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Preliminary list of small cetacean  
populations with high priority for  
designation of task teams and potential  
development of Conservation Management  
Plans

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INTERNATIONAL  
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# **PRELIMINARY LIST OF SMALL CETACEAN POPULATIONS WITH HIGH PRIORITY FOR DESIGNATION OF TASK TEAMS AND POTENTIAL DEVELOPMENT OF CONSERVATION MANAGEMENT PLANS**

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## **INTRODUCTION**

At the last year's meeting in Bled, the Small Cetaceans sub-committee proposed the creation of Small Cetacean Task Teams (SCTTs), whose primary aim would be to assist the Scientific Committee in providing advice to requesting countries on situations where populations of small cetaceans are in danger of serious declines that may eventually lead to their extinction; the ultimate aim being to ensure that no extinction occurs.

This process would consist of several phases, the first of which would be the identification of critical populations where actions by SCTTs may be helpful. The Small Cetaceans sub-committee will then agree on one or more populations for the SCTTs to address, with priority normally being given to populations found within the waters of more than one country or upon a specific request for advice from a government.

The main objective of this working document is to identify populations of small cetaceans that require special attention and should have a high priority in the Small Cetaceans sub-committee and addressed by SCTT. This does not necessarily include only populations listed as 'Endangered' or 'Critically Endangered' by the IUCN, but also populations of 'Least Concern' and 'Data Deficient' species that may be suffering high unregulated exploitation. The resulting list is by no means meant to be comprehensive, and any suggestions for additions (or deletions) are welcome.

## **METHODS**

Populations of small cetaceans to be included in this preliminary list were identified using information from:

- a) IUCN Red List assessments (either global or regional/intra-specific);
- b) IWC SM reports and recommendations;
- c) Published literature (this search was not exhaustive).

Species and/or populations were included in the list if they met one or more of the following criteria:

- Listed as 'Endangered' or 'Critically Endangered' by the IUCN
- Repeatedly included in the SM sub-committee recommendations in the past five years.

## **RESULTS**

Based on the criteria listed above, 18 populations of 15 species were included in the list (Table 1). Out of those, two were listed as 'Critically Endangered' on a species level, two listed as 'Endangered' on species level, six listed as 'Critically Endangered' on sub-species level and three listed as 'Endangered' on sub-species level. Note that for the purposes of this exercise, all assessed sub-populations of Irrawaddy dolphins are grouped together, as are the boto and tucuxi. The identified populations represent 5 families (Delphinidae, Phocoenidae, Monodontidae, Platanistidae and Iniidae). In addition to these 19 populations, nine other candidate populations are listed at the end of Table 1, and may be considered.

The threats affecting these populations are numerous and diverse, but can broadly be divided into the following categories: 1) bycatch in fishing gear; 2) habitat degradation (including habitat fragmentation, chemical pollution and urbanisation); and 3) directed takes.

The identified populations are located around all continents, with six in Asia, four in Europe (including the Mediterranean and the Black Seas for the purposes of this exercise), three in New Zealand, two in North America, two in South America, and one in Africa. The range of nine of these populations falls under the jurisdiction of a single country, while all others are shared by several countries.

## **DISCUSSION**

Several populations included in this review, such as the vaquita or Maui's dolphin for example, represent an entire species or sub-species and are already listed by the IUCN. Some others, however, are listed as Least Concern or Data Deficient on a species level, but may be under severe threat on a population level. A form of a triage system or a decision tree, in which populations are given some level of priority for consideration by the SCTTs, may be developed by the Small Cetaceans sub-committee if considered appropriate or useful.

Bycatch in gillnets appears to be the single most important threat to these populations overall, as 13 out of 18 populations are impacted by it (Table 1).

**Table 1.** Potential priority populations of small cetaceans.

Population /species	Species (scientific)	Geographic range	Countries involved	Identified threats	IUCN listing (regional or intra-specific)	IUCN species global	Rationale	Source of information
Vaquita	<i>Phocoena sinus</i>	Upper Gulf of California	Mexico	Bycatch in gillnets		Critically endangered	Endemic, extremely low pop. size, unsustainable bycatch	Rojas-Bracho et al., 2006; Gerrodette et al., 2011; IUCN; IWC
Maui's dolphin	<i>Cepharorhynchus hectori</i> ssp. <i>maui</i>	New Zealand	New Zealand	Bycatch in gillnets		Critically endangered	Endemic, extremely low pop. size, unsustainable bycatch, recognised subspecies	IUCN; IWC
Hector's dolphin	<i>Cepharorhynchus hectori</i>	New Zealand	New Zealand	Bycatch in gillnets		Endangered	Endemic, small pop. size, unsustainable bycatch	IUCN; IWC
Yangtze finless porpoise	<i>Neophocaena asiaorientalis</i> ssp. <i>asiaorientalis</i>	Yangtze river	China	Bycatch in rolling hooks long lines, electro-fishing and gillnets, vessel collisions, chemical pollution, habitat degradation	Critically endangered	Vulnerable	Endemic subspecies, small pop. size, high impact from other anthropogenic sources, recognised subspecies	Huang et al., 2012; Mei et al., 2012; IUCN; IWC

