



Media Release

Chiefs of Staff, News Directors

Monday 4 December 2017

Melbourne Zoo's penguins star in research to save seabirds from fishing nets

Melbourne Zoo's penguins have played a key role in a scientific study which found that saving some of the 400 000 seabirds killed globally each year in fishing gillnets could be as simple as changing the colour of the nets.

Over a three-week period in 2015, IMAS scientists in collaboration with Zoos Victoria tested different coloured nets in the Zoo's penguin pool to see if the birds were better at seeing and avoiding particular colours.

The study, published in the science journal [Aquatic Conservation](#), showed collision rates were significantly lower when orange netting was used.

Lead author Roshan Hanamseth, who led the IMAS and Zoos Victoria research team as part of his Honours studies, said sea-trials were needed to establish whether the results applied in different light conditions in the open ocean, but the study could be the first step towards saving thousands of birds each year.

"Little penguins are among several species significantly affected by gillnet fishing so it's great that the penguins at Melbourne Zoo could potentially be helping to save their cousins in the wild," Mr Hanamseth said.

"The experiments in the penguin pool were carefully designed to minimise the risk of injury and closely supervised to ensure the birds were safe.

"During the study we placed panels of different coloured gillnets across the penguin pool and collected data on the number of interactions penguins had with the different treatments.

"We found that collision rates were much lower with orange nets (5 of 91 encounters, or 5.5 per cent) than clear (33 of 92, 35.9 per cent) or green netting (16 of 52, 30.8 per cent).

"This is the first study in the world to assess the effect of net colour on seabirds living in a zoo as a potential mitigation measure for gillnet fishing.

"Experiments overseas have found that Right Whales can see red and orange ropes from a significantly greater distance than green rope.

“Our study confirms that penguins too are more likely to detect orange gillnets from a few metres away than clear or green filaments.

“Gillnet fisheries take a number of measures to reduce bird deaths but the number of mortalities caused by gillnets is estimated to be higher than for longline fishing.

“While further research is needed to assess the impact of different coloured nets on target fish species, studies such as this could pave the way for an efficient and cost-effective alternative for the industry to adopt,” Mr Hanamseth said.

Downloadable video content:

- penguins interacting with the experiment using orange gillnet filament, July 2015;
- interview grabs with Roshan Hanamseth;
- an edited package with interview and penguin overlay for social media.

<https://www.dropbox.com/sh/yziia0a4ab9ncjn/AACoU9qHUfzBQ2lyrilqdjwva?dl=0>

IMAS Media Contact: Andrew Rhodes (03) 6226 6683 or 0417 239 537, email: ajrhodes@utas.edu.au

Information released by:

Communications and Media Office, University of Tasmania

Phone: 61 3 6226 2124

Email: Media.Office@utas.edu.au