

Oryx

Using expert knowledge to refine marine turtle conservation interventions

By Lauren Lopes, 14th April 2022

People have long harvested marine turtles and benefitted from using their body parts, and this continues to threaten these species. Noticing declines in marine turtle populations in some parts of the world and their collapse in others, NGOs began conservation efforts as early as the 1950s. As of 1986, most marine turtle species also became protected at a higher level under both CITES and the Convention on the Conservation of Migratory Species of Wild Animals, which generally prohibit international commercial trade in marine turtles and their take, respectively. We wondered why, despite these extensive efforts, illegal activities continued to occur and we wanted to contribute to the planning of successful conservation interventions to tackle these illegal activities.



Caretta caretta entering the ocean.

Detailed information on sensitive topics such as illegal take, use and trade is of great value for informing conservation decision-making. However, such information is scarce and difficult to

obtain. To gather such information in an expedient and cost-effective way that could support decision-making, we surveyed over 100 researchers, programme coordinators and other professionals with expertise on marine turtle conservation and/or trade.

We found that current challenges to addressing illegal activities involving marine turtles fit into one of three main overarching categories: fisheries management, enforcement, and legislation. Challenges for fisheries management include bycatch, the incursion of foreign nationals, and illegal, unreported and unregulated fishing by foreign vessels. Other challenges include unclear legal frameworks, poor understanding of legal harvest quotas, outdated fishing gear and techniques in small-scale fisheries, poorly managed hatchery programmes, weak penalizing systems that fail to discourage unlawful practices, lack of political interest or involvement by authorities, and limited local capacity, both human and financial.



Release of rehabilitated marine turtle organised by a Greek NGO dedicated to the protection of marine turtles. NGOs work season after season to protect, rehabilitate, and raise awareness on marine turtles and their conservation.

Pointing out challenges whilst neglecting the need to offer solutions is only a job half done. Thus, we also asked the marine turtle experts how current conservation interventions should, in their view, be refined to maximize chances of success. We asked experts who had been involved in marine turtle conservation projects addressing illegal activities within the previous 10 years to share the strategic management options they considered crucial for the success of such projects. The experts stressed the importance of ensuring projects undertake collaborative management and planning with locally affected stakeholders; ensure continuous monitoring at key sites; and conduct adequate preliminary research on the local socio-economic, cultural and ecological contexts to inform project design.



Loggerhead sea turtle hatchling heading to the sea.

These findings and others detailed in our [article](#) enabled us to compile a list of eight priority elements that we recommend future marine turtle conservation interventions address if they are to be successful in curbing illegal harvest, use and trade, both locally and globally. Among those elements are ensuring that project leaders thoroughly understand local socio-economic and ecological contexts, that coordinated mechanisms to prevent wildlife cybercrime are implemented, that scientific knowledge on marine turtles is furthered, and that multidimensional project approaches are adopted.

We would like to thank all those that contributed to the study by sharing their knowledge, survey pre-testers and colleagues for their advice, and the University of Bayreuth and the Elite Network of Bavaria for covering software costs.



Hatchling touches the sea for the first time.

Title cover photo: Sun sets over beach replete with marine turtle nests on the island of Crete, Greece

All photos: Lauren Lopes

The article [Global challenges and priorities for interventions addressing illegal harvest, use and trade of marine turtles](#) is available in *Oryx—The International Journal of Conservation*.



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