

Takahē and the Takahē Recovery Programme Fact Sheet 2018-2019



Scientific name: *Porphyrio hochstetteri*, South Island species North Island species (*P. mantelli*) is extinct.

Family: Rallidae, world's largest rail.

Conservation status: Endangered - Threat classification of Nationally Vulnerable (reclassified from National Critical in 2017).

Current population: around 375 (376; as of 1 Oct 2018)

Approx. 1/3 of population in the wild with the rest located on island and mainland sanctuaries, lowest recorded 124 birds in 1981, growing population with observed 10% average annual growth across last four years. The breeding population is made up of over 100 breeding pairs producing 60-70 chicks per year across the total population.

Rediscovery: Thought to be extinct after the last of four known specimens was taken in 1898 – rediscovered 50 years later by a party lead by Invercargill physician Geoffrey Orbell in the remote Murchison Mountains (Fiordland) in 1948 - starting New Zealand's longest standing and progressive conservation programme – 70 years of dedicated work and learnings to ensure the takahē is never again considered extinct.

Ecology: endemic to NZ, flightless, predominantly herbivorous, grassland species, require large habitats as are very territorial. A takahē pair may hold a breeding territory of 15 to 40ha depending of habitat quality. 50cm tall, average weight 2.3kg female and 2.7kg male (but up to 4kg), maximum expected lifespan 16-18 years in the wild and 20-22 years at sanctuary sites. Weird fact – because of their highly fibrous diet takahē can do up to 7m - 9m of poo a day!

Breeding: reach sexual maturity 2-3 years, monogamous (although will change mates if a more attractive one comes along), breed yearly, lay 1-3 eggs (8cm long), pair shares incubation and chick rearing duties, chick survival rate between 25-80%, depending on location. Classified as chicks: hatch – 3 months, invention: 2.12 months, curve and adults: 2.20



juveniles: 3-12 months, sub-adults: 1-2 years and adults: over 2 years, chicks may stay with parents for 12-18 months to assist with chick rearing and learn valuable foraging and life skills.

Threats: It is presumed that takahē were pushed to the brink of extinction from a combination of habitat loss and predation. Introduced mammals, particularly ferrets, stoats, cats, and dogs are the biggest threat to takahē. The NZ falcon is the natural predator of takahē. Deer culling operations have been conducted in the Murchison Mountains since 1960's to reduce grazing competition. To date the Programme has taken a precautionary approach to landscape scale 1080 baiting, using instead extensive trapping networks and utilising predator free/controlled sanctuaries.

Monitoring takahē: The Programme uses transmitters attached to the birds with a non-invasive harness and radio tracking gear to locate the birds via the signals the transmitters emit. In the Murchison Mountains, approx. 1/3 of the birds are fitted with transmitters and are regularly monitored using a SkyRanger receiver flown in an aircraft. This traverses the mountains to locate the birds and monitor survivorship. If the transmitters are stationary for more than 12 hours the transmitter will emit a faster beep, indicating either a dropped transmitter or a dead bird.

The Takahē Recovery Programme:

Department of Conservation: DOC has a dedicated Takahē Recovery Team which includes an Operations Manager, Scientist and Technical Advisor that are shared with the Kākāpō Recovery Team based in Invercargill, five Takahē Rangers based in Te Anau and two rangers based at the Burwood Takahē Centre.

Iwi and takahē: The takahē is a taonga (treasured species) of Ngāi Tahu and Ngāi Tahu is the primary partner of DOC in the Takahē Recovery Programme. Ngāi Tahu works with DOC to set recovery direction and shares in the decision making on the implementation of the Takahē Recovery strategy. Whenever takahē are transferred to a new release site they are accompanied by representatives of Ngāi Tahu, who hand over the kaitiakitanga (guardianship) of the bird(s) to the iwi of the new site.

Programme partners: In mid July 2016 Fulton Hogan joined DOC as the national partner in support of the Takahē Recovery Programme. Mitre 10 after over a decade of being the national partner remains the Official Supplier to the programme and New Zealand National Parks and Conservation Foundation provides expertise in funds management and independent assurance of the investment. The Takahē Recovery Programme has a wide network of support in scientists, veterinarians, volunteers and all the organisations and supporter groups related to the takahē sanctuary sites around the country.

Long Term Recovery Goal:

Takahē exist in growing numbers in large areas of their former natural range as a functioning element of natural ecosystems, and are treasured as a national icon.

Management Challenges:

Now with the blueprint for making more takahē the next biggest challenge is finding new homes for the growing population and to have effective and financially viable landscape scale pest control. Predator Free NZ 2050 will be ideal for takahē to reach the long term recovery goal.

Where do takahē live and how are they managed:

Murchison Mountains: (approx. 152 birds) site of rediscovery, last remaining wild population refuge above Lake Te Anau, Fiordland. A Takahē Specially protected area of 50,000ha with restricted access and an extensive trapping network of 2500 trap boxes across their habitat. The Recovery Programme has released over 80 birds into the mountains over the past four years and will continue to release 7-10 on an annual basis to supplement the wild population until it is near the estimated carrying capacity of 180 birds.

Burwood Takahē Centre: Established in 1985, originally for hand rearing eggs from the wild for release back into the Murchison Mountains. Burwood is now the hub of the breeding programme, housing up to 25 breeding pairs and their offspring. The last puppet hand rearing occurred in 2010 and now adult birds raise their own chicks, producing much higher quality birds. Burwood is the only tussock site outside of the Murchison Mountains and Gouland Downs, therefore any birds bound for the wild are brought to Burwood to be fostered on to resident birds to learn valuable foraging behaviours.

Island and mainland sanctuary sites: These sites are home to an insurance population of takahē in case disaster should

strike in the Murchison Mountains or Burwood. Many of the sites are successful breeding sites, producing around half the annual chicks per season. With 10 of the sanctuaries being the main breeding sites the other 7 provide safe homes for birds retired from the breeding programme and provide wonderful opportunities for the public to see a takahē up close. The birds across these sanctuary sites are managed as one large meta-population, as the sites are restricted by size and available habitat to hold large populations. Therefore, to ensure adequate genetic mixing and most successful pairings possible, takahē are transferred between sites and some birds go on to be released into the wild.

Gouland Downs, Heaphy Track, Kahurangi National Park: In Autumn 2018 the Programme released 30 takahē into Gouland Downs, with the hope of establishing a second wild population that is self-sustaining. This was a big step for the Programme and will provide many valuable learnings to move towards a more sustainable management of takahē recovery. The first breeding activity of eggs and hatched chicks was observed in Nov-Dec 2018. This is a positive sign that the birds are finding their new home suitable. Walkers and bikers on the Heaphy Track have also observed the birds.

For more information see <u>www.takahērecovery.org.nz</u>

