

sharks and providing evidence-based information to ensure the long-term survival of these iconic species.

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Lost and found: discovery of the painted swellshark *Cephaloscyllium pictum* in Timor-Leste

During a survey of Timor-Leste's deep-sea environment (water depth > 200 m), we have recorded the first live video footage of a painted swellshark *Cephaloscyllium pictum*. We conducted this survey using low-cost deep-sea cameras developed by the National Geographic Society Exploration Technology Lab (Giddens et al., 2021, *Frontiers in Marine Science*, 7, 601411).

Cephaloscyllium pictum was described in 2008 from five specimens collected at fish markets in Lombok and Bali, Indonesia (Last et al., 2008, *CSIRO Marine & Atmospheric Research Paper*, 022, 358). Four of the five specimens were collected in 2002, with the fifth collected at the Tanjung Luar fish landing site in Lombok on 12 July 2004. To our knowledge, this species has never been observed in the wild, and little is known about its ecology, habitat or behaviour.

On 17 and 18 November 2024, our deep-sea cameras captured footage of this species at two sites off Dili, Timor-Leste, at depths of 570 and 536 m. The habitat at both sites consisted of steep rocky slopes. At each site, the shark returned to the camera several times, and in the second instance the female shark interacted with the bait and made several passes in front of the camera. This is a new species record for Timor-Leste and extends the species' known range by > 1,100 km.

Although sharks and rays are protected in Timor-Leste, there is a dearth of information on their diversity and distribution, especially for deep-sea species. Recently, the IUCN Species Survival Commission Shark Specialist Group identified four Important Shark and Ray Areas along the north coast of Timor-Leste based on diver observations (sharkrayareas.org/e-atlas). However, in situ research is critical to inform conservation, especially for deep-sea species where diver observations are not possible.

Cephaloscyllium pictum is categorized as Data Deficient on the IUCN Red List because of the limited information

available. Approximately 33% of chondrichthyan species are threatened, with this number increasing to c. 40% if Data Deficient species (which may be threatened) are included (Dulvy et al., 2021, *Current Biology*, 31, 4773–4787). The discovery of the painted swellshark off Timor-Leste highlights the importance of modern, cost-effective technologies to survey the deep sea and locate these lost sharks before they vanish.

We thank the National Geographic Society for supporting this project. DAE would like to acknowledge the Save Our Seas Foundation (grant 594) for support of the Lost Sharks program.

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Eels: uncertain impacts of proposed CITES listings

The European eel *Anguilla anguilla* is listed in CITES Appendix II, regulating its international trade. In October 2024, in preparation for the 20th meeting of the Conference of the Parties in Uzbekistan in 2025, the Directorate-General for the Environment of the European Commission sent letters to all CITES Parties within the range of the European eel and all other anguillids *Anguilla* spp., to inquire whether moving the species to Appendix I would help ensure its survival, and whether a genus-level listing in Appendix II would help ensure that international trade is both legal and sustainable.

Listing the European eel in Appendix I, which prohibits international commercial trade, would effectively terminate all commercial exploitation of the species, given that both eel fisheries and aquaculture rely on the international trade in glass eels (few countries harbour both a glass eel fishery and eel aquaculture). However, contribution to the species' survival could be minimal, as non-fishing threats remain. Eel aquaculture in Europe could transition to other species, such as the American eel *Anguilla rostrata*, which requires comparable aquaculture conditions. However, this species is already facing significant pressure from legal and illegal fishing. The relocation of European eel aquaculture to countries where there are fisheries is another potential consequence, although the associated costs would be high. Evaluation and improvement of EU-wide measures under the *European Council Regulation (EC) No 1100/2007 Establishing Measures for the Recovery of the Stock of*