

Pacific Golden Plover Report

Pacific Golden Plover (*Pluvialis fulva*) are the fourth most numerous Arctic breeding species to occur in New Zealand, but until this year very little was known about our population. Where do they breed – Alaska or Siberia? What is their migration strategy? Where do they stop to refuel during migration? The species is widely dispersed throughout the Pacific: do New Zealand birds ‘island hop’ during migration? There is though, one thing we do know about them: according to recent Birds NZ census data, their numbers in New Zealand have fallen by 60% since the early 1990s.

Pukorokoro Miranda Naturalists Trust (PMNT) set about finding some answers. We were joined by a team from Brigham Young University Hawaii, and Montana State University, led by Wally Johnson – the world authority on this species, to try and catch birds and deploy GPS pinpoint trackers. We knew these exceedingly shy birds would not be easy to catch, and soon learned just how difficult it would be.



PMNT had raised \$22,000, including \$4600 from the Birds NZ Projects Assistance Fund, to purchase 10 trackers. However the target of ten birds proved to be out of reach. After two weeks of effort, long days with cannon nets, and mist netting through the night, just three birds were caught. Each was colour banded and fitted with a solar-powered GPS tracker held in place by leg harness. To conserve battery life the trackers were programmed to report periodically. To pinpoint a bird's position the tracking system requires three good GPS fixes before it sends a report, and an Argos satellite then needs to be in good position to receive the data.

A sample size of three for a project such as this is woefully thin, but we were to be fortunate in that all three devices functioned very well over the next few months. One bird, Amanda, departed on 8 April and landed in Honshu, Japan, followed a few days later by a second bird, JoJo. Both made nonstop flights of nearly 10,000 km in 8 days, a similar pattern to that of Bar-tailed Godwits migrating north from New Zealand. By late May both birds were on the Yukon Kuskokwim Delta in Alaska, confirming that at least some PGP in New Zealand are breeding east of the Bering Sea. The third bird, Jim, departed New Zealand on 23 April and followed a completely different route – stopping on Guam and Okinawa before flying up the Yellow Sea and over northern China and Eastern Russia, eventually arriving in northern Alaska on 5 July.

By September Jo Jo was the only bird still reporting and is thought to have departed Alaska soon after 14 September. It reached Teraina in Kiribati on 22 September, remaining there until 25 October. By 30 October it was on Tongatapu where it remains at time of writing. A wide network of contacts throughout the Pacific, were alerted through various channels, including social media to look out for the other two birds. Similarly, people in New Zealand are being asked to look at any PGP for colour bands.

Despite only being able to deploy three trackers, the project has been a great success so far. A second attempt at catching birds was to be made in late November to deploy the remaining 7 trackers.

Keith Woodley

Pukorokoro Miranda Shorebird Centre, November 2019