## HOOKANDIINE SUPVEYS

We collect fish data through the help of volunteer anglers aboard chartered fishing boats to catch and release fish. We divide the study area into $500 \mathrm{~m} \times 500 \mathrm{~m}$ grid cells. Local fishing knowledge helps ensure grid cells are placed in locations where fish are commonly caught in rocky habitats. On a survey day, five cells are randomly selected and anglers fish using standardized gear for a fixed amount of time. All fish caught by the volunteers are measured and released. Hook-and-line surveys enable us to have fish in hand to take accurate length measurements. We will look at differences in average fish length before and after the reserve is closed to fishing, both inside the reserve and outside in the comparison areas (monitoring sites open to fishing). By sampling over time, we can determine whether fish sizes as well as catch rates (catch per unit effort) are changing due to cessation of fishing.


| Tool Usage |  |
| :---: | :---: |
| Depth Range | $10-40 \mathrm{~m}$ |
| Habitats | Rocky reefs |
| Sampling <br> Limitations | Calm sea states, availability <br> availability of volunteer <br> anglers |



