

East Coast Whale Entanglement Mitigation Program

Update 27/3/2020

13 NSW Ocean Trap and Line (NSW OTL) fishers are taking part in gear trials to determine the practical utility and safety aspects of gear modifications that may potentially minimise whale entanglement. These trials will determine potential for uptake of gear modifications by other NSW OTL fishers, and provide focus for further scientific trials to determine whale entanglement mitigation.

Fishers undertaking the trials utilise two fishing methods within the NSW OTL fishery, Demersal Fish Trap (DFT) and Spanner Crab (SC). The fishers are located between Ballina (nth coast NSW) to Wallaga Lake (sth coast NSW), with a geographical spread of approximately 900kms. Fishers will be conducting trials in water depths between 10m and 150m, using licensed fishing vessels between 5.8m and 16m in length.

Most fishers are trialling multiple gears/methods, with maximum flexibility of use of trial gears an inherent part of the trial methodology.

Trial Gears

The main focus is to trial gears/methods which minimise the amount of rope (particularly slack rope) in the water column, consistent with advice for DFT and SC fishers within the NSW OTL Fishery Code of Practice for Reducing Whale Entanglements.

Negatively Buoyant Rope (NBR) - A total of 64 coils (18,000 metres) of NBR have been sourced from an Australian rope importer via Vietnam. The NBR is in three sizes 6mm, 7mm and 8mm.



Negative Bouyant Rope (NBR)

32 coils of NBR (7and 8mm) have been distributed to 9 DFT fishers for use on head gear. The objective is to increase tension on the upper portion of the head gear to reduce slack rope in the water column.

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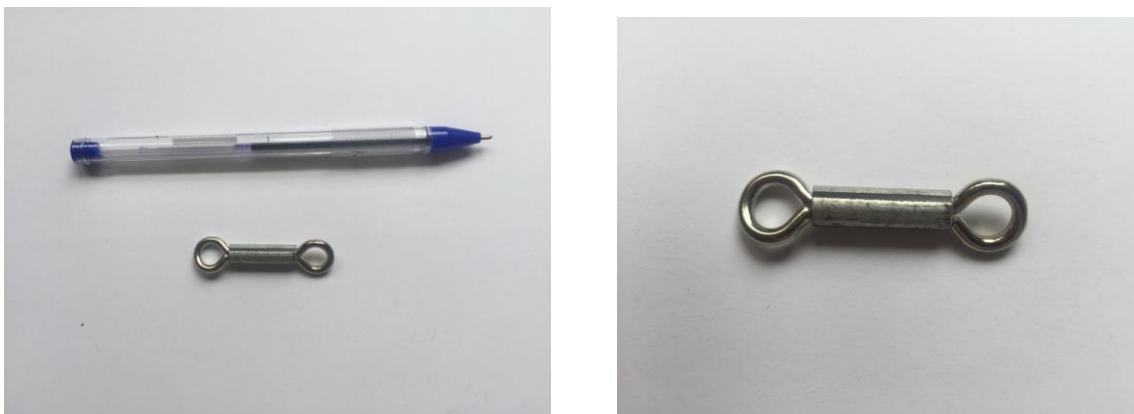
Lead Core Rope (LCR) – 250 m of 8mm LCR has been distributed to one SC fisher for use on spanner crab trot lines.



Lead Core Rope (LCR)

The objective is to ensure the trot line lies on the substrate to eliminate the potential for rope associated with the ground gear rising into the water column.

Galvanic Time Releases (GTR) – A total of 8300 GTRs have been ordered from an Australian supplier. Models ordered include A2 (11hrs), A4 (17hrs), A5 (21.5hrs), B5 (39hrs) and G8 (7days). The spread of models ordered will enable flexibility for fishers to tailor GTR use to various water temperatures and gear soak times. The G8 GTRs will be used as a back up within the grappling trials to reduce the risk of lost gear as a result of the trials.



Galvanic Time Releases (GTR)

To date 3950 GTRs have been received, with a further 1850 expected to be received in the next few days. There have been some difficulties obtaining A5 GTRs from the US

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manufacturer within the project time frame, compounded by the recent Covid 19 health emergency. Contingencies include the sourcing of B5 GTRs if available, with fishers able to “burn off” time on the GTR before deployment with the trial gear.



GTRs delivered as at 27/3/2020

The GTRs will be distributed to 8 DFT fishers for use on head gear. The objective is to remove the head gear from the water column for the majority of the soak time. Expected delivery date to DFT fishers undertaking GTR trials is the 1st week of April 2020.



