

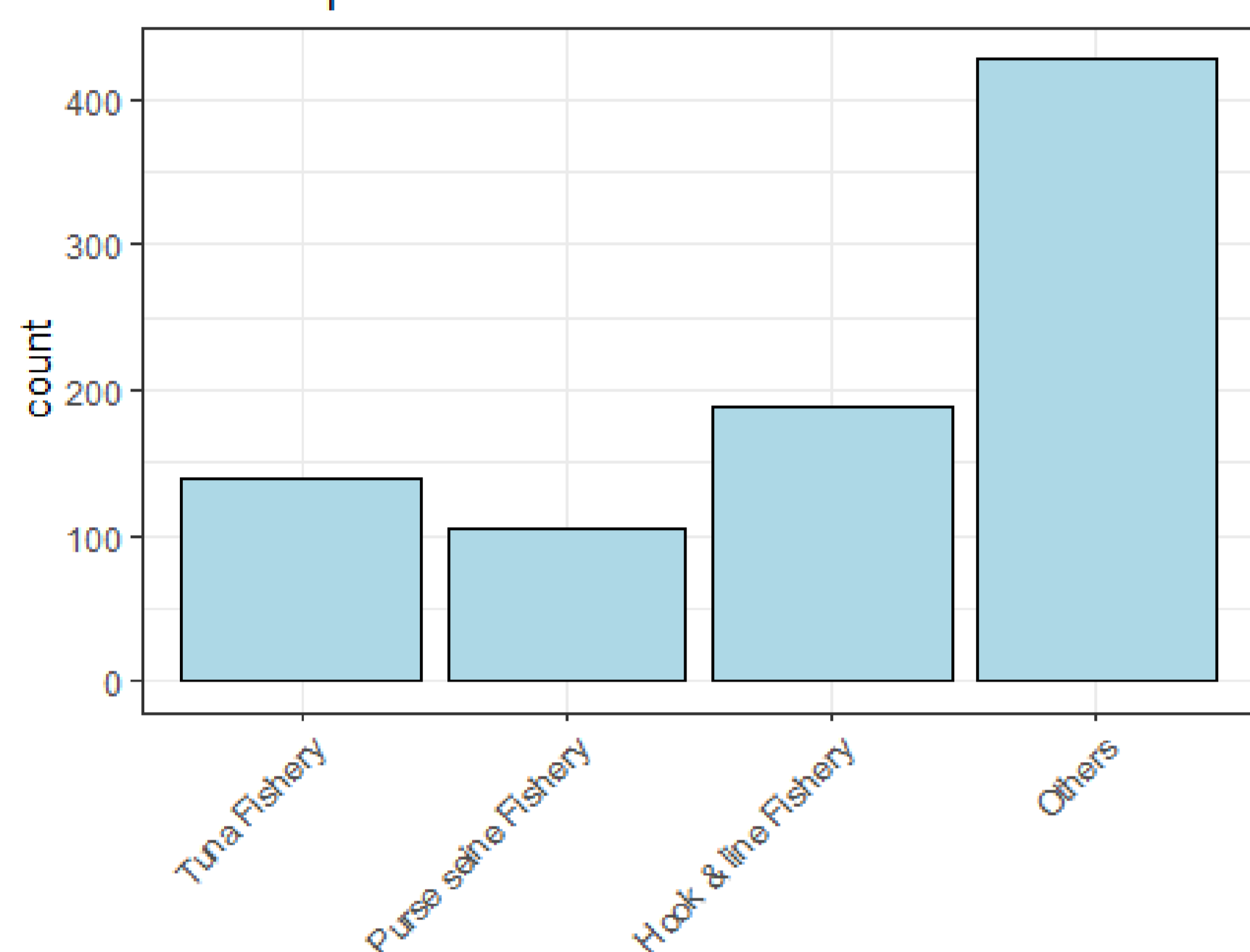
A. Rodríguez-Juncá
alicia.rodriguezjunca@gmail.com

Alicia Rodríguez-Juncá¹, Alejandro Escáñez Pérez^{2,3}, Marta García Doce¹, Pablo Martín-Sosa⁴, Natacha Aguilar de Soto¹ and Raquel de la Cruz-Modino⁵
¹BIOECOMAC, Dept. Animal Biology, Edaphology and Geology, University of La Laguna, Tenerife, Canary Islands, SPAIN ²Dept. Animal Ecology and Biology, University of Vigo, Pontevedra, Galicia, SPAIN ³MARE – Marine and Environmental Sciences Centre, ARDITI, Funchal, Madeira Island, PORTUGAL ⁴Centro Oceanográfico de Canarias (IEO-CSIC), Santa Cruz de Tenerife, SPAIN ⁵ University Institute for Social Research and Tourism, University of La Laguna, Tenerife, Canary Islands, SPAIN



