

Biodiversity management (native species) report 11 May 2011

(Previous report 22.2.11)

Kiwi

Our last chick of the season has just been released back to the mountain. It had successfully hatched at Kiwi Encounter, from an egg that Mark needed to rescue from Tari's nest (I believe he only had to rescue 2 eggs this season!). Our 6 known breeding pairs of kiwi (we're still a bit unsure about a 7th) produced 14 known chicks this season. Two of those unfortunately died from misadventure, which is a 14.3% mortality rate – which is of course way better than the 95% mortality of young birds that is known to occur in unprotected sites. Next season we expect more of our founder birds to reach breeding age, and some of our existing younger breeders will become more experienced and productive – so production and survival of chicks should rise.

In March I submitted a proposal to the trust, recommending that we work towards completing the current intensive-management phase of our kiwi reintroduction programme by the end of the 2012/13 season at the latest. I have received no objections to that. The following is a brief history of our kiwi programme, and a quick outline of how it will now be completed.

Planning for a kiwi reintroduction programme began in 2004, and the first founder birds were released in 2005. The original goal was to translocate 60 founder birds, bred from at least 30 source pairs, from (as much as possible) throughout the remaining range of this kiwi taxon. The trust is now considering reducing that goal down to 40 founder birds (still from 30 source pairs), due to the ongoing difficulties experienced in acquiring founder birds. Sources so far have been Tongariro Forest Park (DOC ONE programme), Otorohanga captive breeding programme (Otorohanga Zoological Society), western King Country (a rescued pair from a functionally extinct relict population), and Taranaki (Taranaki Kiwi Trust ONE programme).

All founder kiwi have been released into the 2 sub-enclosures (total 100 ha), as the main mountain is not quite yet ready for such ground-dwelling birds (open traps and dog teams are still being used to clean up the few remaining hares). There are currently 24 known founder kiwi in the sub-enclosures, and they were sourced from 19 breeding pairs.

The first breeding of kiwi on Maungatautari occurred in the 2007/08 season – and 6 or 7 pairs have now bred, producing many chicks. Ten of those progeny have been exported to Tongariro Forest Park – to avoid overcrowding in the sub-enclosures, and to reduce the risk of small-population genetic effects compromising the population (that risk will be minimised when all of the necessary founders are on the mountain). Another 13 progeny (nearly all from the 2010/11 breeding season) will soon be exported to Tongariro – and next season progeny will be exported to Taranaki, and perhaps to other projects. Those exports will terminate when the main mountain is available for kiwi (expected very soon). When the Maungatautari mountain population has reached capacity, about 100 kiwi a year will then be available for export to other restoration projects.

The trust is now looking at completing this kiwi reintroduction programme by the end of the 2012/13 season at the latest (9 years after it started) – thereby finally bringing to an end the

prolonged intensive (and expensive) management that has been necessary. Efforts are currently being made to find additional sources of founders (to be ‘traded’ for export Maungatautari birds) – but if agreements can’t be reached, then the trust might have to settle for having only about 32 founders from about 27 source pairs (which can be provided by current sources). The latter course might pose some risks, given the potential future value of Maungatautari as a ‘Kohanga Kiwi’ site (a source of many birds for other restoration projects). I have asked the Kiwi Recovery Group to provide formal comment on this – and I suggested that if they do think it might be a significant risk, then perhaps they might like to help us acquire additional founders for Maungatautari. Nine years and several hundred thousand dollars is a lot to spend on one species reintroduction programme (i.e. kiwi) to Maungatautari, when there are many other species that also need our scarce resources.

Ted Tauroa has suggested that I do more of the groundwork myself with the iwi contacts for 2 potential new source sites for founder kiwi for Maungatautari, and then start involving mana whenua. I plan to start doing that this week or next.

Takahe

All birds appear good. Linda Kilduff is the DOC ‘Takahe Metapopulation Manager’ based in Te Anau, and she will be visiting here on the afternoon of Thursday 12 May. I will show her our 2 takahe sites, and we will discuss possible future plans for our young birds.

I will soon be colour-banding the 2 sub-adults from last breeding season, and weighing & health-checking all the birds. I will also take feather samples to sex the 2 youngsters from last season – but now that they are well grown, their ‘culmen’ and ‘tarsus’ (bill plus shield, and lower leg) measurements might provide an indication of that.

Hihi

Kate reports that all of the 39 hihi released on Thursday 14 April were still alive and mobile a few days ago. This must be one of the first times that such a complete translocated cohort of a threatened species have all been radio-tagged (other than our kiwi). One-hundred percent survival, more than a month after the release, is really good information to have. Some of the tiny transmitters are now starting to run out of battery power, and they will soon start falling off as well (they are only lightly glued to the base of the tail feathers) – but she has now got some really good information on survival and dispersal (they have apparently hooned all over the mountain, and sometimes beyond the fence and back again). A few are only now starting to visit the feeder stations in the southern cell, so they certainly didn’t seem to need them.

Yellow crowned kakariki

Now that the pitoitoi translocation is over, I will again start making arrangements for the birds available at Lochmara to be quarantined, air-freighted, and released into our aviary. They will only be held there for a couple of weeks at most, before release. We have released more males than females so far, so hopefully the new group might be skewed the other way.

