

Kākāriki Karaka Recovery Monthly Status Report: April 2022

Reporting Period: 31/3/2022 – 30/4/2022

Recovery Programme Status: How are we tracking to our goal “Preventing Extinction”?

Overall:

- The establishment of a new population at Brook Sanctuary is continuing to look positive and has been further bolstered by an additional translocation this month. This will be the last translocation for 2021/22 breeding season.
- The population in the South Branch Hurunui appears to be experiencing a contraction, and will likely require more intensive monitoring and protection to persist under the current conditions.
- There is still a significant vulnerability to this population for rapid decline during beech mast events – a priority for 2022 was determining the next sites to establish new populations. At the Recovery Group hui on 11/3/2022, it was agreed to recommend that the Hawdon Valley be our focal release site for season 22/23.
- COVID response continues to create uncertainty regarding translocations/releases, as well as day to day management of the species in the wild and captivity. Contingency plans are in place and Kākāriki Rangers have been trained to support Isaac’s and Orana Park captive operations if required.

Milestones from this month

Milestone

- Fifth translocation of kākāriki karaka to Brook Sanctuary carried out in April (19 birds translocated 27th of April). This will be the final translocation for the 2021/22 season.
- With this fifth and final release, the total number of kākāriki karaka released into the Brook is over 100 birds.
- Three nests are confirmed to have fledged so far in the Brook, one complete but with an uncertain outcome, with three more active nests expected.
- Large mixed flocks (31 birds seen in one flock) of unbanded and banded kākāriki karaka have been seen in the Brook Sanctuary.
- Work has begun in the Hawdon Valley to accommodate next seasons releases; this includes prepping the release site and establishing cat trapping networks.
- Aviary capacity is being increased at Isaacs, with aviaries to be assembled over Autumn providing another two breeding aviaries and nine holding aviaries for juveniles. The NZ Nature Fund is also looking to support construction of four breeding aviaries at Orana Park this year.
- A pair of kākāriki karaka are now on display at Orana Park, increasing opportunities for advocacy.
- There have been initial meetings between iwi, University of Canterbury and the Department of Conservation representatives to establish post-graduate iwi students studying kākāriki karaka.
- Two nests have been found on Blumine Island.

Project Issues (new actions bold and italicised)

Critical Issues	Priority	Action Required	Owner	Date First Raised
HT ensure Blumine island Orange-fronted parakeet population understanding and protection is obtained?		Understand how J4N roles can most effectively support Blumine priorities	Director NSI	27/02/2019 <i>To be resolved as J4N plan developed.</i>
How to increase aviary capacity for the Orange-fronted parakeet captive breeding programme?		Support construction of additional aviaries at Orana Park as supported by Governance and Recovery groups.	Director ESI	27/02/2019 <i>NZ Nature Fund is in talks with Orana Park to support new aviaries. New aviaries to be assembled at Isaacs over Autumn.</i>
How to ensure that work is not being compromised by access constraints, including elevated river levels and restrictions imposed by adjacent leaseholders?		Build relationships and understandings with Mt White station, Eskhead station and Lake Taylor station to establish greater security of access	Director ESI	28/10/2020 <i>Still a live issue, access restrictive for some valleys</i>
How to ensure that COVID responses, such as Traffic Light Setting changes and interregional travel restrictions, do not impact translocations?		Support travel required to enable translocation as required.	Director ESI	5/11/2021 <i>Current mandates are being relaxed over the next month, which will allow ease of travel, but ongoing issue with staff becoming sick will be an issue</i>
<i>How to bring post-graduate research students on board to support addressing data deficiencies for Orange-fronted parakeets</i>		Continued research into existing knowledge gaps to be supported by J4N positions that need to be recruited asap.	Director ESI	30/3/2021 <i>Looking at establishing post-graduate positions.</i>

Actions for GG Consideration (updates bold and italicised)

