

Verifying seabird-safe practices WITH ELECTRONIC MONITORING

What electronic monitoring (EM) can and cannot do:

- Check if night setting protocols are followed.
- Check if a bird scaring line is used. EM cannot always confirm that the bird scaring line meets all design specifications. However, when EM is combined with dockside inspections, the verifier can be more confident these specifications are being met.
- Check if hook-shielding devices are used. EM cannot confirm the hook-shielding device meets specifications. However, when EM is combined with dockside inspections, the verifier can be more confident that these specifications are being met.
- Check if an underwater bait setter is used. EM cannot confirm the depth that hooks are released from the bait setter.
- Check if line weights are present on branchlines. EM cannot confirm the mass of weights or their distance from the hook. However, when EM is combined with dockside inspections, the verifier can be more confident these specifications are met. Note: the position of sliding weights in relation to the hook is easily changed during fishing (and after the dockside inspection).

Electronic monitoring specifications to detect:

BIRD SCARING LINES

Camera position

Cameras should be placed so that the bird scaring line attachment point and bird scaring line streamers are in the camera frame. Visibility will be diminished at night, but it should still be possible to detect the presence of the bird scaring line and see the streamers.



Minimum footage review

Footage at the start and end of the set.

What to record in the review of each set

- The presence of an adjustable tori pole that allows the streamers of the bird scaring line to hang above where baited hooks land in the water. Hooks usually land to the side of the vessel outboard of the stern quarter.
- Whether a bird scaring line is deployed prior to start of the setting process and is present until after the last baited hook is set.
- Whether the bird scaring line streamers hang above the baited hooks when they land in the water.
- The presence of coloured streamers.

BRANCHLINE WEIGHTING

Camera position

Cameras should be placed so the weights on branchlines can be seen when the branchlines are stored. A camera should also be placed so the hook end of the branchline is in frame during:

- setting (camera at the stern), and
- hauling (camera at the hauling station).

Minimum footage review

Branchlines when they are stored, and throughout the set, to see if weights on branchlines were always used.

What to record in footage review per set:

- Instances where weights are missing from branchlines.

NIGHT SETTING

Camera position and footage review

- The EM system needs to be configured to record the start and end of line setting.

What to record in the review of each set

- Time of the start and end of the set.
- Latitude and longitude.
- Length of time (minutes) any setting occurs prior to before nautical dusk.
- Length of time (minutes) setting continues after nautical dawn.

USE OF HOOK-SHIELDING DEVICES

Camera position

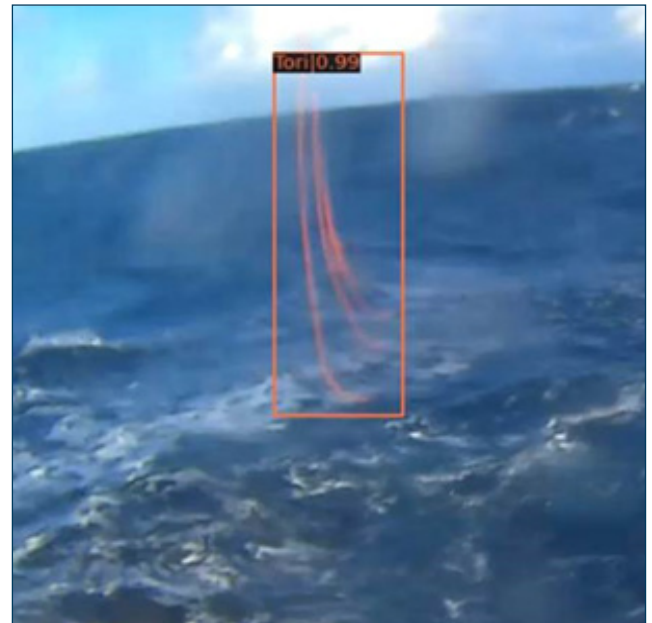
At the stern, so the baiting process and use of hook-shielding devices can be seen.

Minimum footage review

Samples throughout the set to see if hook-shielding devices were used on all hooks.

What to record in the review of each set

- Instances when hook-shielding devices are missing from branchlines.
- Instances where hook-shielding devices are not used properly.



AI detecting bird scaring lines shown in red box.

USE OF UNDERWATER BAIT SETTER

Camera position

- Close to the stern where the capsule loading can be seen.

Minimum footage review

Samples throughout the set.

What to record in footage review per set

Instances where the underwater bait setter is not used. For instance baited hooks thrown manually by crew.

Artificial intelligence (AI)

AI technology has the potential to make footage review faster and cheaper.