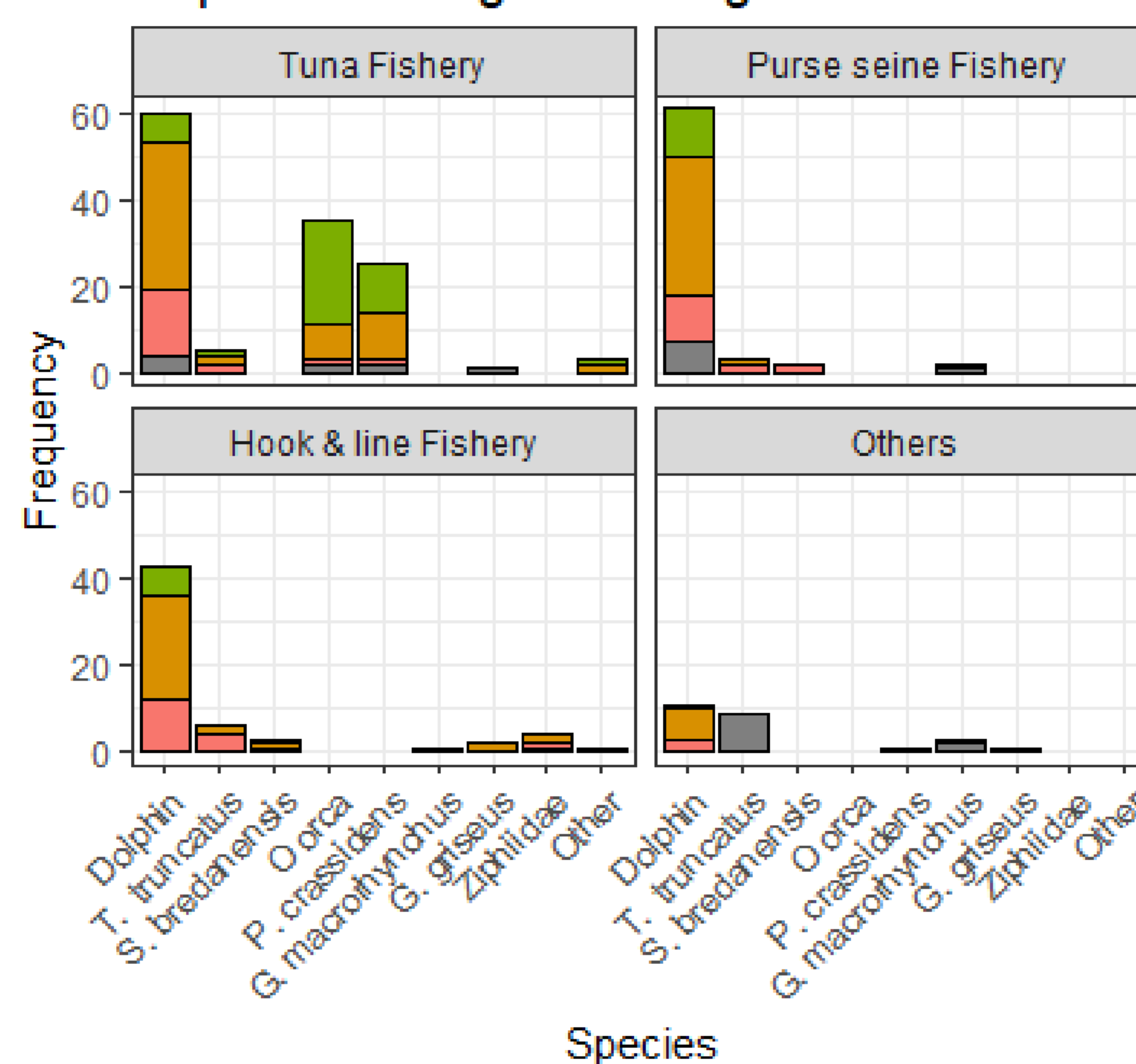
Interactions between cetaceans and fisheries are a worldwide problem including in the Canary Islands (Spain). Here, the small-scale fishing fleet plays a role in maintaining the food security of the archipelago as well as socio-economic and cultural values. The Canary Islands waters contain 30 species of cetaceans protected under Spanish (Law 42/2007; 4/2010) and European law (OSPAR, BONN, BERN). The range areas of cetacean species overlap with small-scale fishing grounds, sharing common fishing resources. This situation facilitates the appearance of human-wildlife interactions. This study aimed to obtain the first characterization of the interactions between small-scale fisheries and cetacean species in the Canary Islands waters, detecting hotspots and characterizing the potential incidence. A total of 239 interviews were conducted covering all the small-scale fishers' guilds in the archipelago. Interviews were carried out employing a questionnaire specifically designed to assess the typology, intensity, losses and damages, mitigation measures used and small-scale fishers' perception. Interviews revealed positive (collaboration) and negative (depredation, gear loss/damage, bycatch) interactions. The intensity and typology of interactions varied between and within islands. Here we present the negative interactions with an archipelagic scope. A better understanding of the interactions and correct management tools can improve the coexistence between cetaceans and small scale fisheries and sustainability of this social and economic activity.

