

Satellite-tracking Red Knots

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Red Knots have proven to be reluctant to divulge their secrets to Aotearoa New Zealand researchers. Knowledge of their migration stopovers and staging sites has scarcely increased over the past decade, and the birds have become less numerous and harder to catch around our shores, yet there are important unknowns such as whether the initial staging site for knots heading north is in Australia or New Guinea, how often birds use Taiwan versus mainland China, and what proportion of the population uses (or more importantly does not use) the well-known staging site in Bohai Bay in China before heading to the breeding grounds. With Lotek developing new 2-g satellite tags suitable for use on knots, we had high hopes of resolving these unknowns. The birds, and the weather, had other ideas in 2022 and no birds were caught. 2023 was to be better, we hoped, and in March three were tagged at Pūkoro Mirānda. One of these transpired to be too immature to migrate, and it remained mostly in the Manukau Harbour through the winter. The other two left our shores and staged in northern Australia or in West Papua. That answered one question – Australia or New Guinea? Why not both?

Success declined after that. The West Papua bird carried on with a beautiful flight to a somewhat inhospitable part of the coast of Taiwan, and signals ended at that site. Either the tag was shed, or the bird died there. The bird from Australia embarked on a second flight, then thought better of it, turned around, and returned to West Papua. Transmitters were also sent to Chinese colleagues who deployed some on migrating birds passing near Shanghai, but we learnt little from those also. So, the project was not a huge success. We incrementally gained some new insights but are yet to get a high-resolution track all the way to the breeding grounds. Maybe in 2024...

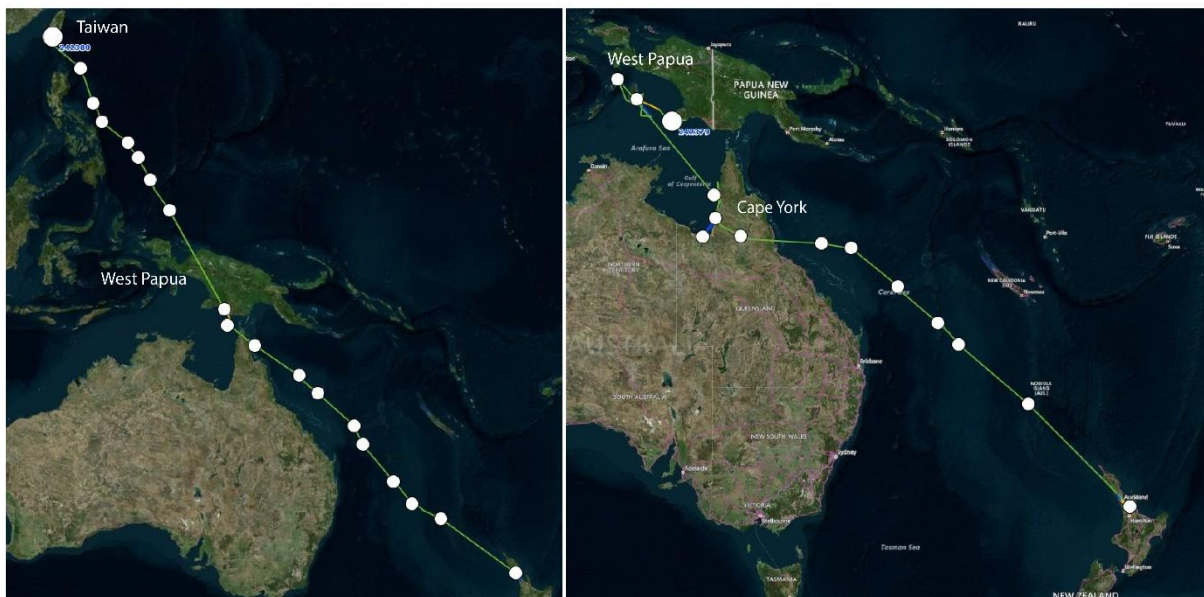


Figure. International movements of Red Knots satellite-tagged in New Zealand that staged in West Papua and Cape York Peninsula.