Conservation news

A major victory in the effort to end the online, ornamental trade in bats

Although the use of wildlife for ornaments is not new, the large-scale harvesting and fashioning of animals into curios is a growing phenomenon, exacerbated by e-commerce. Concern about the conservation threat posed by online ornamental trade to Southeast Asia's bats (including painted woolly bats *Kerivoula picta*), which are sold as taxidermied specimens and skeletal remains, was first raised by Lee et al. (2015, *Oryx*, 49, 204).

We (the IUCN Species Survival Commission Bat Specialist Group, Bat Trade Working Group) systematically quantified the online trade in these distinctive orange and black bats on the USA's three biggest shopping websites: Amazon, eBay and Etsy (Coleman et al., 2024, *European Journal of Wildlife Research*, 70, 75). Our results, gathered over just 3 months, suggest that in 2022 alone, hundreds of *K. picta* were imported into the USA.

We determined that this trade was probably illicit (by analysing relevant laws in source countries and the USA) and recommended enhanced legal protection for *K. picta*. Before our paper was published, we communicated our findings to the Center for Biological Diversity, which, in May 2024, together with the Monitor Conservation Research Society, submitted a petition to add *K. picta* to the U.S. Endangered Species Act. This listing should raise border scrutiny and reduce USA imports of ornamental bats. This petition was publicized on the websites of the Center for Biological Diversity and the non-profit Lubee Bat Conservancy, and on social media.

The frequent use of seemingly deceptive sales tactics (e.g. statements that bats had been sustainably sourced) in the listings we analysed suggests that buyers may not be aware of their inadvertent contributions to bat population declines. We suggested this issue be publicized, reasoning that heightened public awareness could reduce demand and that media exposure could push e-tailers to ban sales of bats. We acted on our recommendation via carefully coordinated efforts by Queens College, City University of New York and the University of California, Davis. Joint press releases by their press offices on 16 July 2024 elicited considerable media attention, including a front-page New York Times article (nytimes.com/2024/07/25/climate/taxidermy-bats-kerivoula-picta.html).

All these efforts, including those by countless people and organizations who circulated these articles and social media posts, had a major impact. By mid-August 2024, eBay and Etsy had removed all bat listings from their platforms worldwide and in the USA, respectively, with both companies implementing concrete policies prohibiting bat trade. This

remarkably swift success story highlights how conservation researchers and practitioners working with the media to effectively communicate their message can galvanize diverse actors around a mission and achieve the ideals of corporate social responsibility. We gratefully acknowledge everyone involved and encourage other e-tailers to adopt similar policies. This outcome has strengthened our commitment to ending the unsustainable ornamental bat trade. We are now working to address supply chains (e.g. market surveys in Southeast Asia) and preparing to push for *K. picta* to be listed in the CITES appendices at the 2025 Conference of the Parties.

Joanna L. Coleman^{1,2} (joanna.coleman@qc.cuny.edu),
Joe Chun-Chia Huang^{1,3}, Tigga Kingston^{1,4},
Benjamin P.Y.-H. Lee^{1,5}, Joy M. O'Keefe^{1,6},
Nistara Randhawa^{1,7}, Abigail L. Rutrough^{1,4},
Chris R. Shepherd^{1,8}, Vu Dinh Thong^{1,9} and
Susan M. Tsang^{1,10}

¹IUCN Species Survival Commission Bat Specialist Group, Bat Trade Working Group. ²Queens College, City University of New York, Flushing, New York, USA. ³National Taiwan Normal University, Taipei City, Taiwan. ⁴Texas Tech University, Lubbock, Texas, USA. ⁵Royal Commission for AlUla, AlUla, Saudi Arabia. ⁶University of Illinois Urbana-Champaign, Urbana, Illinois, USA. ⁷University of California, Davis, Davis, California, USA. ⁸Monitor Conservation Research Society, Big Lake Ranch, Canada. ⁹Vietnam Academy of Science and Technology, Hanoi, Viet Nam. ¹⁰American Museum of Natural History, New York City, New York, USA

This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence CC BY 4.0.

Marine conservation in Indonesia's Senayang Islands: addressing threats to dugongs and hawksbill turtles within the coral triangle

The Senayang Islands in the Riau Archipelago, Indonesia, with their abundant coral reefs and inclusion in the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security, have become a vital area for marine species. These ecosystems provide safe breeding, feeding and migration grounds for threatened marine fauna (Hadi et al., 2020, *The Status of Indonesian Coral Reefs 2019*). The islands are natural habitats for the dugong *Dugong dugon* and hawksbill turtle *Eretmochelys imbricata*, categorized as Vulnerable and Critically Endangered on the IUCN Red List, respectively. Other migrating marine animals, such as sharks, green turtles, dolphins and whales, are often observed by the local community, passing these islands on their migration routes.

