Hawksbills on the edge

Sea turtles have survived and thrived in the Earth’s oceans for more than 200 million years, but over the last 200 years populations have declined globally to dangerously low levels. Six of the world’s seven species of marine turtle are still found in Australia and the Asia-Pacific region but all face serious threats to their survival.

The hawksbill turtle (Eretmochelys imbricata), so named for their hawk-like bill, are famous for the colour and quality of their speckled shell, which has been used for centuries for ornamental purposes. Despite being listed internationally on the International Union for the Conservation of Nature (IUCN) Red List (2008) as critically endangered, hawksbill turtles are the most poorly studied species of marine turtle.

In the Pacific Ocean, nesting female hawksbill turtles have declined by more than 75% in the past century (IUCN Red List, 2008), with numbers still falling. Australia’s best-studied hawksbill turtle population is in the Great Barrier Reef and is regarded as one of the largest and most important populations globally but this population also continues to decline (Limpus & Miller 2008; Dobbs et al., 1999; Limpus 2009). While more science is required, some researchers fear our regional hawksbill turtle populations may be on the verge of collapse and that maintaining the status quo is no longer an option.

Like rhinos and sharks, and other species that are traded extensively across global markets, hawksbill turtles are intrinsically valuable. No one community, island, state or nation owns them – we all share responsibility for their survival. They are an icon for marine conservation and a flagship for conserving habitats such as coral and rocky reefs which benefit thousands of species.

Four steps to recover hawksbill turtle populations

The problems

The decline in hawksbill turtle populations is primarily caused by:

1. Loss or impact to critical nesting and foraging habitats (e.g. from climate change, marine debris, coastal development, predators).
2. Illegal & unsustainable take (e.g. market and trade of shell, fishing bycatch, egg and meat harvest).
3. Insufficient community awareness & support at all levels (e.g. lack of involvement, ongoing consumer demand for banned turtle shell ornaments).
4. Inadequate national & international conservation management (including scientific knowledge, compliance with international agreements, national laws and implementation of conservation programs).

The solutions

To help stop the decline, turn this crisis around and recover hawksbill populations, urgent action across four overlapping steps:

1. Strengthening national & international conservation management.
2. Building community awareness, involvement and support.
3. Reducing demand & supply so all take is legal and sustainable.
4. Restoring the resilience of critical habitats.
Life cycle threats

Some hawksbill turtles migrate long distances between feeding grounds and nesting sites and often cross international borders. They face different threats at each life phase (Figure 3) and in each region, with only about 1 in 1,000 hawksbill turtle hatchlings surviving to maturity.

So, every hawksbill turtle death is significant. Population recovery actions are best focussed on critical nesting beaches and foraging grounds and are most effective when coordinated with all partners across the region over the long term.

Partnership and recovery opportunities

Working with international research and management experts, a range of projects (or actions) to address these life cycle threats, clustered around the four themes, have been identified to bring back the hawksbills in the Asia-Pacific region (Figure 4). The region includes Australia, Papua New Guinea, Solomon Islands, New Caledonia and Vanuatu, Timor-Leste, Indonesia and Malaysia, Fiji, Philippines, Vietnam, Thailand, Cambodia, China, Japan, and Hong Kong. Investment in the Asia-Pacific region can deliver global benefits, as the region contains many internationally significant hawksbill turtle populations.

While focussed on hawksbill turtles, the suggested projects will benefit many other marine species and habitats. The four high-level themes are mutually supportive and all partnership opportunities can contribute to these outcomes. Because all projects can be delivered at one or many locations, they can be tailored to include elements of several suggested projects to match partner interests and resources. Detailed project plans will be developed with interested partners and additional projects will be identified over time.

The level of financial investment and in-kind support to recover hawksbill populations is multiple millions of dollars. To reach this ambitious goal, the funding required for each project will vary depending on the nature, scope and time frames. The number of turtle symbols indicates the estimated level of investment required to commence each project (each turtle represents approximately US$100k). Ongoing funding requirements will be determined in individual project plans. The four themes and 16 potential projects are not in priority order.
Partnership benefits

*Bring Back the Hawksbills* has been initiated by WWF-Australia in collaboration with supporting organisations following the 2016 Regional Hawksbill Crisis Workshop held in Darwin (see supporting organisations in footnote). This prospectus provides a blueprint to broker partnerships and drive national and regional hawksbill recovery through direct action and investment. It builds on a range of projects and plans operating across the region (see supporting information section for details) and provides an open invitation for potential partners to identify their best possible contribution. While current recovery efforts are important they need to be significantly strengthened and integrated to reduce threats, restore resilience and *Bring Back the Hawksbills*.

Apart from the obvious conservation benefits for hawksbill turtles, with your support the partnership opportunities in this prospectus can:

- Leverage new and emerging technology to resolve hawksbill turtle knowledge gaps.
- Empower local communities, support economic prosperity and strengthen relationships across the region.
- Improve governance, international trade, customs and biosecurity arrangements.
- Enhance ecosystem resilience for the benefit of other marine species and dependent human and ecological communities.

The initiative will attract growing global media interest as the significance of hawksbill turtle recovery is increasingly recognised.

Contact details

To find out how you can help *Bring Back the Hawksbills* contact:

Christine Hof  
Marine Species Project Manager  
WWF-Australia  
Level 1, 17 Burnett Lane, BRISBANE QLD 4000  
t: 1800 032 551  m: 0404 421 172  
e: chof@wwf.org.au  w: wwf.org.au

The development of this prospectus was financially supported by WWF-Australia and The Nature Conservancy with contributions provided by the Queensland, Western Australia, and Northern Territory governments, Secretariat of the Pacific Regional Environment Programme, Great Barrier Reef Foundation, National Fisheries (Papua New Guinea), Sea Turtle Foundation, Ghost Nets Australia, and TerraFormDesign.

Supporting information

1. CITES (2016). Adopted decisions on the Hawksbill Turtle (*Eretmochelys imbricata*). 17(222 and 7.223)