

## Post-release Monitoring of Takahē in Kahurangi National Park

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Since their dramatic rediscovery in 1948, the South Island takahē (*Porphyrio hochstetteri*) has been a national conservation icon and flagship species, under intensive management from DOC and its' predecessors. The latest step on the road to recovery of the species has been the mainland reintroduction to Kahurangi National Park, North-West Nelson. In March and April 2018 the first 30 birds were released in the Goulard Downs area of the park, in the hope that these pioneers would establish as the first free and independent population of takahē outside of Fiordland in over 100 years.



However, despite the apparent suitability of the release site (there is plenty of tussock to provide food and shelter and very few stoats and possums to give the released birds any trouble), the successful establishment of the reintroduced population is far from assured. It is therefore of critical importance that intensive post-release monitoring is employed in Kahurangi, both to identify any issues in the released population that will require management intervention, and to gain greater understanding of takahē habitat requirements and behaviour that will be critical for informing the design of future mainland reintroductions.

My PhD has been designed in collaboration with the DOC Takahē Recovery Team to ensure that the maximum learning potential is realised from the Kahurangi reintroduction. In order to do this it is vital that the released birds are closely monitored, using a combination of VHF-radio and GPS tags. So far all 30 released birds have been fitted with VHF tags, but currently only 16 also have the GPS units that will allow much more fine-grained tracking data to be collected. The receipt of a grant from the Birds NZ Research Fund allows me to expand the use of GPS tracking by purchasing an additional 6 tags to be deployed on birds due for release in January 2019. The detailed tracking dataset that I aim to collect from these tags will be used to evaluate and refine a series of spatial models I will be developing to predict patterns in the establishment of the released takahē population. These models will be used for informing takahē conservation management into the future.