Team	Issue	Context	Recommended Actions	Risk of not proceeding	Status
Eastern South Island	Increase captive breeding capacity	<ul style="list-style-type: none"> There is currently not enough captive breeding capacity to meet the needs of the Kākāriki Karaka. 	<p>Governance Group to mandate the following:</p> <ul style="list-style-type: none"> Find solution to resolve standoff with building new aviaries whilst go cart issue is being worked through. Funding and install aviaries at Orana Park. Complete Isaac/DOC operational Plan to build new aviaries and secure 10-year tenure for captive breeding Investigate alternative funding options for IVL bid <p>Current Task assignment for this with ESI Director: DOC-6144305</p>	<ol style="list-style-type: none"> Population declines and extirpation of populations in some valleys - the survival of the species is reliant on captive released birds Species persistence Species extinction Loss of primary captive facility for the species Compromised captive breeding programme 	<p>GG agreed on recommendation during GG meeting. 27/8/20</p> <p>Anne and Mark engaged with Orana and have confirmed with Orana Park CEO that aviaries can be constructed there. Quote has been provided by Orana Park as to what it would cost them to construct the aviaries.</p> <p>Now require confirmation of funds and agreement on design. 27/8/20</p> <p>Nic Toki, Wayne Beggs and Andrew Grant met with Rob Clarke (Chair TICWT) re MOU and ongoing relationship with TICWT 1/7/2021</p> <p>Draft for 2021-2026 MOU has been completed and is with Dir ESI for consideration and signing with TICWT</p> <p>NZ conservation fund is in talks with Orana Park as of March about aviary expansions.</p> <p>The Janszoon aviary are arriving April at Isaacs and along with the Ashburton aviaries, will be assembled over Autumn. These will give us another 2 breeding aviaries and 9 holding aviaries for juveniles.</p>

OPERATIONS REPORT

Population situation (includes captive and wild sites)

SITE	Situation
ORUAWAIRUA/BLUMINE ISLAND	<ul style="list-style-type: none"> • Approximately 81 birds (based on survey conducted in August 2020) <ul style="list-style-type: none"> ○ 7 nests confirmed this season (1 unsuccessful)
BROOK WAIMĀRAMA SANCTUARY	<ul style="list-style-type: none"> • Approximately 68 birds (based on sightings over the past 3 months) <ul style="list-style-type: none"> ○ 104 birds released to date ○ 68 birds detected over the past 3 months ○ 13 birds previously detected, but not over the past 3 months ○ 20 birds have not been detected since their release ○ 3 birds have been found dead ○ 12 nests confirmed this season
HAWDON VALLEY	<ul style="list-style-type: none"> • Likely no birds <ul style="list-style-type: none"> ○ Surveys undertaken in 2021/22 have not detected kākārīki karaka.
POULTER VALLEY	<ul style="list-style-type: none"> • Likely no birds <ul style="list-style-type: none"> ○ Surveys undertaken in 2021/22 have not detected kākārīki karaka.
SOUTH BRANCH HURUNUI	<ul style="list-style-type: none"> • Approximately 243 (205-281) birds (based on mark-resight analysis in Fig. 1) <ul style="list-style-type: none"> ○ Pre-survey period reduced to 2 months to provide a more conservative estimate ○ 9 nests confirmed this season ○ 20 birds released in January
NORTH BRANCH HURUNUI	<ul style="list-style-type: none"> • At least 2 birds (based on 2021/22 searches) <ul style="list-style-type: none"> ○ 3 localised OFP sightings (2 sightings of a male OFP and 1 of a female OFP) recorded over two days in July 2021
ISAACS CONSERVATION & WILDLIFE TRUST	<ul style="list-style-type: none"> • 20 adults, 7 chicks <ul style="list-style-type: none"> ○ 10 breeding pairs. ○ 2 pairs have hatched 1 chick and 6 chicks. ○ 2 pairs not breeding, have swapped aviaries and birds around to see what happens. ○ 1 non-breeding pair has been released
ORANA WILDLIFE PARK	<ul style="list-style-type: none"> • 10 adults <ul style="list-style-type: none"> ○ 1 older pair (on display) ○ 2 pairs breeding ○ 2.2 birds for flock mating
AUCKLAND ZOO	<ul style="list-style-type: none"> • 6 adults <ul style="list-style-type: none"> ○ 2 breeding pairs, 1 non-breeding pair
MT BRUCE	<ul style="list-style-type: none"> • 2 adults <ul style="list-style-type: none"> ○ 1 pair on display

