MAR 21, 2023

Protocol status: Working
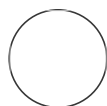We use this protocol and it's working

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🌐 Mo'orea Coastal Use Monitoring Protocol

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ABSTRACT

This procedure is used for costal monitoring and has been tested along the majority of the coast of Mo'orea, French Polynesia; completed by UC Berkeley's Island Sustainability classes. This protocol includes steps to collect observation data regarding birds, costal armoring, and boats, along shoreline transects.

GUIDELINES

- Do not trample coral.
- Do not walk through private property, unless you have explicit authorization.
- Write observations in a field notebook.
- Take pictures to document your transect.
- Try interacting with people as soon as possible and explaining what you are doing/getting feedback.

MATERIALS

- Gaia GPS mobile app
- Field notebooks
- Stopwatch (with seconds)
- Water-appropriate shoes
- Tape-measurer
- Pencil

SAFETY WARNINGS

> ⚠️ - Eels and stone fish may be present
> - Remain wary of stray dogs (staying grouped and pretending to pick up a stone or stick to throw at them is a sufficient deterrent)
> - Entering private property often happens by accident, be prepared with phrases in the local language to explain who you are

- Wear attire appropriate for constant re-entry into the water.
- Check that a working seconds stopwatch is present..

GAIA GPS Tracking

1 Have two team-members start a track on GAIA GPS. Make sure both members have full battery.

2 After starting track recording, with the GAIA-App take a picture of the group's hand-watch with seconds showing on the hand-watch (will help make sure time on watch and GPS time are synced).

3 When done tracking, save and export the track as a .gpx file.

Birds

4 When you see a bird, record the number and identify whether the bird(s) is an egret or heron. Refer to the bird ID sheet, linked here.

5 Record the timestamp at the time you spotted the bird.

Coastal Monitoring

6 Start time-stamp as soon as the coastal profile changes or as soon as you are no longer able to monitor.

7   Record the coast types on the data sheet using the following categories: unArmored (no apparent human-made alteration), armRocks (armored coast w/ piles of rocks/stones), armSeaWall (armored coast cement/concrete wall), and armOther (other category of armored coast). When you encounter a perpendicular structure (dock/over-water bungalow/stone alignment), record a time-stamp and the type of perpendicular structure on the data sheet.

8   Estimate the distance in meters from the coastal armoring to the shoreline and record on the data sheet.

9   Start a time-stamp if backtracking or if you left the coast and make note.

Boats

10 Walking along the shore, take a timestamp of any boats, canoes, jet skis, or other vessels on the water that are visible to you. Record under Time-Stamp using military time up to the millisecond.

11 If a fishing vessel, ID each vessel as one of the following under fisherBoat: outrigger, motorboat, swim on-foot. Leave this section blank if not a fishing vessel.

12 If applicable, note the type of fishing gear under fisherGear: spear, line, or net.

13 Under fisherN, record the number of fishermen in the crew if applicable.

14 Under vesselType, regardless of if the vessel is for fishing, ID the vessel from the following categories: closed-cabin motorboat, opened-cabin motorboat, tourist-operator motorboat,

sailboat, jet-ski [indicate number of jet skis in ()].

15 Under anch-navigating, indicate whether the vessel (regardless of if it is fishing), is anchoring or navigating.

16 Repeat for each new vessel spotted. Use a single entry for each vessel unless it is a group of jet skis which pass at the same timestamp. Indicate if you cannot see the gear in the fishing boat.

Water Outlets

17 Walking along the shore or as close to the shore as possible, write down the timestamp of every water outlet walked by.

18 Try estimating the width of the outlet (in feet or meters. Write down the estimate.

19 Mark if the water outlet is flowing and any other relevant observations about it.

Final Steps

20 At the end of the day, take a picture of your notebooks before data entry.