



PORBEAGLE SHARK (<i>Lamna nasus</i>)	
Appendix II listing	Proposed by Sweden on behalf of European Union Member States and Palau
IUCN Red List status	Critically Endangered in Northeast Atlantic and Mediterranean Endangered in Northwest Atlantic Near Threatened in Southern Ocean Vulnerable globally

RECOMMENDATION: SUPPORT

- The Pew Environment Group applauds the submission of this proposal and urges CITES Parties to support it.
- The expert panel of the United Nations Food and Agriculture Organisation (FAO) acknowledged significant porbeagle population declines and determined that available data support the proposal to include *Lamna nasus* in CITES Appendix II.
- Porbeagle sharks are very slow growing with low reproductive capacity. Yet, they are over-exploited in bycatch and targeted fisheries for their large fins and high-value meat.¹
- To date, governing bodies have enforced little to no international trade limitations of porbeagle shark products.²
- A CITES Appendix II listing would regulate international trade of porbeagle meat and fins, aiding efforts to reverse the unsustainable harvest of this species.
- Although the European Union’s recent decision to end all fishing for porbeagles in the Northeast Atlantic, where the species is critically endangered, will help the species recover, the regional action does not alleviate the need for the international protections that a CITES listing provides.

Biological vulnerability to over-exploitation

- Long gestation period of eight to nine months.³
- Long-lived:
 - 29 to 45 years, Northwest Atlantic
 - about 65 years, Southwest Pacific⁴
- Slow to reach reproductive maturity:
 - 18 years, Northwest Atlantic
 - 26 years, Southwest Pacific⁵
- Low reproductive capacity, with litters averaging about four pups.⁶

Porbeagle fisheries and trade

The porbeagle shark is a large shark distributed throughout the temperate North Atlantic and Southern oceans. This species yields significant commercial value for its large fins and meat, and is taken in both targeted and bycatch fisheries. The combination of the porbeagle’s low reproductive output and high market value makes populations especially vulnerable to over-exploitation and depletion.⁷ Porbeagle sharks have been heavily exploited in the Northwest and Northeast Atlantic. In the Northwest Atlantic, female spawning stock has decreased to between 12 and 16 percent of former levels.⁸ Populations are so depleted that the Canadian Department of Fisheries and Oceans (DFO) has determined that porbeagles are no longer fulfilling their role in the ecosystem.⁹

Scientific analysis of stock assessment data in the Northeast Atlantic revealed severe population declines, estimating more than a 90 percent depletion of biomass from baseline levels.¹⁰ Over the past several



Porbeagle shark

years, scientists with various entities, including the International Council for the Exploration of the Sea (ICES), have encouraged the closure of Northeast Atlantic porbeagle fisheries. Additionally, scientists have supported practices that limit bycatch and eliminate landings of this critically endangered population.¹¹

Stock information is less available for Southwest Atlantic porbeagles, but depletion in spawning stock indicates biomass is 18 percent of previous levels.¹² In the Mediterranean Sea, porbeagles have virtually disappeared from fishery record.¹³ Bycatch research on Mediterranean pelagic fisheries in 1998 yielded only 15 specimens in 12 months.¹⁴ Additionally, research on swordfish longline bycatch published in 2002 documented zero catch of *Lamna nasus* in the Western Mediterranean.¹⁵ On the high seas, porbeagle catch numbers are unclear because of widespread underreporting.¹⁶

The absence of species-specific trade data has hampered efforts to determine the proportion of global catch that enters international trade. At the conclusion of International Commission for the Conservation of Atlantic Tunas (ICCAT)/ICES specialist meetings in 2009, officials recommended that high-seas fisheries stop targeting porbeagle.¹⁷ In 2007, Germany proposed a Convention on International Trade in Endangered

Species of Wild Fauna and Flora (CITES) Appendix II listing for *L. nasus* at the 14th Conference of the Parties. However, the proposal did not achieve the two-thirds majority vote required for an Appendix II listing and was defeated. The CITES meeting in March 2010 presents the opportunity to secure a CITES listing for porbeagle and to enact crucial trade regulations that will help to ensure the future sustainability of this highly vulnerable species. The Pew Environment Group recommends that Parties support this proposal and look forward to providing assistance and collaboration in its implementation.

