

## Non-breeding movements of Gentoo Penguins at the Falkland Islands

First published 30<sup>th</sup> September 2020



Gentoo penguins are one of four penguin species that call the Falklands home (ignoring the occasional Macaroni). Unlike Rockhopper and Magellanic penguins, which migrate to warmer waters during winter (as far north as Brazil), Gentoo penguins are resident year-round. Just like us, Gentoo penguins must adapt to reduced day length and an increase in storm frequency during the Falklands winter. But what do Gentoo penguins get up to in winter? We often assume that Gentoo penguins don't venture far – after all, in summer foraging trips are typically day trips within 30 km of breeding colonies and in winter, they

are found loafing on the beaches. However, few studies have tracked the movements of Gentoo penguins during winter.

In our soon to be published paper in the ornithological journal *Ibis* we described the winter movements of Gentoo penguins at the Falkland Islands. We attached miniaturized satellite tags to the feathers of Gentoo penguins, which provided location data in near real-time for over 3 months. While many penguins did indeed undertake short foraging trips, we found some penguins travelled up to 600 km, while maximum foraging trip duration was 24 days. These findings are remarkable and far exceed the winter movements of Gentoo penguins at other breeding locations, such as South Georgia Island. The Gentoo penguins that we tracked also frequently moved between breeding colonies within the Falkland Islands archipelago, but typically returned to their respective colonies, although not necessarily on consecutive foraging trips. For example, one particularly adventurous penguin travelled from Cow Bay (near Volunteer Point) to visit numerous Gentoo penguin breeding colonies, as far west as Steeple Jason Island, before returning to Cow Bay. Extended movements highlight Gentoo Penguin breeding dispersal capability, which might play a crucial role in population dynamics and gene flow at the Falkland Islands.

### Gentoo Winter

