

*Mako shark angler behaviour is different by region in Australia*

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Humans have sordid relationships with predators, especially sharks. Many sharks are top predators and perform essential ecosystem services. Vulnerable to disturbance and exploitation, shortfin mako sharks are a species at risk. Recreational fishers represent an important user group that targets mako sharks, yielding a rare opportunity to study the human perceptions of a top predator that is highly valued by stakeholders. We sent a survey to recreational mako shark fishers in Australia to understand their attitudes and ideas about mako shark fishing.

We found that fishers who caught mako sharks specialized in mako fishing, meaning that they mostly target only mako sharks. Some fishers joined organized fishing clubs and tended to be more specialized than anglers that fished more independently. Australian anglers who caught mako sharks reported that they released many sharks, and the extent of release reported was higher than previous surveys reported. Anglers were predominantly motivated by the thrill of seeing makos jump, the fighting quality compared to other species, interaction with the amazing animals, and the challenge. Harvesting was generally less important. However, there were significant differences in attitudes towards harvest among three Australian states. Anglers from New South Wales released mako sharks more frequently than anglers in Tasmania or Victoria. These regional differences are meaningful for managers aiming to conserve makos because the findings show that different strategies may be needed in different regions.

Our study shows that mako shark fishing is a popular activity and that although they are a well-liked food fish, anglers are motivated by the thrills and challenges of catching makos. Other research confirms that mako sharks survive capture; understanding that anglers are motivated by catch-based and not necessarily harvest-based objectives yields important data for catalyzing a shift towards catch-and-release

angling. If conservation is a management objective, and it should be, then regionally-targeted actions will assist in achieving this goal. These studies are needed to investigate opinions and attitudes of sharks and other predators to identify ways in which attitudes and behaviour can be changed for the achievement of conservation objectives.

Plain language summary from the article: French, RP, Lyle, JM, Lennox, RJ, Cooke, SJ, Semmens, JM. Motivation and harvesting behaviour of fishers in a specialized fishery targeting a top predator species at risk. *People Nat.* 2019; 1: 44– 58. <https://doi.org/10.1111/pan3.9>