Fishers' profile: fisheries.

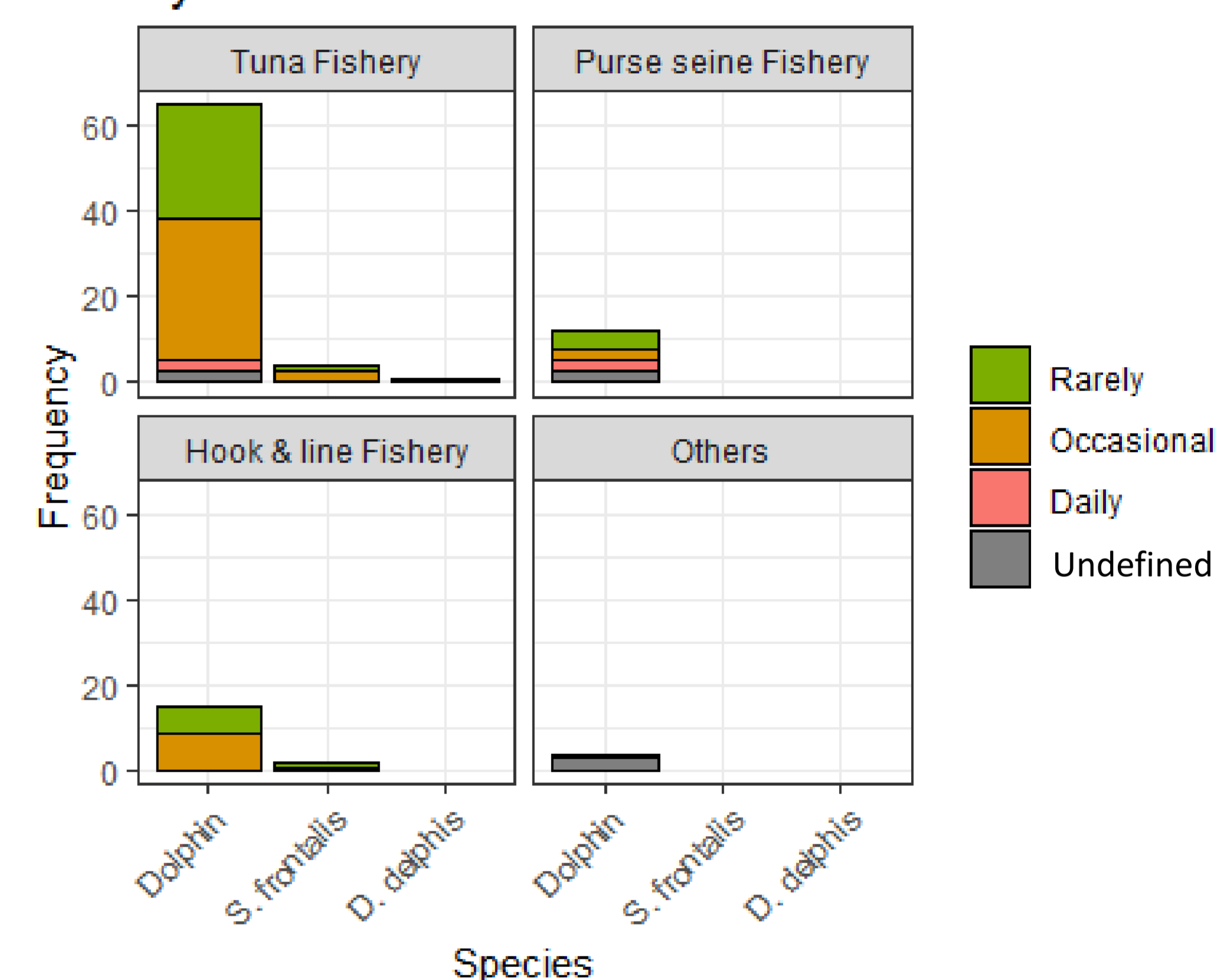


Small scale fisheries in the Canary Islands have a polyvalent fleet.
 *'Tuna Fishery' includes different pole & line gear.
 *'Purse seine Fishery' for bait and small pelagics.
 *'Hook & line Fishery' includes: electric reels, handlines, longlines.
 *'Others' includes: traps, beach seines, gillnets, lift nets, harvesting, fishing poles, jigs, "puyón", trolling, wahoo rod.

