

SHARK

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NEWS



IUCN SSC
Shark Specialist Group



ReShark: An international, collective effort to recover threatened sharks and rays around the world





ReShark Retreat participants, Seattle August 2023

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Rewilding of threatened (i.e., listed as Critically Endangered, Endangered, or Vulnerable on the IUCN Red List of Threatened Species) sharks and rays using conservation translocation techniques that have been pioneered over the past half-century for terrestrial fauna is a concept whose time has come. In the last issue of Shark News, Dudgeon et al. (2024) provided a comprehensive look at the development and implementation of the StAR (*Stegostoma tigrinum* Augmentation and Recovery) project, an innovative collaboration between large public aquariums, shark conservationists, government agencies, and local communities using a combination of *ex-situ* breeding and in situ translocation to recover the population of Indo-Pacific Leopard Shark (*Stegostoma tigrinum*; also known as Leopard Shark) in Raja Ampat, Indonesia. While that project is showing significant progress and signs of early success, there are numerous related approaches currently being considered, including artificial insemination of *ex-situ* animals, translocating adults from stable, healthy populations to areas where that species has been previously extirpated, and “rescuing” Critically Endangered individuals from populations under severe

threat and transferring them to conservation breeding facilities for future translocation efforts. Indeed, the last issue of Shark News highlighted just such an approach being planned for one of the world’s most threatened rays, the Maugean Skate (*Zearaja maugeana*) in Tasmania (Shiffman, 2024).

In contemplating the significant potential of these various techniques to expand the toolbox of shark and ray conservation efforts, the coalition behind the StAR project enthusiastically agreed in 2023 to launch “ReShark” (www.reshark.org) as an umbrella initiative to focus funding, expertise, and lessons learned for rewilding projects specializing in threatened sharks and rays. A “ReShark Retreat” was held in Seattle in August 2023 to bring together a range of shark and ray conservation experts, including many with experience in the StAR project, to brainstorm on the possibilities and begin fleshing out a framework for the development of the ReShark initiative.

From that retreat, a strong consensus emerged that traditional shark and ray conservation techniques (ranging from fisheries management and bycatch reduction efforts to species-specific protections to the development of Marine Protected Areas and shark sanctuaries) remain the first line of defence in protecting sharks and rays. “Resharking”, combining *ex-situ* and *in-situ* techniques, is a valid approach worthy of significant further practical development. The group spent considerable time discussing the criteria (biological, conservation, and cultural) that might qualify a particular species or geography for a shark or ray rewilding project and then brainstormed an initial list of threatened shark and ray species that might conceivably benefit from various combinations of conservation breeding and translocation efforts.

The group then spent the final days of the retreat discussing the optimal governance structure for ReShark. While there was considerable discussion of the potential merits of launching a new ReShark non-governmental organization (NGO), in the end, it was decided to retain and expand the global collaborative approach of the StAR project to encourage the active participation of a broad range of experts from across the spectrum of *in-situ* and *ex-situ* shark and ray conservation. An initial advisory board (the “ReShark Council”) comprised of the six authors of this article was appointed, with plans to expand in the near future [the chairperson/director of any future rewilding projects coming under the ReShark umbrella will automatically have a seat in the Council]. The ReShark Council plans to recruit an executive director and global program manager to further develop the funding base and framework for inviting new shark and ray rewilding projects beyond the StAR project into the ReShark collective.

While it’s still very much “early days”, the Council believes ReShark already offers a significant value proposition for nascent shark and ray rewilding efforts to join the collective. As described in detail by Dudgeon et al. (2024), the StAR project was deliberately designed to follow the IUCN’s One Plan Approach and the IUCN SSC Guidelines on the use of *ex-situ* management for species conservation and has moreover carefully incorporated recommendations from a number of IUCN SSC specialist groups ranging from the IUCN SSC Shark Specialist Group to the IUCN SSC Conservation Planning Specialist Group and the IUCN SSC Conservation Translocation Specialist Group. The lessons learned from the past five years of careful planning and implementation of the StAR project have informed the ReShark approach, and we believe it will provide important credibility (and an expansive

knowledge base on everything from developing government support for shark rewilding to shark egg import and quarantine procedures) for additional projects within the ReShark collective.

