

 <p data-bbox="215 533 454 571">Agreement on the Conservation of Albatrosses and Petrels</p>	<p data-bbox="491 241 1406 280">Sixth Meeting of the Seabird Bycatch Working Group</p> <p data-bbox="651 297 1406 336"><i>Punta del Este, Uruguay, 10-12 September 2014</i></p> <p data-bbox="534 443 1358 533">Seabird Bycatch During Gear Retrieval in a Pelagic Longline Fishery</p> <p data-bbox="911 571 981 609">USA</p>
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SUMMARY

In the Hawaii (USA) shallow-set pelagic longline fishery (targeting swordfish), most seabird captures historically occurred during gear setting. Since 2001, however, when NMFS introduced seabird regulations, about 75% of seabird captures occur during the haul. The National Marine Fisheries Service (NMFS) sponsored a limited study of the factors that may influence the frequency of these incidental captures. Some of the factors identified included the number of albatrosses near the fishing vessels during gear hauling, and the length of the leaders. The branchline weight and the wind speed were also important. The study noted that research on potential alternative fishing operations that might reduce seabird bycatch during longline gear hauling should focus on reducing bird access to baited hooks as the crew coils the branch lines. Such possible alternatives include using shorter leaders, using heavier swivels, more efficient branchline coiling, and shielding the area where hooks become accessible to birds.

Captura secundaria de aves marinas durante el virado de aparejos en una pesquería de palangre pelágico

En la pesquería de palangre pelágico de Hawai (EE. UU.), de calado superficial y destinada a la pesca del pez espada, la mayor parte de las capturas de aves marinas ocurría, desde siempre, durante el calado de los aparejos. Sin embargo, desde 2001, cuando el Servicio Nacional de Pesca Marina de los EE. UU. (NMFS) incorporó reglamentaciones para la conservación de aves marinas, es ahora durante el virado donde ocurre aproximadamente el 75% de las capturas de aves. El NMFS patrocinó un estudio limitado de los factores que pueden influir sobre la frecuencia de estas capturas incidentales. Algunos de esos factores identificados fueron, entre otros, la cantidad de albatros presentes en las inmediaciones de los buques pesqueros durante el virado de aparejos y la longitud de las líneas. El peso de las brazoladas y la velocidad del viento también fueron aspectos importantes. El estudio señaló que la investigación sobre posibles maniobras de pesca alternativas que reduzcan la captura secundaria de aves marinas durante el virado de los palangres debía centrarse en cómo limitar el acceso de las aves a los anzuelos cebados mientras la tripulación aduja las brazoladas. Tales alternativas posibles incluyen el empleo de líneas más cortas, destorcedores más pesados, adujado de brazoladas más eficiente y el resguardo de la zona donde los anzuelos quedan accesibles.

Capture accessoire d'oiseaux de mer durant le relevage d'engins de pêche dans une pêcherie palangrière pélagique

Dans la pêcherie palangrière pélagique (d'espadons) d'Hawaii (USA), la plupart des captures d'oiseaux de mer survenaient généralement durant la mise à l'eau des engins de pêche. Cependant, depuis que le NMFS a mis en place des règlements relatifs aux oiseaux de mer en 2001, environ 75% des captures d'oiseaux de mer surviennent durant le relevage. Le Service national des pêcheries marines (NMFS) a parrainé une étude limitée sur les facteurs qui peuvent influencer la fréquence des captures incidentes. Parmi les facteurs identifiés, on trouve le nombre d'albatros présents près des navires de pêche lors du relevage des engins ainsi que la longueur des avançons. Le poids de l'avançon et la vitesse du vent sont également importantes. L'étude a souligné que les recherches relatives à des opérations de pêche alternatives qui pourraient réduire la capture accessoire durant le relevage des palangres devaient s'axer sur la réduction de l'accès des oiseaux de mer aux hameçons munis d'appâts lorsque l'équipage relève les palangres. Parmi les options possibles, on note la réduction de la longueur des avançons, l'utilisation d'émerillons plus lourds, l'enroulement plus efficace des avançons, et la protection de la zone où les oiseaux peuvent accéder aux hameçons.

Laysan and black-footed albatrosses forage throughout the North Pacific Ocean and nest on tropical and sub-tropical oceanic islands ranging from Mexico to Japan. The core breeding range is the Hawaiian Islands, where more than 99% of the world's Laysan albatrosses and more than 95% of the black-footed albatrosses nest on the small islands and atolls of the Northwestern Hawaiian Islands. Although these U.S. islands and nearshore waters are protected as part of the Papahānaumokuākea Marine National Monument, longline fisheries overlap in space and time with the foraging ranges of these albatross.

Both the Laysan and black-footed albatrosses are included in the U.S. Fish & Wildlife Service List of Birds of Conservation Concern, indicating that without additional conservation actions, species on this list are likely to become candidates for listing under the ESA.

Fishery interactions, along with other threats, affect seabird populations and have the potential to impede seabird population recovery. The United States has implemented highly effective management in the Hawaii longline shallow-set fishery to greatly reduce seabird bycatch, primarily through mitigation measures required during longline gear setting, that is, gear deployment. Since implementation of these measures, most (about 75%) of the remaining seabird interactions occur during gear hauling. In the Hawaii shallow-set fishery in 2012, 78% of seabirds retrieved during gear hauling were alive.

Understanding the characteristics of haul bycatch and then testing various haul bycatch mitigation devices may help develop best practices that further minimize impacts to seabirds. Analyses of data collected by fishery observers, additional monitoring, consideration of recent studies and trials of new seabird deterrent measures, and consideration of new research and field trials may yield insights on how take of birds by this fishery might be reduced further.

In a limited study sponsored by NMFS in Hawaii, researchers identified various factors that influence the incidental catch of seabirds during the haul (see Gilman et al. 2014). Aside from inter-annual variations, some of the factors identified included the number of albatrosses near the fishing vessels during gear hauling, and the length of the leaders. The branchline weight and the wind speed were also important. Gilman et al. (2014) found that the haul capture rate for Laysan albatrosses was significantly higher than for black-footed albatrosses. Therefore, if additional effective haul mitigation techniques are identified, they are most likely to benefit Laysan albatrosses.

The study noted that research on potential alternative fishing operations that might reduce seabird bycatch during longline gear hauling should focus on reducing bird access to baited hooks as the crew coils the branch lines. Such possible alternatives include using shorter leaders, using heavier swivels, more efficient branchline coiling, and shielding the area where hooks become accessible. Such research could identify the usefulness and cost-effectiveness of modifications to fishing practices and gear with the goal of reducing haul bycatch.

Reference: Gilman E., M. Chaloupka, B. Wiedoff, J. Willson. 2014. Mitigating seabird bycatch during hauling by pelagic longline vessels. PLoS ONE 9(1): e84499.doi:10.1371/journal.pone.0084499