



REMOTELY OPERATED VEHICLE SURVEYS

The remotely operated vehicle (ROV) is our most complex video tool. It is driven by an operator from a boat, controlled via an umbilical cable. The ROV can swim up, down, and around obstacles and follow along a transect line, like a SCUBA diver. The high-definition video is later analyzed for fish, invertebrates, and habitat type. We measure the abundance of select invertebrates and each species of fish observed. We also estimate the size of fish when possible using paired lasers spaced 10cm apart as a size reference. Biogenic habitat such as macroalgae, sponges, deep water corals, and gorgonians are quantified as living habitat that may play a role in structuring the observed fish community. The ROV is perfect for surveying rocky habitats all the way out to the deepest parts of the reserves.

Data collected:



Invertebrates



Habitat



Macroalgae



Fish



| Tool Usage | |
|----------------------|--|
| Depth Range | 20-50m |
| Habitats | All habitat types |
| Sampling Limitations | Calm sea states and a minimum of 3m visibility |