TOTAL POPULATION ESTIMATE	Current Total ≈ 439 birds (including chicks in captivity)
	• Captive ≈ 45 (38 adults and 7 chicks)
	• Wild ≈ 394
	2020/21 Total ≈ 351 birds
	2019/20 Total ≈ 304 birds
	2018/19 Total ≈ 180-230 birds (pending revision)

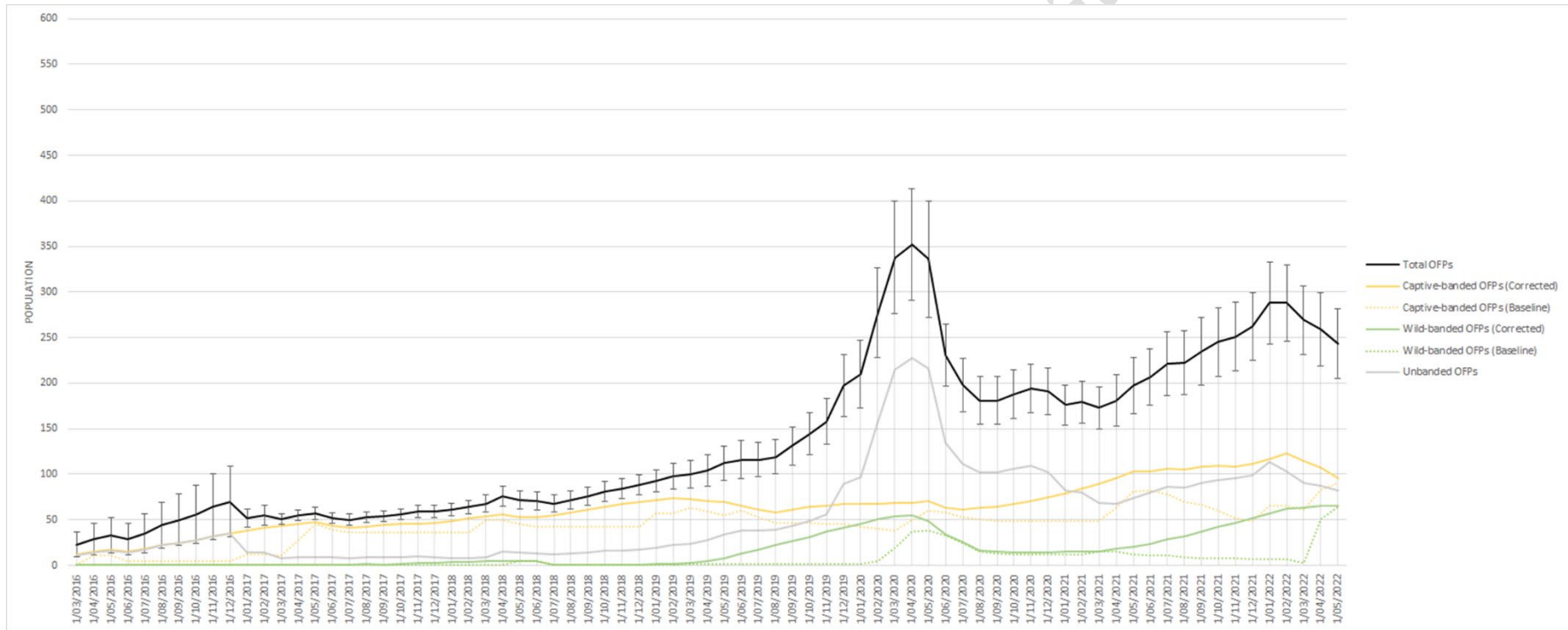


Fig. 1: Rolling population estimate for OFPs in the South Branch of the Hurunui, based on mark-resight survey data collected in the year leading up to each date. Error bars represent 95% confidence intervals. The analysis includes a 2-month pre-survey period to determine the baseline number of banded birds present. The impact of releasing birds in the wild is only fully realised in surveys that commenced after the date of their release. An interim correction factor has been applied to account for this.

Work programme (includes captive, operations, and research)

SITE	Last Month – What happened since last report?	Next Month – What is planned for next month?
Rangiora	<ul style="list-style-type: none"> • Fifth kākārīki release for Brook Sanctuary • Track cutting for bait station installation in Hawdon and South Branch • Bait station lines flagged in the Hawdon • Trap checks in all valleys • Nest searching and protection South Branch • Post 1080 tracking tunnel monitoring – for Stoats • Preparing a “Change request” for the Te Waipounamu project • Best practice predator trapping course for both HikingNZ and DOC staff • Valley-wide surveys for OFPs in Poulter and Andrews, no birds found. • Ongoing talks with higher education facilities and iwi about post graduate students studying OFPs. • Aviaries flown from the South Branch to Hawdon • Cat trapping networks installed in the Hawdon 	<ul style="list-style-type: none"> • Bait station lines flagged in the Hawdon • Track cutting by contractors in the Hawdon for these lines • Bait station preparation and installation in the South Branch and Hawdon Valley • Trap checks in all valleys • Seed catchers to be built and placed under feeders (prototypes have been designed) • Radio tracking birds in the Brook • Electrician setting up power in the Poulter • Setting up research on Blumine • Te Tatai Atawhai training • Flying aviaries from the Poulter to the Hawdon • Aviaries set up in the Hawdon
