

Project summary:

Satellite-tracking Red Knots

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Despite being the second-most numerous Arctic shorebird that visits New Zealand, Red Knots are classified as Vulnerable due to large and ongoing population declines. The New Zealand population has virtually halved over the past 30 years, with habitat loss in Asia being the likely principal cause. However, knowledge of the migration strategies and stopover sites used by knots is poor, and published data almost certainly misrepresent the migrations of New Zealand's knots.

Previous attempts to track the migrations of knots have met only partial success. Geolocator-tracking in 2013 revealed that all knots tracked from the Manawatu Estuary made a stopover in northern Australia or Papua New Guinea before then migrating to the Yellow Sea, where the major staging sites were presumed to be. However, the low resolution of geolocators meant that it was impossible to be certain whether birds were in Australia or Papua New Guinea, whether they made short stops in the Philippines or Taiwan or mainland China, and how far north in the Yellow Sea they went.

A subsequent attempt to track birds by using PinPoint GPS loggers was foiled by tagged birds likely being immature, and only one bird made an international migration, and only as far as Cape York Peninsula in northern Australia. Lotek has been developing a new 2-g satellite tag that is suitable for use on knots. In this project, the SunBird tags will be used to track Red Knots in 2022, and hopefully we can finally identify the specific locations used by this species as it migrates along the world's most threatened shorebird flyway.

