CONSERVATION MEASURE 24-02 (2002)
Experimental Line-weighting Trials

Species	seabirds
Area	selected
Season	all
Gear	longline

In respect of fisheries in Statistical Subareas 48.6 south of 60°S, 88.1 and 88.2 and Division 58.4.2, paragraph 3 of Conservation Measure 25-02 shall not apply only where a vessel can demonstrate prior to licensing for this fishery its ability to fully comply with either of the following experimental protocols.

Protocol A:

A1. The vessel shall, under observation by a scientific observer:

(i) set a minimum of five longlines with a minimum of four Time Depth Recorders (TDR) on each line;

(ii) randomise TDR placement on the longline within and between sets;

(iii) calculate an individual sink rate for each TDR when returned to the vessel, where:

(a) the sink rate shall be measured as an average of the time taken to sink from the surface (0 m) to 15 m; and

(b) this sink rate shall be at a minimum rate of 0.3 m/s;

(iv) if the minimum sink rate is not achieved at all 20 sample points, repeat the test until such time as a total of 20 tests with a minimum sink rate of 0.3 m/s are recorded; and

(v) all equipment and fishing gear used in the tests is to be the same as that to be used in the Convention Area.

A2. During fishing, for a vessel to maintain the exemption to night-time setting requirements, continuous line sink monitoring shall be undertaken by the CCAMLR scientific observer. The vessel shall cooperate with the CCAMLR observer who shall:

(i) aim to place a TDR on every longline set during the observer's shift;

(ii) every seven days place all available TDRs on a single longline to determine any sink rate variation along the line;

(iii) randomise TDR placement on the longline within and between sets;

(iv) calculate an individual rate for each TDR when returned to the vessel; and

(v) measure the sink rate as an average of the time taken to sink from the surface (0 m) to 15 m.

A3. The vessel shall:

(i) ensure the average sink rate is at a minimum of 0.3 m/s;
(ii) report daily to the fishery manager; and
(iii) ensure that data collected from line sink trials is recorded in the approved format and submitted to the fishery manager at the conclusion of the season.

Protocol B:

B1. The vessel shall, under observation by a scientific observer:

(i) set a minimum of five longlines of the maximum length to be used in the Convention Area with a minimum of four bottle tests (see paragraphs B5 to B9) on the middle one-third of the longline;

(ii) randomise bottle test placement on the longline within and between sets, noting that all tests should be applied halfway between weights;

(iii) calculate an individual sink rate for each bottle test, where the sink rate shall be measured as the time taken for the longline to sink from the surface (0 m) to 10 m;

(iv) this sink rate shall be at a minimum rate of 0.3 m/s;

(v) if the minimum sink rate is not achieved at all 20 sample points (four tests on five lines), continue testing until such time as a total of 20 tests with a minimum sink rate of 0.3 m/s are recorded; and

(vi) all equipment and fishing gear used in the tests is to be to the same specifications as that to be used in the Convention Area.

B2. During fishing, for a vessel to maintain the exemption to paragraph 3 of Conservation Measure 25-02, regular line sink rate monitoring shall be undertaken by the CCAMLR scientific observer. The vessel shall cooperate with the CCAMLR observer who shall:

(i) aim to conduct a bottle test on every longline set during the observer's shift, noting that the test should be undertaken on the middle one-third of the line;

(ii) every seven days place at least four bottle tests on a single longline to determine any sink rate variation along the line;

(iii) randomise bottle test placement on the longline within and between sets, noting that all tests should be applied halfway between weights;

(iv) calculate an individual sink rate for each bottle test; and

(v) measure the line sink rate as the time taken for the line to sink from the surface (0 m) to 10 m.

B3. The vessel shall whilst operating under this exemption:

(i) ensure that all longlines are weighted to achieve a minimum line sink rate of 0.3 m/s at all times;

(ii) report daily to its national agency on the achievement of this target; and

(iii) ensure that data collected from line sink rate monitoring are recorded in the approved format and submitted to the relevant national agency at the conclusion of the season.

B4. A bottle test is to be conducted as described below.

Bottle Set Up

B5. 10 m of 2 mm multifilament nylon snood twine, or equivalent, is securely attached to the neck of a 750 ml plastic bottle[1] (buoyancy about 0.7 kg) with a longline clip attached to the other end. The length measurement is taken from the attachment point (terminal end of the clip) to the neck of the bottle, and should be checked by the observer every few days.

B6. Reflective tape should be wrapped around the bottle to allow it to be observed at night. A piece of waterproof paper with a unique identifying number large enough to be read from a few metres away should be placed inside the bottle.

Test

B7. The bottle is emptied of water, the stopper is left open and the twine is wrapped around the body of the bottle for setting. The bottle with the encircled twine is attached to the longline[2], midway between weights (the attachment point).

B8. The observer records the time at which the attachment point enters the water as t_1 in seconds. The time at which the bottle is observed to be pulled completely under is recorded as t_2 in seconds[3]. The result of the test is calculated as follows:

Line sink rate = $10 / (t_2 - t_1)$

B9. The result should be equal to or greater than 0.3 m/s. These data are to be recorded in the space provided in the electronic observer logbook.

[1] A plastic water bottle that has a hard plastic screw-on 'stopper' is needed. The stopper of the bottle is left open so that the bottle will fill with water after being pulled under water. This allows the plastic bottle to be re-used rather than being crushed by water pressure.

[2] On autolines attach to the backbone; on the Spanish longline system attach to the hookline.

[3] Binoculars will make this process easier to view, especially in foul weather.