I understand that the occasional bird or 2 is still visiting the feeding stations in the clearing, and the day after the pitoittoi release I heard kakariki at both the western and eastern extremities of the southern cell. It is possible that our few captive-bred released birds might have produced a clutch or 2 last season, so any observations of unbanded birds will be confirmation of that (but the bands are hard to see on their short legs). And any observations of colour band combinations will also be very useful (at the feeders or elsewhere), as we have very little such data on the survival/dispersal of our released kakariki. So feel free to collect same, if you can, and pass that info on to me.

Robins/pitoittoi

Mana whenua have indicated that they prefer to use the Maori name 'pitoittoi' for robins, rather than 'toutouwai'.

Last Friday morning we released our first 40 pitoittoi at the clearing; 21 males and 19 females. Looking back in my records, serious planning for a pitoittoi translocation began in 2004 – which provides an indication of what is involved in these things.

In February this year we started visiting Pureora to feed/train (with mealworms) birds at 4 different locations there – and by the time we were ready to start catching, we had trained about 160 birds. We only needed to catch 70 (40 for us and 30 for Hauraki DOC who were working with us) – but we needed to train those extras to allow for any sex imbalance (normally many more males are caught), dispersal of juveniles, and any mortality between training and catching (there's no shortage of moreporks and falcons at Pureora, and the occasional stoat and ship rat of course).

We did 3 final days of feeding/training on 28 April-1 May, then went back and started our catching on Wednesday 4 May (catching is done with what is basically a spring-loaded butterfly net mounted on the ground, baited with a mealworm, and remotely released). By mid-afternoon the next day we'd caught all our birds. At 7.30am the next morning (Friday), we received a forecast for bad weather on Saturday (the planned release day), so we then made the call to release all our birds at Maungatautari as early as possible that day (Friday) – which is what we did, the release was mid/late morning.

At least 8 individual birds have been seen around the release site in the last few days, and it seems that most visitors since the release have seen one or more pitoittoi between the entrance and the tower.

Various people are planning to breed mealworms for our post-release monitoring, which is great. The initial primary reason for this feeding/monitoring is to encourage some of the released birds to remain in the southern cell (the release area). This will facilitate the collection of data on survival/dispersal and breeding, and it will also increase the chances of the visiting public seeing/hearing pitoittoi from day one (all might otherwise disperse beyond the southern cell). The first reason will dwindle with time, but the second reason might continue longer. When pitoittoi are eventually common in the area, feeding might no longer be considered necessary or desirable. Feeding wildlife can cause such projects to be seen as just another 'zoo' rather than for ecological restoration, and can also cause species to become reliant on such artificial food (while not so likely for pitoittoi, this is a potential worry for species like kaka) – so the reasons for the feeding need to be clear, and able to stand scrutiny.

I have produced an instruction sheet and a data recording sheet for those who wish to contribute to this monitoring effort; please contact me if you are interested.

Heartfelt thanks to all those staff and volunteers and others who helped with – planning/preparation, bird feeding/training, people-food management (including cooking; our people fed at least 35 people on at least one night at Pureora Lodge!), team safety, vehicle transport (including 4WD), iwi consultation & tikanga, funding, bird food management, making up the bird transport boxes, recruiting/informing/training the team, bird catching/handling/processing & care while held in the boxes, communications, field logistics, and event management (for the release). That's in no particular order – and I've mentioned no names, or this report would be several pages longer. But you know who you are.

A top-up translocation of a similar number of birds will still be required – and about the same time next year will be a good time for that, to take advantage of already having some pre-trained birds there (yes they do remember the training for at least a year afterwards).

Tieke/saddleback

After the pitoittoi release (for which Dr Kevin Parker was contracted to do most of the bird processing/banding/sexing), Kevin and I and Gordon met with Ted Tauroa to discuss Kevin's proposal to translocate tieke to Maungatautari and one other site next year. Ted was very supportive, and suggested that Kevin do more of the groundwork with the source iwi for the 3 different islands he has in mind. This is part of a large post-doctoral research proposal that Kevin has submitted to Massey University (he is on Massey staff). He will be looking for as much funding as he can get, but it is also likely that MEIT will need to come up with some of that. But it will be much cheaper to MEIT than if we had to mount the whole operation ourselves, and this is an opportunity we shouldn't miss.

Post script

While looking around the southern cell for pitoittoi on the day after the release, Kevin Parker and I heard every bird species that we have released onto the mountain so far (except kiwi) – and we saw all of them except whiteheads and yellow crowned kakariki (and kiwi). So the magic is certainly starting to happen. Bring on kokako later this year, and tieke/saddleback early next year. The pitoittoi song has already changed the character of that area (as did the first kaka we released), and the addition of kokako and tieke will really start to show what it can be.

Virtually all of our translocations have been deliberately done in a way that increases the chances of visitors seeing/hearing those species in the main visitor area immediately afterwards (i.e. they don't have to wait for the populations to build up). That has been achieved by (a) releasing them in the middle of the southern cell, (b) soft-release via the aviary in some appropriate cases, (c) appropriate supplementary feeding, and (d) providing nest boxes in the case of kaka. I have been somewhat surprised (and pleased) how well that has worked. Whiteheads have been the only species so far for which that wasn't really possible – but they are already showing good signs of establishing, and we can expect them to become one of our commonest birds. Although individually less impressive than e.g. a

saddleback, being in the middle of a large feeding flock of whiteheads (often with other species tagging along) can be quite an experience.

Experience elsewhere has shown that we can expect some kokako and tieke to remain close to the release site as well – as some of the pitoittoi appear to have done.

Chris Smuts-Kennedy
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