

*How can conversations with fishers improve understanding of where they fish and whether they comply with marine management policies?*

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Our ocean is increasingly under pressure from fishing fleets globally. Understanding where fishing fleets fish and how fishers make decisions on where to fish is key to managing this pressure. Often, specific drivers for fishers' decisions are not identified at the fleet level. This may lead to management that has negative outcomes for both fishers and protection of the ocean.

Our research mapped fishing of Sri Lanka's offshore fishing fleet, which operate medium-sized vessels (9 to 17 metres) and fish both within national waters and high seas areas. We show their broad geographic range and occasional illegal incursions into other countries waters. We conducted interviews and a mapping activity with fishers landing to two sites on the south west coasts of Sri Lanka.



*Study authors (who gave permission for their images to be used) speaking to fishers at landing sites. Image courtesy of Claire Collins.*

We used a paper map to ask fishers where they had fished over the last five years and how important each fishing area was in terms of overall catch volume and annual earnings. We also asked questions about how they decided where to fish and how this has changed in recent times.

We identified that distance from landing site and environmental factors such as sea surface temperature may be important in guiding fishing decisions. During conversations, fishers also reported that

some will fish illegally in other countries waters, especially if they are targeting sharks and want to earn a higher income.



*Shark catch. Image courtesy of Claire Collins.*

Our study highlights that collecting data directly from fishers can increase our understanding of where fishing effort is distributed. Furthermore, it can identify important social drivers for behaviors that, when combined with data about the environment, could help us to better manage fishing fleet movements. We suggest that using informal approaches to discuss sensitive issues can help identify illegal fishing activity, which may endanger the ability of protected areas to conserve vulnerable marine species or habitats. Our recommendations are that advanced technologies to track fishers, including satellites, are combined with understanding gained from speaking with fishers directly to manage fisheries.