Packed rope bag (NSW Lobster Fishery example)

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Ancillary Items

Deep Sea Floats – A total of 70 x 8” and 30 x 10” deep sea floats with the capability to withstand pressure to 250m depth have been distributed to 8 DFT fishers undertaking GTR trials. The floats will be used as a substitute for the common polystyrene variety to ensure the floats are not crushed by pressure when deployed at depth. Floats are white in colour.



Deep Sea Floats – white in colour

Oyster Mesh – A total of 8 rolls of 20 x 20 oyster mesh have been distributed to 8 DFT fishers undertaking GTR trials. The mesh will be used to manufacture rope bags to be used in conjunction with GTRs.



Oyster Mesh

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Shark Clips – A total of 100 x 4” stainless steel shark clips with swivels have been distributed to 8 DFT fishers undertaking GTR trials. The shark clips will be used to attach the GTR rope bag to the hauling rope to enable retrieval of the rope bag after the deployment of the floats.



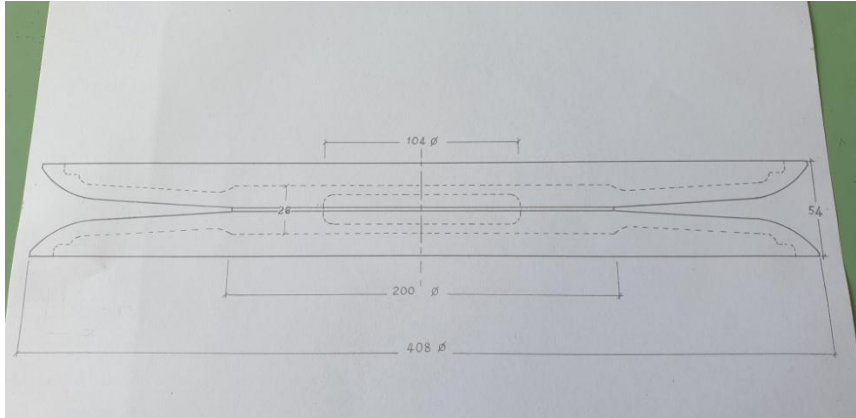
Packed rope bag attached to dan line with shark clip (NSW Lobster fishery example)

Phosphor Bronze Line Hauler Plates – A total of 3 sets of phosphor bronze line hauler plates have been ordered and will be distributed to 3 SC fishers undertaking LCR and NBR trials. It is expected that the use of LCR and NBR within the trot line of SC ground gear will result in particles of sand becoming embedded with the trot line resulting in excess abrasion of standard alloy line hauler plates.

An initial mould has been created with 3 sets of line hauler plates being cast with higher phosphor bronze content.

At the time of writing, the line hauler plates have been manufactured. The plates are currently in transit between the manufacturer on Flinders Island Tas and the delivery address in Ballina NSW.

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Details of bronze hauler plate castings.

Delivery

A total of 4111 kms have been driven between 28/2/20 and 16/3/20 to pick up and deliver trial gear to fishers.



Pick up from Sydney

Sect 37 Permits – NSW DPI

Section 37 Permits to allow the trialling of Galvanic Time Releases (GTR) and grappling of sub surface rope by DFT fishers have been negotiated and signed off, and were distributed on 26th March 2020 by NSW DPI.

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Trial Reporting

At the completion of the trials, fishers will report on details of their typical gear and gear modifications, utility of the gear modifications, safety aspects of the gear modifications, impacts of gear modifications on the amount of lost gear and potential for future uptake by themselves and others through a standardised questionnaire.

Each fisher undertaking trials has had a face to face briefing explaining the reporting questionnaire when the project officer delivered the trial gear.

Code of Practice

Each fisher undertaking trials has had a face to face briefing regarding the NSW OTL Fishery Code of Practice for Reducing Whale Entanglements from the project officer.

Entanglement Information

Wheelhouse stickers providing information on the course of action when an entangled whale is encountered are currently under development by the NSW NPWS.

Fiobouy Acoustic Release System

The planned trials of the Fiobouy Acoustic Release System will not be able to go ahead. Travel restrictions associated with the current Covid 19 health emergency will not allow the principal of Fiobouy, John Fiotakis, to travel from Tasmania to NSW to deliver equipment and training to the fisher undertaking the trials without undergoing 14 days quarantine on his return to Tasmania. There is a strong desire from Fiobouy, the East Coast Whale Entanglement Mitigation Program, and the fisher volunteering to undertake the trials to re-evaluate the situation when circumstances permit.



Fiobouy AC100 (photo credit - Fiobouy)