





BAITED REMOTE UNDERWATER VIDEO SYSTEMS (BRUVS)

BRUVs (Baited Remote Underwater Video Systems) are a globally standardized, non-invasive method to study predator fish species and reef health in the Andaman & Nicobar Islands. Each BRUV unit consists of an underwater camera mounted on a frame with a bait bag (~500 g of oily fish) to attract predators, recording 60-minute videos at depths of 10-20 m. Individual fish sizes are estimated using a 5 cm PVC pipe attached to the bait arm as a size reference. This method provides essential data on species presence, relative abundance, and habitat use patterns.

Broadly, BRUVS can be used to the diversity and species composition of communities, trophic networks and, more specifically, questions relating to the top-down ecological effects of apex predator removal.

PROGRESS

Since 2021, we have conducted surveys around Wandoor and Swaraj Dweep, accumulating approximately 40 hours of footage for predator presence analysis. In the 2021-2022 surveys, checkered snapper (Lutjanus decussatus) was the most common species, followed by bluefin trevally (Caranx melampygus). In 2022-2023, peacock grouper (Cephalopholus argus) became the most frequently observed species, followed by checkered snapper.

This long-term dataset is crucial for understanding the ecological consequences of apex predator declines and provides valuable insights to inform spatial conservation,

THE ANDAMANS PROJECT

BRUVs were deployed across sites with varying ecological and fishery conditions to assess predator presence and their role in trophic dynamics. The project focuses on key predator species (e.g., sharks and groupers) that are particularly vulnerable to overfishing and climate change.

