## Specific Yellow-eyed Penguin Information (XYP)

Yellow-eyed penguins/hoiho are at risk of capture because fishers and penguins are both fishing in the same spot; it is not because they are feeding on fish in the gear, i.e., XYP are not "following" you or deliberately engaging with your fishing gear (unlike albatross and trawlers)

## Foraging traits:

- Visual hunters feeding at the seafloor down to 160 m deep (benthic foragers)
- Forage during daylight hours but can remain at sea overnight (particularly fledglings)
- Forage up to 50 km from shore, although typically less than 25 km
- Diet studies suggest that hoiho eat small fish ( $<25 \mathrm{~cm}$ ) of several species (including blue cod, red cod, opalfish, ahuru, sprat and arrow squid).


## Previous captures and known foraging areas

Most XYP captures occur in SCH/SPO target sets but are also at risk from MOK/BUT sets.
Tracking data show that different colonies and individuals have different fishing grounds, some (particularly Codfish Island and Otago Peninsula colonies) may travel significant distances offshore while others operate closer to the coast (Anglem Coast, Port Pegasus, North Otago colonies).
XYP habitually use the same areas throughout and between years. If you have fished consistently in an area without capturing one, the prospects are that you aren't in one of their feeding grounds and are less likely to catch one compared to fishing somewhere new.

## Known high risk areas

Fishing and observer data for last 18 years as shown in the following maps highlight places of relatively high effort and observer coverage where XYP have not been caught but also a few higher risk areaa. In these areas consider every option to reduce risk, i,e. night fishing when possible (haul before dawn) or avoiding fishing there at certain times of the year (see OP for more detail):

- The Glenavy/Waitaki bump in South Canterbury
- Toward Papanui Canyon off Otago Peninsula
- NW of Stewart Island (where birds may be foraging towards Te Wae Wae Bay).


Figure 1. South Island (FMA 3) shark setnet effort (coloured squares with dark squares = more effort) observer coverage (black dots with bigger dot = more observer coverage) and yellow eyed penguin captures (red dots) from 2003-2018. Data from Fisheries NZ and Dragonfly.