Including porbeagle sharks in CITES Appendix II is:

- Consistent with the CITES listing criteria (Res. Conf. 9.24 [Rev. CoP14], Annex 2a [A, B]), Annex 2b (A).
- Essential for ensuring that international trade is regulated sustainably.
- Likely to spark enhanced assessment and management of populations worldwide because countries will need to make non-detriment findings prior to issuing permits for international trade.
- Necessary for ending the serial population depletion driven by international trade.
- In line with the FAO International Plan of Action for sharks.

1 J. Stevens et al., *Lamna nasus* (2006). In: IUCN 2009. IUCN Red List of Threatened Species, Version 2009.2, <www.iucnredlist.org>. Downloaded 11 December 2009.

2 CITES Proposal 17, <www.cites.org/eng/cop/15/prop/E-15%20Prop-17.pdf>. Downloaded 21 December 2009.

3 CITES Proposal 17 Annexes <www.cites.org/eng/cop/15/prop/E-15%20Prop-17-Ax1-5.pdf>. Downloaded 28 December 2009.

4 S. Campana and J. Gibson, "Catch and Stock Status of Porbeagle Shark (*Lamna nasus*) in the Northwest Atlantic to 2007," Northwest Atlantic Fisheries Organisation, Doc. 08/36 (2008), <http://archive.nafo.int/open/sc/2008/scr08-036.pdf>; DFO, "Stock assessment report on NAFO Subareas 3-6 porbeagle shark," Science Advisory Report, Canadian Science Advisory Secretariat, 2005/044, <www.dfo-mpo.gc.ca/csas/Csas/status/2005/SAR-AS2005_044_e.pdf>; M. P. Francis et al., "Age under-estimation in New Zealand porbeagle sharks (*Lamna nasus*): is there an upper limit to ages that can be determined from shark vertebrae?" *Marine and Freshwater Research*, 58:10-23 (2007), <www.publish.csiro.au/paper/MF06069.htm>.

5 Campana, "Catch and Stock Status"; DFO, "Stock assessment report"; Francis, "Age under-estimation."

6 CITES Proposal 17 Annexes.

7 Stevens.

8 ICCAT/ICES, Report of the 2009 porbeagle stock assessments meeting (Copenhagen, June 22-27, 2009), <www.iccat.int/Documents/Meetings/Docs/2009_POR_ASSESS_ENG.pdf>. Downloaded 14 August 2009.

9 DFO, "Potential Socio-economic Implications of Adding Porbeagle Shark to the List of Wildlife Species at Risk in the Species at Risk Act (SARA)," DFO Policy and Economics Branch—Maritimes Region, Dartmouth, Nova Scotia (2006), <www.dfo-mpo.gc.ca/species-especes/reports-rapports/porbeagle-maraiche/index-eng.htm>.

10 ICCAT/ICES, p. 8.

11 ICES, "Report of the ICES Advisory Committee on Fishery Management, 2008," ICES Advice 2008, Book 9, <www.ices.dk/products/icesadvice/2008/ICES%20ADVICE%202008%20Book%209.pdf>.

12 ICCAT/ICES, p. 9.

13 Stevens.

14 P. Megalofonou et al., "By-catches and discards of sharks in the large pelagic fisheries in the Mediterranean Sea," Project 97/50, Directorate General XIV/C1, European Commission (2000).

15 J. M. De la Serna et al., "Large Pelagic Sharks as By-catch in the Mediterranean Swordfish Longline Fishery: Some Biological Aspects," NAFO SCR Doc. 02/137, Serial No. N4759 (2002), <http://archive.nafo.int/open/sc/2002/scr02-137.pdf>.

16 ICCAT/ICES, p. 14.

17 ICCAT/ICES, p. 13.

