# Logging the diversity and importance of sharks and rays across the Indo-Pacific



Our mission: To document, promote, and enhance the social, cultural, economic, ecological and conservation values of sharks and rays for Indo-Pacific communities, both now and for future generations.

Sharks and rays are vital to the Indo-Pacific. They have unique social, cultural, and economic values, and they help to maintain health and balance in our marine ecosystems. Unfortunately, many sharks and rays are threatened and some populations have seriously declined. Furthermore, the lack of scientific understanding about the Indo-Pacific's sharks and rays hinders efforts to manage and conserve these species, especially in coastal fisheries which are generally undervalued and poorly understood.

### Shark Search gathers crucial knowledge

There is much more to learn about the Indo-Pacific's sharks and rays. Recent discoveries of new species, or even rediscoveries of species thought to be lost, highlight how little scientists know. Shark Search Indo-Pacific (SSIP) is collecting the basic data needed to understand which shark and ray species occur where, and how they are faring. This information is needed to properly manage fisheries and habitats. SSIP is addressing this information gap by building checklists and syntheses for each country and territory throughout the region, helping to ensure these species are maintained for future generations.

SSIP AIMS TO BUILD ACCURATE AND RELIABLE CHECKLISTS AND STATUS OVERVIEWS OF SHARKS AND RAYS FOR EVERY COUNTRY AND TERRITORY IN THE INDO-PACIFIC BY 2030.



## **Shark Search is working with people**

Shark Search Indo-Pacific is working with divers, dive centres, fishers, yachties, scientists, conservation workers and managers across the Indo-Pacific to build scientifically robust, and locally verified checklists of sharks and rays for every country and territory in the region. Each checklist is accompanied by a desktop Status Overview of the health and status of sharks and rays in each country, and the key threats affecting their future.

#### **How Shark Search works**

Each checklist project begins with a conversation. SSIP establishes a group of incountry partners – dive centres, divers, scientists, and staff from NGOs, fisheries and environmental agencies – who provide local knowledge and check the accuracy of SSIP data. SSIP researchers\* then build a draft checklist using available data and photos sent in from divers across the region.

The records are verified with taxonomists and museums, and then the draft *checklist* and *Status Overview* are sent to the incountry experts for review. Once the review is complete, the checklist and status overview are sent to a scientific journal for further independent review. All scientific articles will be published as open access, ensuring the data are freely available for all.

#### What SSIP is doing right now

In 2017, the Solomon Islands checklist and overview were published. SSIP is now looking for photographs of sharks and rays from Fiji, French Polynesia, Niue, Tuvalu, Tonga, Kiribati, and the Federated States of Micronesia. SSIP also need photographs of blue-spotted lagoon rays, and the ornate, banded, and purple eagle rays.

If you have these photographs, you can help!

# FIND OUT MORE, GET INVOLVED

Email andrew.chin@jcu.edu.au with local docitizen scien

Web www.sharksearch-indopacific.org volunteers.

#### The long term vision

SSIP's checklist and status overview projects are the first stages of a long term vision. They provide a reference point about shark and ray resources in each location, data that in-country partners can use to plan, develop and implement shark and ray projects in each country. These projects would also be designed to align with key regional strategy documents such as the *Noumea Strategy*, the *Global Shark & Ray Initiative* and *Sustainable Development Goal 14*.

SSIP is developing a 'project portfolio' of potential projects that local communities of practice can modify to suit local contexts, and help them work towards meeting their aspirations and needs for sharks and rays.

## A different approach

Complex challenges need innovative solutions. The SSIP approach uses multidisciplinary teams\* and mixed methods to build checklists and overviews. This includes involving social scientists and citizen scientists to help find species records, engage communities, and to ensure that full consideration is given to the human dimensions of shark and ray management, conservation and sustainability. This approach provides a more realistic account of the situation in each country, and a more grounded and holistic approach to project planning and development.

The \*SSIP team includes Dr Andrew Chin and Dr Michael Grant (Fisheries -James Cook University), in partnership with local dive shops, fisheries officers, citizen scientists, students and volunteers.