

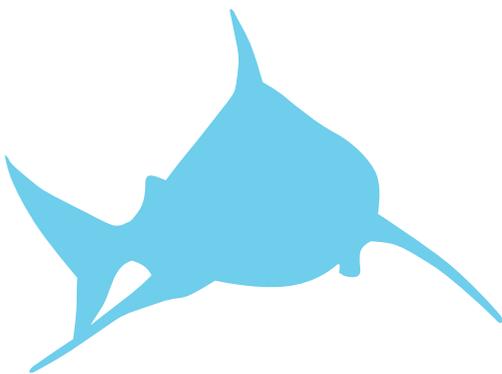
FACTSHEET



Photo: Andy Cornish

Monad Shoal, Philippines Dive operators form a fund to protect a thresher shark site

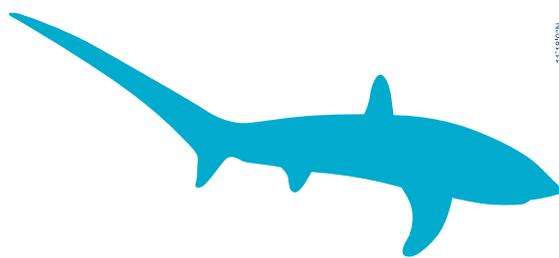
All fishing is prohibited within the Monad Shoal MPA



History

Monad Shoal is currently the only known location where pelagic thresher sharks (*Alopias pelagicus*) can be predictably found at recreational diving depths. In the early hours of morning, these sharks rise from their normal depths of up to 150 m to be cleaned by reef fishes at several cleaning stations at depths around 30 m. It is believed that the site was found after learning from fishers that thresher sharks regularly breached at Monad Shoal, and the first diving operation to offer the thresher shark dive started in the late 1990s. The Monad Shoal MPA was established in 2002, and in mid-2015 Monad Shoal and Gato Island were designated at a provincial level as the Philippines' first shark and ray sanctuary. The Executive Order establishes a participatory Management Board, provision for additional regulations, and increased funding from local government. Furthermore in 2014 the Provincial Fisheries & Aquatic Resources Ordinance of Cebu was amended to penalize the catching, possession, and trading of all shark and ray species in Cebu.

Monad Shoal is a standard municipality MPA, and 150 Pesos (US\$ 3) per visitor to the island per day is collected by the municipality as a marine park fee. While some of the fees collected have been used to install mooring buoys, how the majority of the funds are used is unclear, and enforcement of the ban on all fishing within the MPA was weak. The MPA covers an area of 184 hectares, and includes a buffer zone of 500m at its outermost region around the shoal.



