



Performance of the Southern Blue Whiting Fishery at Campbell Plateau (SBW 6I) and Compliance with the 2021 Operational Plan

Monitoring of Operational Plan Requirements

The Fisheries New Zealand 2021 Operational Plan to manage the incidental capture of New Zealand sea lions in the Campbell Plateau southern blue whiting fishery (SBW 6I), sets out the operational measures that vessels are expected to employ to manage interactions with New Zealand sea lions (sea lions). The Operational Plan also details the additional monitoring that Fisheries New Zealand Observers commit to undertake in support of these operational measures.

Performance against each operational measure is set out below:

Information Gathering

- At least one Fisheries New Zealand Observer will be placed on each vessel that operates in SBW 6I during the 2021 season.*
 - Ten vessels participated in the SBW 6I fishery during 2021 (9 vessels participated in 2020 and 14 vessels participated in 2019). Eight vessels carried at least one Fisheries New Zealand Observer while operating in the SBW 6I fishery in 2021 (83% coverage).
- Fisheries New Zealand Observers will undertake a minimum of one marine mammal abundance count each day. This count is taken during the first daylight haul as standard practice.*
 - The 2021 SBW 6I season comprised 10 trips in total.
 - The average number of sea lions observed during the daily count was 1.3 (last year 1.5 sea lions were observed on average).
 - Counts ranged from 0 to 10 sea lions (maximum count last year was 15).
 - At times observers noted that from the bridge of the vessel that it was difficult to determine whether animals observed were sea lions or fur seals.
 - Counts were not undertaken if light was poor (or at night); it was too foggy or marine mammals were too distant from viewing point.
 - Examples of observer observations include:

“Sea lions were sighted on several occasions during hauling, eating fish that had fallen from the net. It was often not possible to be certain of the identification as either a New Zealand sea lion or a New Zealand fur seal due to the rough seas, distance and obstructions to viewing. On other occasions sea lions were identified as they followed the net as it was being hauled almost to the stern of the vessel. They were observed swimming over the net forward of the SLED and pulling fish out that were partially sticking out of the net mesh.”

“Sea lions were seen infrequently, typically between three to seven at a time foraging near the codend during the end of hauling. Occasional fish losses from SLEDs and cod-end meshes during hauling contributed to successful foraging.”

“Sea lions were not regularly observed while towing the trawl or following the net while hauling, numbers present were low, generally from a single to three animals. On one occasion ten animals were observed beside the vessel at the end of a haul. During the last four days of fishing their presence was more prevalent.”

3. *In addition to standard ID and biological sampling (sex, lengths, tissue samples and photos), observers will aim to take a tooth sample from each dead sea lion.*
 - Two sea lions were captured dead in 2021 (one male and one female) and two were released alive (one male alive and one sea lion of unknown sex). Samples were taken from the two dead sea lions.
4. *Observers will also monitor the operation of Sea Lion Exclusion Devices (SLEDs) in the fishery, specifically*
 - a. *Any issues with crew safety; and*
 - b. *The behaviour of the SLED in the trawl net*
 - Observers did not report any issues with either crew safety or the behaviour of the SLED in the trawl net.
5. *Observers will also closely monitor each vessel’s adherence to the guidelines specified in the VMP and MMOP.*
 - Observers noted that the level of adherence with VMPs and the MMOPs on the eight observed trips was good, there was no need for follow up actions in 2021.

Additional mitigation measures

6. *SLEDs will be used in every tow in SBW6I during 2021 and vessels will carry at least one spare SLED on board.*
 - Observers reported that SLEDs were used in every tow during the 2021 SBW6I season and vessels carried one or two spare SLEDs.
7. *All SLEDs will be audited on shore before the season commences, to ensure they meet the agreed SLED specifications.*
 - Based on information provided to Fisheries New Zealand by Deepwater Group, all SLEDs on vessels that participated in the 2021 SBW6I season were audited prior to the start of the SBW6I season and met the agreed SLED specifications.
8. *Each SLED will be measured at the beginning of the season by the Fisheries New Zealand Observer on board for the first SBW6I trip in 2021.*

- Observers checked and measured SLED specifications before they were used for the first time, all SLEDs met the specifications in 2021.

9. *SLED damage: if at any point during the season the observer or crew have reason to consider a SLED has been damaged, its use will be discontinued until the SLED measurements have been re-checked by the Observer.*

- No reports of SLEDs being damaged were received in 2021.

10. *The Operational Plan contains sea lion trigger points, including a limit that if reached will prompt the fleet to leave the fishery for the year. Monitoring by Fisheries New Zealand Observers will assess progress towards these capture trigger points and limits. Industry have a voluntary limit that if reached will prompt the fleet to leave the fishery for the year:*

- i. a limit of 12 female sea lion mortalities or*
- ii. 25 total sea lion mortalities*

- Two sea lions were caught dead in 2021 and two sea lions were released alive.

11. *Vessel operators must provide the Fisheries New Zealand Observer Programme with five days' notice by email prior to the vessel leaving port for each fishing trip where the vessel intends to operate in SBW6I (whether for all or part of the trip).*

- The Fisheries New Zealand Observer Programme were provided with five days' notice for all trips in SBW6I in 2021.