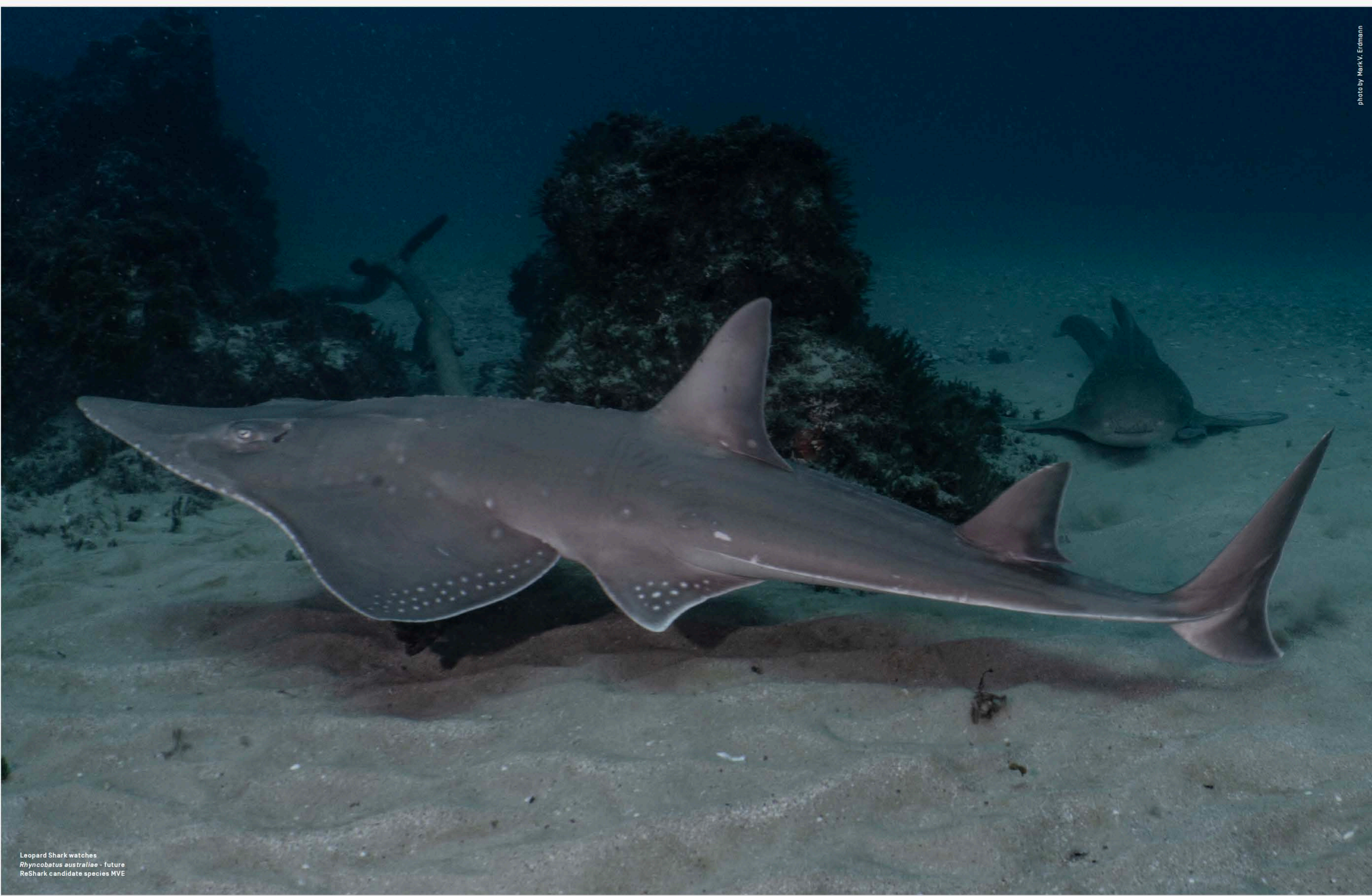
ReShark has invested significantly in developing its social media platforms and producing several short films documenting the steps in implementing a shark rewilding project (www.reshark.org/videos); these platforms will be available for promoting any additional projects joining the collective. Relatedly, the ReShark Council has identified and cultivated a growing number of donors with a strong interest in supporting shark rewilding efforts. Finally, the 90+ partners already involved in the ReShark coalition offer a tremendous breadth of knowledge and expertise to be shared with future projects. In some cases, even the current ReShark infrastructure (e.g., hatcheries, grow-out pens, and acoustic arrays for post-release monitoring) could also be utilized for other species.