The thresher shark experience

Thresher sharks
rise from the depths
at dawn to be cleaned
by reef fishes

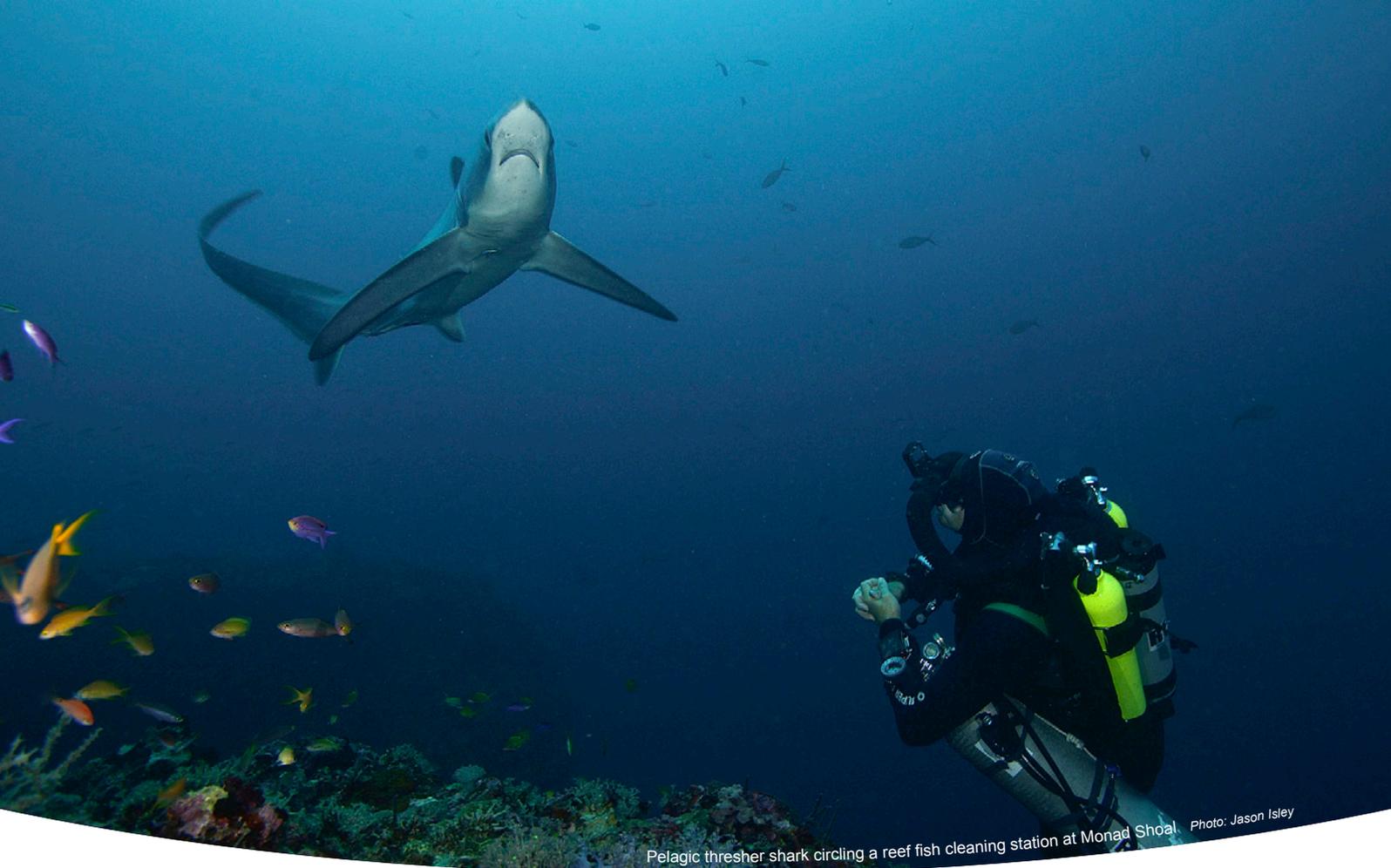
As of late 2015, more than ten diving centres on Malapascua were offering the thresher shark dive and the number continues to grow unchecked. The occasional liveaboard also visits. Most of the centres take divers to the same wall at Monad Shoal where fish cleaning stations regularly used by the thresher sharks can be found at around 30 – 35 m depth, and within 100 m of each other. Several species of reef fish have been observed cleaning the sharks (of parasites, loose skin etc.). Diving mostly occurs between dawn and 9 am, as this is the time when sightings of the thresher sharks occur most regularly. As the number of divers at this site at any one time has grown, operators have placed concrete blocks with ropes between them on the reef behind the cleaning stations to prevent the divers from approaching the threshers too closely – a system that on the whole works well. While it is not uncommon to have more than 50 divers in the water and moving between the cleaning stations at any one time, the thresher sharks may have become habituated to the sight as they still use the cleaning stations and may pass within metres of the divers.



Marine protected area related financing

Fees collected by
participating
dive centres fund
enforcement of
the MPA

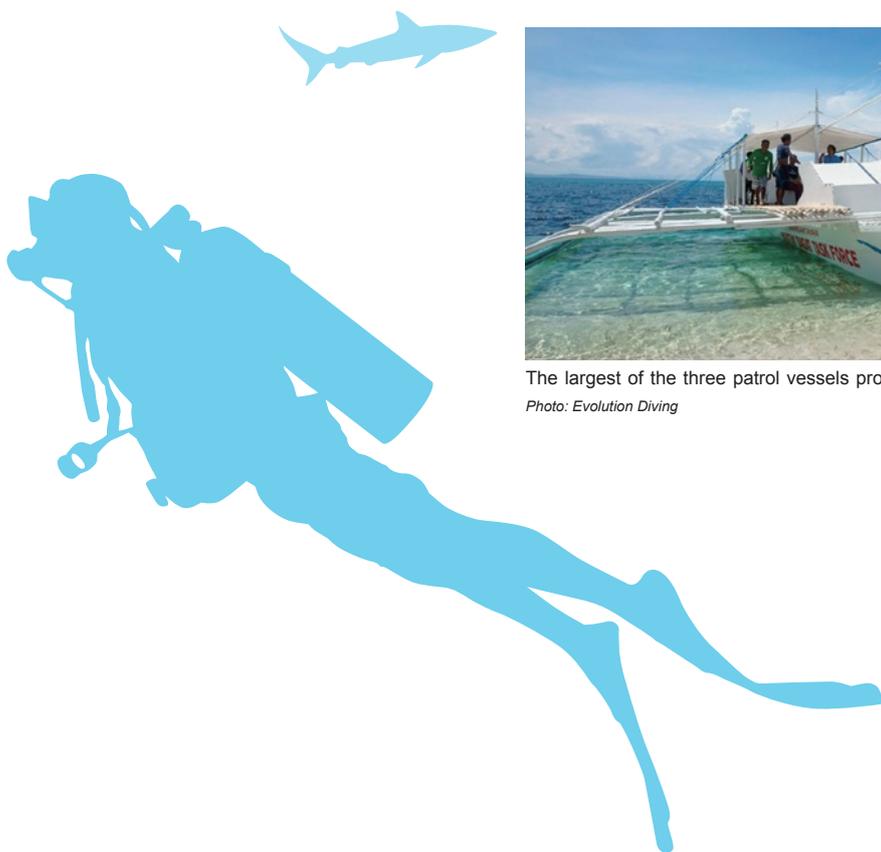
In 2010, several of the dive centres joined forces to establish the Malapascua Marine Protection Fund (MMPF), which is financed primarily by charging divers to Monad Shoal an additional 50 pesos (US\$ 1). Some other dive centres and businesses on Malapascua such as restaurants also make fixed or occasional donations. In 2015, around 1 million pesos (US\$ 21,000) was collected. With the assistance of the Save Philippines Seas, 28 ex-fisherman have been trained as Bantay Dagat (or Sea Patrol), who enforce fishing regulations at Monad Shoal using three small patrol vessels also provided by the MMPF. The Bantay Dagat is a system of community-based, volunteer organizations that has provided a participatory approach to coastal law enforcement under the Bureau of Fisheries and Aquatic Resources since the 1970s.