In May 2024, the Serindit Philosophy Centre, a youth-led non-profit organization from Batam Island, conducted fieldwork in the Senayang Islands, supported by Denver Zoo through the Women in Conservation Award. Our activities included research and awareness campaigns about dugongs and hawksbill turtles, as well as mapping seagrass distribution and identifying hawksbill nesting sites. We also engaged an ecologist from the National Research and Innovation Agency of Indonesia to ensure scientific data collection ran alongside community engagement. Our research identified a 185-ha seagrass bed, primarily composed of Enhalus acoroides, a key food source for dugongs (Herandaru et al., 2019, Panduan Survei dan Monitoring Duyung dan Lamun). Through our fieldwork, we estimate that dugongs frequently inhabit c. 4,615 ha of marine area around the islands. We found hawksbill turtle nesting sites on Belading, Kapal Kecil and Kapal Besar Islands, on sandy beaches shaded by mangroves or coconut trees, and surrounded by coral reefs, a primary food source for hawksbill turtles.

Dugongs and hawksbill turtles face severe threats from bycatch, hunting and poaching in the area. Dugong hunting persists, and local fish traps called *Kelong* worsen bycatch in some seasons. In 2002, c. 12 dugongs were captured and exploited without being released. Local communities remain largely unaware of these threats, leading to the depletion of many nesting sites by predators or poachers. Through our environmental education we reached 19 preschool and 78 high school students, using educational books to increase their knowledge of the two species.

We emphasize the need for a robust conservation strategy, including community-based efforts, in situ and pseudo in situ conservation for hawksbill turtles, and further research on dugongs.

Fauzan Alawy¹ (alawy@serindit.org), Chantira Saifimar¹, Alia Firdamayanti¹, Rusmadi², Kesuma Wijaya³ and Henti Hendalastuti Rachmat^{4,5}

¹Serindit Philosophy Centre, Batam, Indonesia. ²Lingga Regency Fishery Service, Lingga, Indonesia. ³Protected Forest Management Unit II, Batam, Indonesia. ⁴Research Centre for Ecology and Ethnobiology, National Research and Innovation Agency of Indonesia. ⁵IUCN Species Survival Commission Indonesian Plant Red List Authority

This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence CC BY 4.0.

Turning the tide for sharks: Important Shark and Ray Areas

Two years after the Important Shark and Ray Areas project was launched, nearly two-thirds (63.8%) of global marine waters have been examined and 4.3% are identified as

critical habitats for the persistence of sharks, rays and chimaeras (hereafter sharks). Although the initiative has been a turning point for the conservation of sharks, bold actions are required to safeguard the future of these species. More than one-third of sharks are categorized as threatened on the IUCN Red List of Threatened Species. Over the last century, fisheries have had a large and cumulative impact on sharks and this threat is being compounded by habitat loss and climate change. Area-based conservation can play a critical role in reversing population declines by reducing mortality, increasing resilience, providing refuge from threats, and supporting population recovery. Important Shark and Ray Areas are now equipping resource managers with the information needed to incorporate sharks into conservation planning.

As of January 2025, Important Shark and Ray Areas have been delineated in six of the 13 regions worldwide: Central and South American Pacific, Mediterranean and Black Seas, Western Indian Ocean, Asia, Polar Waters, and New Zealand and Pacific Islands. So far, 868 scientists, citizen scientists, fishers and resource managers have been engaged in the identification process and contributed to the delineation of 590 Important Shark and Ray Areas incorporating 327 species (one-quarter of all shark species globally). Important Shark and Ray Areas factsheets, spatial layers and regional compendiums are available at sharkrayareas.org/e-atlas. Over 210 spatial data requests have been received from 51 jurisdictions, and Important Shark and Ray Areas are increasingly featured in scientific publications. Important Shark and Ray Areas have been incorporated into other area-based conservation approaches such as the Nosy Be Important Shark and Ray Area being recognized as a Key Biodiversity Area. Parties to the Convention on the Conservation of Migratory Species of Wild Animals adopted a decision to engage with the Important Shark and Ray Areas process and consider identified areas in their spatial planning and conservation action (including when updating National Biodiversity Strategies and Action Plans). In line with their growing use in conservation efforts, grant making initiatives are also now increasingly prioritizing Important Shark and Ray Areas.

The most recent Important Shark and Ray Areas workshop was held in January 2025 to assess critical habitats in the South American Atlantic and South American Inland Waters regions. The assessment of the remaining five regions (European Atlantic, North America and Caribbean Atlantic, African Atlantic, Australia and Southeast Indian Ocean, and North American Pacific) is intended for completion by 2027. This timeline will ensure resource managers and policy makers are provided with the information needed to consider sharks in conservation planning when meeting their political commitments under Target 3 of the Convention on Biological Diversity Global Biodiversity Framework to protect 30% of land and sea by 2030. Through a global, collaborative and open-access process, Important Shark and Ray Areas are bringing attention to the conservation needs of