In summary, future shark rewilding projects joining the ReShark collective can expect to benefit significantly from the experience (technical, project governance, fundraising, permitting, and government and community relationship-building), brand recognition and infrastructure developed by the ReShark coalition over the past five years. As the ReShark initiative develops and grows, we’ll provide further updates in Shark News. Watch this space!

References

Dudgeon, C.L., Ichida, N., Heatubun, C.D., Hadfield, C.A., Hoopes, L.A., Meyer, E., Neal, L. & Erdmann, M.V. (2024). Resharking leopards in Raja Ampat: A behind-the-scenes look at the StAR (*Stegostoma tigrinum* Augmentation and Recovery) project. Shark News: Newsletter of the IUCN SSC Shark Specialist Group. #9/January 2024. Pp. 46-67.

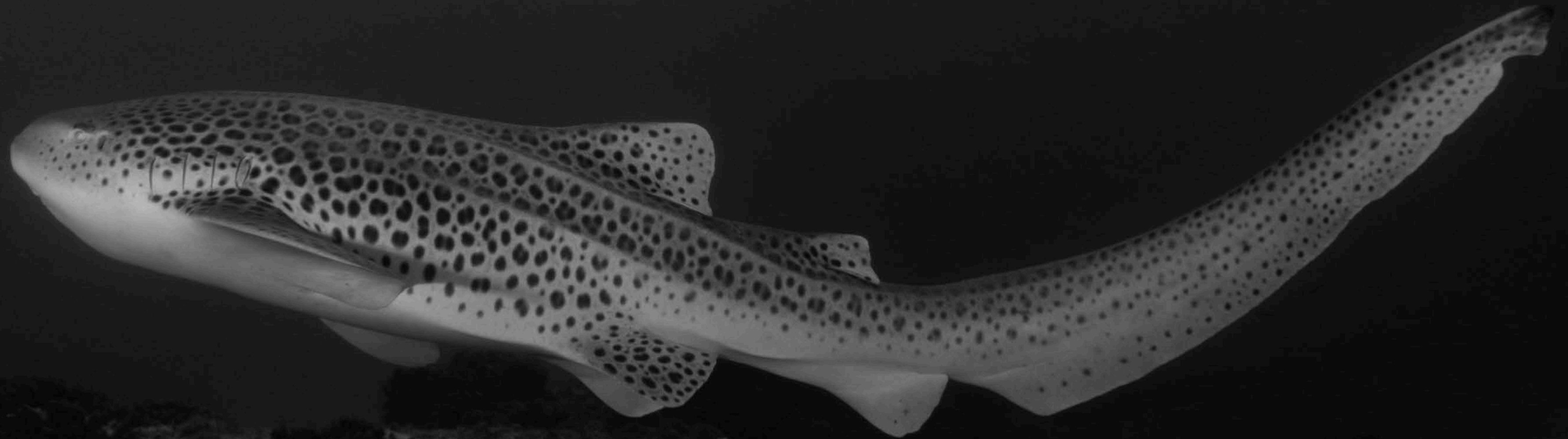
Shiffman, D. (2024). New plan to save one of the world’s most threatened rays from extinction: the Maugean Skate will be extinct in a decade unless we act now. Shark News: Newsletter of the IUCN SSC Shark Specialist Group. #9/January 2024. Pp. 116-123.



Leopard Shark watches
Rhincobatus australiae - future
ReShark candidate species MVE



Pastinachus ater -
future ReShark candidate species







Hemiscyllium michaeli - future ReShark candidate species