vincent in 2006, 2007, 2008, 2009, 2010, 2011, 2014, 2015 and 2016 (total 89.79 kg), most for personal use but some for commercial purposes.

LEMIS data document 29 separate confiscations of meat over that period, all at San Jose airport.

TRINIDAD AND TOBAGO

Robards and Reeves (2011) record the killing of striped and bottlenose dolphins for consumption between 1990 and 2009 but provide no annual estimate.

UNITED STATES

No hunting of small cetaceans is permitted or occurs in the Wider Caribbean region.

PUERTO RICO

No hunting of small cetaceans is reported by Robards and Reeves (2011) or Altherr and Hodgins (2018).

UNITED STATES VIRGIN ISLANDS

No hunting of small cetaceans is reported by Robards and Reeves (2011) or Altherr and Hodgins (2018).

250 ml of cetacean oil (originating in St Lucia) was exported to the United States for personal use in 2005. It was confiscated.

VENEZUELA

Altherr and Hodgins (2018) report that small cetaceans have been hunted on a large scale in Venezuela since the 1960s, for human consumption, oil production and, increasingly, for bait in catfish, crab and shark fisheries. Of the 20 cetacean species found in Venezuelan waters, eleven are known to be targeted in hunts. Common bottlenose and spinner dolphins are subject to the highest levels of hunting, primarily around Margarita Island off eastern Venezuela. In 1991, the Government of Venezuela estimated that 200 to 300 small cetaceans were hunted per year. Others estimated the figure to be between 5,000 and 21,000 dolphins killed each year.

Tucuxi and boto are killed in remote areas for their blubber, which is used to treat respiratory diseases and their teeth are used for necklaces. From 1990–2008 an estimated 840 botos were taken for bait, primarily in villages along the Orinoco River.



CONCLUSIONS

This research demonstrates that, despite small cetaceans having the most highly protected status under the SPAW Protocol, not all parties are meeting their legal obligations to ensure their "total protection and recovery".

Since 2000, eight of the 17 parties to the SPAW Protocol have had a documented "take" (killing or live capture) of small cetaceans in their (or their territory's) waters. Five parties have exported parts or products of small cetaceans for commercial purposes. In at least three parties—St. Lucia, St. Vincent and the Grenadines and Venezuela—hunting occurs at a high level.

These takes and commercial exports are violations of the SPAW Protocol and should be reported to the Convention through the established reporting mechanisms.

Even if parties claim exemptions to the Protocol's prohibited activities for scientific, educational or management purposes, they bear the obligation to evaluate whether the activities undertaken "shall not jeopardize the species". They should also report activities that they claim to be exempt in order for the Scientific and Technical Advisory Committee to assess their pertinence. Similarly, if Parties assert that their killing, possession or trade in small cetaceans are exempt from the requirement for "total protection" because they "meet the traditional subsistence and cultural needs of its local populations", they must provide evidence that the exemption "to the fullest extent possible" shall not cause "a substantial risk to, or substantial reduction in the number of, individuals" within "any ecologically interconnected species or population, particularly migratory species and threatened, endangered or endemic species." In each case this would require dedicated effort to assess the status of the populations concerned.

Although discussion of the biological status of the species targeted is beyond the scope of this paper, the level of exploitation of small cetaceans by some parties raises concerns.

RECOMMENDATIONS

All parties to SPAW must prohibit—and enforce prohibitions on— the taking, killing, possession and commercial trade (including export for commercial purposes) of small cetaceans.

Parties that permit the taking, killing, possession and commercial trade in small cetaceans should report these activities as violations of the Protocol.

Parties that intend to claim an exemption for scientific, educational or management purposes for these activities should provide evidence, based on current population assessments, that they do not jeopardize the species. This will require the collection of catch data and thorough population assessments.

Parties that intend to claim an exemption to meet a traditional subsistence and cultural need should demonstrate to the fullest extent possible no substantial risk to, or substantial reduction in the number of, individuals within any ecologically inter-connected species or population, particularly migratory species and threatened, endangered or endemic species. This will require the collection of catch data and thorough population assessments.

Parties should undertake education and public awareness efforts to discourage the commercial use, including by visitors, of small cetacean products; specifically, they should install displays at airports warning passengers not to export parts and products.

TABLE 1: SUMMARY OF TAKES AND COMMERCIAL USE BY SPAW PARTIES (AND TERRITORIES)

COUNTRY	SMALL CETACEANS CAUGHT AND USED FOR HUMAN CONSUMPTION SINCE 2000	EXPORTS OF CETACEAN MEAT OR OTHER PRODUCTS FOR COMMERCIAL PURPOSES SINCE 2000
THE BAHAMAS	х	x
BARBADOS	х	x
BELIZE	х	x
COLOMBIA	· boto, tucuxi, pantropical spotted dolphin	x
CUBA	not for consumptionmany live captured	х
DOMINICAN REPUBLIC	x	1,920 carvings in 2004 (mainly commercial) sperm whale oil in 2003
FRANCE		
(Guadeloupe)	х	x
(Martinique)	х	х
(Saint Martin)	х	х
(French Guiana)	unspecified dolphinsnumbers not known	x
GRENADA	х	х
GUYANA	х	х
HONDURAS	х	x
NETHERLANDS		
(Aruba)	х	х
(Curacao)	х	х
(Bonaire, Saint Eustatius and Saba)	x	x
(Sint Maarten)	х	· 0.548 kg meat in 2014 (T)
PANAMA	х	· 16 "specimens" in 2006/7 (T)
ST. LUCIA	 hundreds annually: Pilot whales, common dolphin, pygmy killer whale, Fraser's dolphin, melon-headed whale, false killer whale, pantropical spotted dolphin, Clymene dolphin, striped dolphin, Atlantic spotted dolphin, bottlenose dolphin 	. 2.08 kg meat in 2015 . 2 kg meat in 2016
ST. VINCENT AND THE GRENADINES	 annual average of 142.5 pilot whales and 210.6 "other dolphins" (spinner, Atlantic spotted, killer whale, Fraser's dolphin, False killer whale, Risso's dolphin, melon-headed whale, Clymene dolphin, striped dolphin, dwarf sperm whale, rough-toothed dolphin) 60 killer whales since 2007 	 a total of 89.6 kg meat in 29 separate exports in 2006, 2007, 2008, 2009, 2010, 2011, 2014, 2015 and 2016 (personal and commercial)
TRINIDAD AND TOBAGO	· striped and bottlenose dolphin (1990-2009)	х
UNITED STATES	х	x
(Puerto Rico)	x	x
(US Virgin Islands)	х	x
VENEZUELA	thousands annually (for human consumption, medicine and bait) eleven species targeted, mainly, bottlenose dolphin, spinner dolphin, tucuxi and boto	x

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