

 Agreement on the Conservation of Albatrosses and Petrels	Tenth Meeting of the Seabird Bycatch Working Group <i>Virtual meeting, 17 – 19 August 2021 (UTC+10)</i> Interacciones de albatros y petreles con la pesquería artesanal de calamar gigante en el sur del Perú durante el periodo 2015 – 2017 Javier Quiñones¹ y Cristian Moreno² ¹<i>Instituto del Mar del Peru (IMARPE)</i> ²<i>Universidad Nacional de Trujillo (UNT)</i>

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RESUMEN

En el presente estudio, en el marco del programa de observadores a bordo del recurso calamar gigante (*Dosidicus gigas*) realizado por el Instituto del Mar del Perú (IMARPE), se reportó la presencia de especies amenazadas de albatros y petreles (2015-2017) en el sur del Perú. Probamos sus interacciones y comportamiento con la pesca artesanal del calamar gigante (*D. gigas*). Los petreles de barbilla blanca (*Procellaria aequinoctialis*) y albatros de Galápagos (*Phoebastria irrorata*) fueron más abundantes, seguidos por los albatros de Salvini (*Thalassarche salvini*) y de Chatham (*Thalassarche eremita*) y finalmente los petreles del Cabo (*Daption capense*). Para el hábitat, todos mostraron patrones similares, con la mayoría (>60%) prefiriendo el talud continental. Los albatros de Nueva Zelanda (Salvin y Chatham) y los petreles (Petrel de barbilla blanca) estuvieron casi ausentes durante el verano (5% y 15%). Los albatros de Galápagos y petreles del Cabo estuvieron presentes durante todo el año. Todas las especies analizadas forrajearon en descartes de vísceras (~17%) con mayores porcentajes de consumo para el albatros de Chatham (21%) y de Salvini (27%). Un Chatham fue enganchado en el gancho potero, sin embargo, fue desenganchado y liberado con éxito. El albatros de Galápagos, fue la única especie que se alimentó de peces pelágicos en la superficie, registrándose en números importantes (n=43), entre 1300 - 1400 km más al sur de sus límites meridionales habituales, probablemente debido a la extensión de El Niño 2015-16 y 2017. Reportamos el primer avistamiento de albatros real en Perú (*Diomedea epomophora*). A pesar de las condiciones cálidas del sur del Perú se congregaron importantes números de albatros y petreles de Nueva Zelanda durante su temporada de invierno. La magnitud y el crecimiento constante de esta pesquería podrían amenazar a estas especies vulnerables y en peligro crítico de extinción.

SUMMARY

In the present study, within the framework of the onboard observer program on the Jumbo Squid (*Dosidicus gigas*) carried out by the Peruvian Marine Research Institute (IMARPE), the presence of threatened species of albatrosses and petrels (2015-2017) was reported in southern Peru. We test their interactions and behavior with the artisanal fishing of the Jumbo Squid (*D. gigas*). The white-chinned petrels (*Procellaria aequinoctialis*) and waved albatrosses (*Phoebastria irrorata*) were more abundant, followed by the Salvin's (*Thalassarche salvini*) and Chatham (*Thalassarche eremita*) albatrosses, and finally the cape petrels (*Daption capense*). For habitat, all showed similar patterns, with most (>60%) preferring the continental slope. The albatrosses coming from New Zealand albatrosses (Salvin's and Chatham albatrosses) and petrels (white chin petrel) were almost absent during the summer (5% and 15%). The waved albatrosses and cape petrels were present throughout the year. All species analyzed foraged in offal discards (~17%) with higher percentages of consumption for the Chatham (21%) and Salvin's (27%) albatrosses. A Chatham albatross was caught on the hand squid jigs, however it was safely released. The waved albatross was the only species that fed on pelagic fish on the surface in significant numbers (n=43), being located between 1300 - 1400 km further south of its usual southern limits, probably due to the extent of El Niño 2015-16 and 2017. We reported the first sighting of royal albatross in Peru (*Diomedea epomophora*). Despite the warm conditions in southern Peru, important numbers of New Zealand albatrosses and petrels congregated during the winter season. The extent continuous and continued growth of this fishery could threaten these vulnerable and critically endangered species.

Next Steps: Carry out an exhaustive analysis on the interaction of the artisanal Jumbo Squid fishery (*Dosidicus gigas*), especially the one that leaves the ports of the Arequipa region in southern Peru, such as Lomas (15°34'S; 74°51'W); Atico (16°13'S; 73°36'W); La Planchada (16°24'S; 73°13'W); Caleta Quilca (16°42'S; 72°26'W) and Matarani (17°S; 72°06'W), but this time it would be done using all the effort data from this fishery to determine the spatial overlap with the distribution of albatrosses and petrels over the continental slope, Peruvian - Chilean trench and abyssal plain. For which geospatial correlation analysis should be done using the temporal space coverage of this fleet with the sightings of albatrosses and petrels, for which different tools of geographic information system (GIS) and others should be used, the information is supplemented by sightings on board this small-scale fleet, This information will also be fed with the data generated by oceanic bird watching programs on IMARPE's pelagic resource assessment cruises in the southern region from 15°30'S to 17°00'S.