Eastern Taiwan Strait humpback dolphin	<i>Sousa chinensis</i>	Taiwan	Taiwan	Bycatch in gillnets and trammel nets, land reclamation, chemical pollution	Critically endangered	Near threatened	Small pop. size, likely unsustainable bycatch, other impacts	IUCN; IWC
Cook Inlet Beluga	<i>Delphinapterus leucas</i>	Cook Inlet (Gulf of Alaska)	USA (Alaska)	(subsistence whaling, prey availability, climate change, chemical pollution, noise and habitat degradation)	Critically endangered	Near threatened	Small pop. size, likely declining	IUCN
Irrawaddy dolphin (all assessed subpopulations)	<i>Orcaella brevirostris</i>	Rivers Ayeyarwady, Mahakam, Malampaya and Mekong, and Songkhla Lake	Myanmar, Indonesia, Philippines, Cambodia, Laos, Vietnam, Thailand	Bycatch in gillnets, habitat degradation and fragmentation, live captures	Critically endangered	Vulnerable	High bycatch, discontinued distribution, high impact from other anthropogenic sources	Smith et al., 2006, 2007; IUCN; IWC
Baltic harbour porpoise	<i>Phocoena phocoena</i>	Baltic Sea	Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russian	Bycatch in gillnets, chemical pollution	Critically endangered	Least concern	Small pop. size, likely unsustainable bycatch, other impacts	Scheidat et al., 2008; Benke et al., 2014; IUCN

			Federation, Sweden					
Fiordland bottlenose dolphin	<i>Tursiops truncatus</i>	Fiordland, New Zealand	New Zealand	Boat disturbance, vessel strikes, prey depletion, habitat degradation	Critically endangered	Least concern	Small pop. size, poor calf survival, cumulative impacts	Currey et al., 2009a, b, 2010; IUCN
Ganges river dolphin	<i>Platanista gangetica</i>	Indus, Ganges-Brahmaputra-Megna, and Karnaphuli-Sangu river systems	Bangladesh, India, Nepal, Pakistan	Habitat degradation and fragmentation (water development projects), chemical pollution, directed takes, bycatch in gillnets		Endangered	Endemic, small pop. size, represents an entire taxonomical family	Braulik 2006, 2012; Smith et al., 2006; Kelkar et al., 2010; IUCN; Huang et al., 2012
Black Sea harbour porpoise	<i>Phocoena phocoena</i> ssp. <i>relicta</i>	Black Sea, Bosphorus Strait, Marmara Sea, northern Aegean Sea	Bulgaria, Georgia, Romania, Russian Federation, Turkey, Ukraine, possibly Greece	Bycatch in gillnets, chemical pollution	Endangered	Least concern	Likely unsustainable bycatch, recognised subspecies	IUCN
Black Sea bottlenose dolphin	<i>Tursiops truncatus</i> ssp. <i>ponticus</i>	Black Sea, Bosphorus	Bulgaria, Georgia, Romania,	Bycatch in gillnets, live	Endangered	Least concern	Likely unsustainable bycatch,	IUCN

		Strait, possibly Marmara Sea	Russian Federation, Turkey, Ukraine	captures, prey depletion			recognised subspecies	
Mediterranean short-beaked common dolphin	<i>Delphinus delphis</i>	Mediterranean Sea	Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Gibraltar, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Syrian Arab Republic, Tunisia, Turkey	Directed takes (in the past), competition with fisheries, bycatch, chemical pollution	Endangered	Least concern	Likely declining	Beari et al., 2003; 2008; IUCN
Franciscana	<i>Pontoporia blainvillei</i>	Brazil, Uruguay and Argentina coasts	Brazil, Uruguay, Argentina	Bycatch in gillnets, habitat degradation	Vulnerable	Vulnerable	Endemic, heavy overlap with human activity, potentially unsustainable bycatch	IUCN; IWC

Amazon river dolphins (Boto and Tucuxi)	<i>Inia geoffrensis</i> , <i>I. boliviensis</i> , <i>Sotalia fluviatilis</i>	Amazon river system	Bolivia, Brazil, Colombia, Ecuador, Peru, Venezuela	Directed takes for bait, habitat degradation and fragmentation		Data deficient	Endemic, likely unsustainable directed takes, dependency on riverine habitat, entire taxonomical family	Gomez-Salazar et al. 2012; Huang et al., 2012; IUCN; IWC
Western Okhotsk Sea beluga	<i>Delphinapterus leucas</i>	Western Okhotsk Sea	Russia	Live captures		Near threatened	Unsustainable catches, small pop. size	IWC
Russian Far East killer whale	<i>Orcinus orca</i>	Russian Far East	Russia	Live captures		Least concern	No reliable abundance estimates, potentially unsustainable catches, strong social structure	IWC
Atlantic humpback dolphin	<i>Sousa teuszii</i>	West African coast	Morocco, Mauritania, Senegal, Gambia, Guinea, Guinea Bissau, Togo, Benin, Cameroon, Gabon, Republic of	Bycatch in gillnets, directed takes for bushmeat, coastal development		Vulnerable	Endemic to West Africa, potentially unsustainable bycatch and directed takes for bushmeat	Collins et al. in prep.



			Congo, Angola					
POTENTIAL OTHERS								
<i>Mediterranean harbour porpoise?</i>	<i>Phocoena phocoena ssp. relicta</i>							
<i>Solomon islands bottlenose dolphin?</i>	<i>Tursiops aduncus</i>							
<i>Narwhal?</i>	<i>Monodon monoceros</i>							
<i>Baird's beaked whale?</i>	<i>Berardius bairdii</i>							
<i>Chilean dolphin?</i>	<i>Cephalorhynchus eutropia</i>							
<i>Burmeister's porpoise?</i>	<i>Phocoena spinipinnis</i>							
<i>Hong Kong humpback dolphin?</i>	<i>Sousa chinensis</i>							
<i>Strait of Gibraltar killer whale?</i>	<i>Orcinus orca</i>							
<i>Hebrides killer whale?</i>	<i>Orcinus orca</i>							

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