Pelagic thresher shark circling a reef fish cleaning station at Monad Shoal. Photo: Jason Isley

Illegal fishing has declined since the Bantay Dagat patrols started

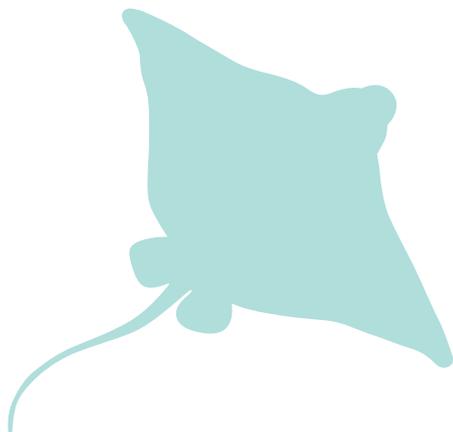
The Bantay Dagat activities are conducted with the approval of local authorities, and in November 2015 Cebu Province provided an additional large vessel to assist with patrols. The Bantay Dagat try to maintain a constant presence at Monad Shoal, and it appears that incidents of illegal fishing have greatly decreased as a result, while sightings of thresher sharks have improved. The MMPF is currently jointly administered by representatives from the five largest diving centres, one of whom acts as a treasurer to collect and distribute the funds. Unfortunately, buy-in to the MMPF is mixed, even amongst the dive centres taking divers to see the thresher sharks, some of whom do not contribute at all, and others sporadically.



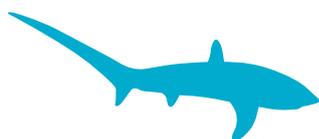
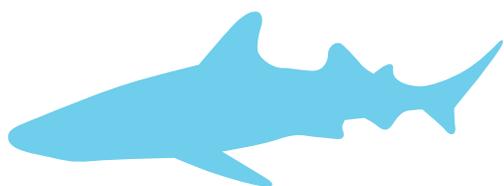
The largest of the three patrol vessels provided by the MMPF
Photo: Evolution Diving



Members of the Bantay Dagat
Photo: Andy Cornish



Less than half of the dive operators routinely contribute to the Malapascua Marine Protection Fund



Challenges and solutions

- i) In the past, Monad Shoal was a good site for fishing large reef and pelagic fishes. The introduction of enforcement of the MPA, while legal, was done without much consultation with the fishing community, and caused some resentment of the tourism operators, who were perceived to be rich. While the high level of direct and indirect economic benefits from the shark tourism enjoyed by the residents of Malapascua is increasingly recognized, and dialogue between the diving centers and the fishing community has increased, some tensions remain.
- ii) Only around half of the diving operators based on Malapascua routinely collect fees from all divers, and contribute them to the MMPF, while all are benefitting from the increased level of protection. The ongoing establishment of new diving operators is exacerbating such disparity, while the level of participation by liveboards is even more unclear. In 2009 there were nine operators, by early 2016 that had risen to 20. Gaining consensus and support for the MMPF as a key platform for conserving the thresher sharks (and other sharks and rays) at Monad Shoal and other nearby sites long-term will require increased dialogue - possibly facilitated by a neutral respected party.
- iii) While sightings of threshers sharks at Monad Shoal seem to be increasing, the degree to which this no-take MPA is acting to conserve the population long-term is unclear. More research is needed at Malapascua and similar sites for other large mobile sharks and rays, to guide the science of designating MPAs as effective conservation measures.
- iv) Greater transparency over the use of marine park fees collected by the municipality, and agreement on investment priorities to support the development of sustainable tourism at Malapascua would be beneficial to all.

Replicability of the model

The collection of visitor fees to fund the management of terrestrial and marine protected areas is a “tried and tested” model, but is usually carried out by government as the MPA managers. In this instance, levels of enforcement by government were perceived as inadequate, leading to the more proactive diving operators introducing an essential voluntary fee in addition to an existing government one, in order to fund a community enforcement scheme which was already in existence nationally.

While the private protection fund concept is undoubtedly replicable, the ideal solution would be that government collected visitor fees would be used to fund management of the MPA, under the advice of a committee including diving operators, fishers and other key stakeholders.



This factsheet was produced as part of a collaboration between Manta Trust, Project AWARE and WWF to produce a guide to best-practise shark and ray tourism.

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