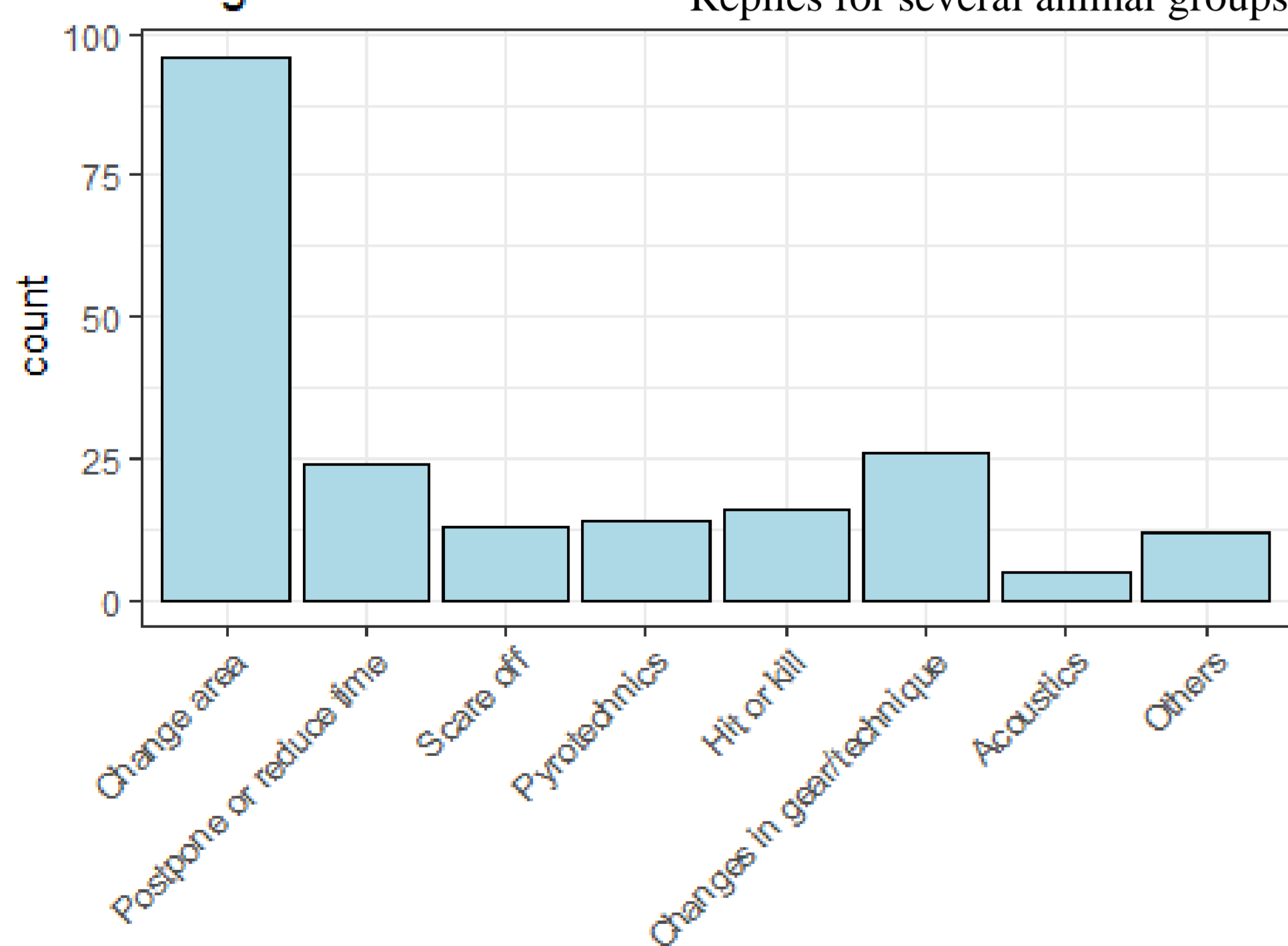
Depredation & gear damage interaction



Bycatch interaction



Mitigation measures



HIGHLIGHTS

- Tuna and purse seine fisheries were the most affected by cetacean interactions.
- Dolphins, *O. orca* and *P. crassidens* were the most frequent species in the Depredation & damage interaction.
- Only dolphin species were reported as bycatch.
- Different mitigation measures currently employed by fishers have been identified, some of which may entail a risk for the animals.
- Cetacean interactions are causing economic losses to varying degrees in the different fisheries, with the highest losses per interaction in the tuna fisheries.
- In depth studies of each interaction are recommended to better understand their impact and potential solutions.



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