Oruawairua	<ul style="list-style-type: none"> • Monitoring of all nests • Feeder cameras installed • Monthly trap and device checks • Training of Picton based rangers in Brook Sanctuary • Public access track cut • Install wasp bait stations • Resource consent work for 2x Portacom units 	<ul style="list-style-type: none"> • Wasp bait operation – <i>Vespula</i> species have never been controlled on island • Recruitment of rangers for fixed-term positions • On-island implementation of research plan from Rangiora staff • Support 1080 operation • Monthly trap and device checks • Biodiversity track cutting from volunteers
Science	<ul style="list-style-type: none"> • Cameras are monitoring predator activity at the base of 43 OFP nest trees in SBH, battery and SD card swap for trunk cameras • Installation of nest cameras, replacement of feeder cameras • Revision of SBH population estimate • Preparation of band combinations for releases • Installation of transmitters on released birds • RFID band modifications, addressed issues re. RFID implementation • Design and demonstration of feeder modifications • Discussed research for post-graduate students • Provided advice for documenting monitoring effort and adjusting tracking tunnel layout • Began documenting status of research initiatives 	<ul style="list-style-type: none"> • Finish documenting status of research initiatives • Continue discussion around post-graduate student involvement • Commence RFID band and reader trials • Refine and test feeder modifications • Modify cameras to reduce issues with condensation during damp and rainy periods • Modify app to record more detailed data on other threatened species • Continue to update summary graphs and charts • Revise history of nests in Hawdon and Poulter • Plan digitisation of historic data • Provide guidance for surveys, nest monitoring, feeder monitoring, etc. • Update list of potential release sites
Captive	<ul style="list-style-type: none"> • Some breeding continuing, chicks will be held over winter. 	<ul style="list-style-type: none"> • Construction of additional aviaries.