Tūturuatu Workshop 1: Context
31-Oct-2022

Attendance:

Name	Role	Affiliation
Laura Boren	Science Advisor Aquatic	Department of Conservation
Sarah Wilson	Facilitator	
Christine Reed	Biodiversity Manager	Pukaha National Wildlife Centre
Brian McDonald	Media and Comms Advisor	Department of Conservation
Kat Smith	Conservation Team Leader	Pukaha National Wildlife Centre
Anne Richardson	Wildlife Manager	Isaac Conservation and Wildlife Trust
Raelene Berry	Senior Conservation Ranger	Pukaha National Wildlife Centre
Leigh Percasky	Assistant Wildlife Manager	Isaac Conservation and Wildlife Trust
Sheree Smith	Acting Ops Manager/Supervisor Bio/Rec East Coast	Department of Conservation
Rebecca Lander	Bio Senior Ranger, East Coast	Department of Conservation
Ian Angus	Director Terrestrial Science	Department of Conservation
Troy Makan	Technical Advisor	Department of Conservation
Jamie Cooper	Biodiversity/Biosecurity Ranger Chatham's	Department of Conservation
Kate McInnes	Veterinary Science Advice	Department of Conservation
Clement Lagrue	Science Advisor, Ecosystems	Department of Conservation
Brett Gartrell	Professor, Vet	Massey University Wildbase
Laurence Barea	Science Advisor Terrestrial	Department of Conservation
Lorraine Stephenson	Governance Board Member	Rangitāne o Tamaki Nui a Rua
Dave Houston	Technical Advisor	Department of Conservation
Rachel Ward	General Manager	Cape Sanctuary
Tryphena Cracknell	Ops Manager, Hawkes Bay	Department of Conservation
Ilina Cubrinovska	PhD candidate	University of Canterbury
Ash Murphy	Science Manager Terrestrial	Department of Conservation

Emma Kearney	Ops Manager, Auckland Inner Islands	Department of Conservation
Kathy Houkamau	Ops Manager, Wairarapa	Department of Conservation
Rose Collen	Captive Facilities coordinator	Department of Conservation
Denise Fastier	Senior Ranger Bio, Hawkes Bay	Department of Conservation

Karakia/Welcomes/Introductions

Laura opened with a karakia, and then Sarah welcomed everyone to the workshop setting the guideline for introductions asking everyone to provide their name, affiliation and what type of context they bring to the table. There was a wide range of expertise in attendees

Director's Context

Ian Angus, Acting Director Terrestrial Science thanked all for supporting the workshops and the shore plover work across years. Apologies from two key directors from the operational arm of DOC, Jack Mace (Lower North Island) and Andrew Baucke (Auckland) were expressed.

Ian reiterated the DOC commitment to work with iwi and partners to protect species. To be successful in this task Ian reflected that there was a need to be clear what species needed conservation action and to be confident on recovery actions. The need for DOC to prioritise to ensure resources were allocated wisely across years was noted. The recovery work on shore plover was highly valued, but some recent events, at release sites and in captive management, suggested it was timely to bring people together to assess the recovery effort and to discuss of there were options that should be explored to improve the likelihood of success. The workshops aimed to provide an avenue for such discussions, and from these, refresh and update the shore plover recovery plan. Ian noted the commitment from all participants to the recovery work and appealed that discussions be undertaken respectfully to ensure a collaborative, open working style going forward.

Shore Plover 101

Dave Houston, Technical Advisor in the Terrestrial Unit and subject matter expert on Tūturuatu shore plover gave a short introduction on the species. The presentation is attached. Key notes from the presentation include:

- Shore plover were once widespread (at least believed to be) and definitely in the South Island.
- They disappeared from the North Island first, 1872 was the last observation of shore plover on the mainland.
- Since then they have been confined to the Chatham Islands.
- They are capable of reasonable flights.
- Ranked as threatened – nationally critical
- ~250 birds, over half of the population is on the Chatham Islands (South East Island/Rangatira, and Mangere with occasional visitors to Pitt)
- The second largest population is Waikawa Island.
- Captive management requires large breeding and flocking aviaries. There is a comprehensive husbandry manual to guide the work at the captive facilities.
- Dave summarised 50 years of translocation history, some notable points in the translocation history.
- Waikawa Island had a successful start up and work began to establish Mana Island.

- Rat incursion on Waikawa set the population back and Mana was put on hold while dealing with the rat incursion. Since then though, the Waikawa population has done well.
- Issues faced at Motutapu have included avian predation and stoat incursion. Generally speaking adult survival hasn't been high enough to grow the population successfully. So the population hasn't increased the same way Waikawa did.
- Island borne juveniles more likely to survive than new chicks, but need to establish breeding pairs on an island to get to that point.
- To do that transfer <40 day old chicks for rearing and releasing.
- Translocation time always subject to change due to disease, breeding etc.
- There must be post release monitoring to determine outcomes of the release and adapt management.
- Avian pox is an issue in captive facilities that can impact numbers of birds available and when they are available to release.
- Working with Wildbase Massey University (vaccine) and Canterbury University (genetic resilience) to improve circumstances for captive shore plover.

Following the presentation there was a question as to whether Avian Pox has been seen in the wild or is it mainly affecting captive birds?
RC: yes it mainly affects captive birds though one case was seen on Motutapu and there was one suspected case on Mana Island.
BG - Standing water and freshwater, as well as diet leading to softer skin play a part in making the captive birds more susceptible, genetics plays a part as well.
KM- Similar is seen with captive penguins.

Breakout Sessions Summary

The group was split into 7 breakout rooms to discuss their context in the Tūturuatu recovery plan. When the group came back together as one the individual groups reported back on their discussions. Key points from the groups were as follows:

- Five pairs of shore plover at Isaac, all breeding. There is a concern about the safety of the birds being bred at captive sites and a desire to want to know they are going to go somewhere safe.
- Have we got enough islands/release sites to consider? And have we the funding/resourcing to ensure getting through the establishment phase at release sites.
- At captive facilities need safe aviaries, this requires maintenance (some old vintage ones that need an upgrade).
- Reflecting on the avian pox. There are many keen to talk more with Brett.
- Another factor to keep in mind and whether we can address it now… climate change. How to pick release sites that can go forward in light of climate change? How might we do that?
- Birds can recover from Avian Pox with the vaccine but lesions but can be quite deforming or damaging.
- Pox impacts juveniles. So should be immune once released if get them through the rearing stage. Genes from the Chatham Islands more resistant to pox. There is a plan to teach captive facility staff how to vaccinate.
- Climate change. Flooding, and water quality issues high rain fall overwhelming the riparian planting so getting more faecal matter from the rivers. Contamination comes

through in the water boatman food for juveniles. Not a problem that's going to go away any time soon. Water management will be a big issue going forward.

- Nutrition will need some work but it keeps them alive and keeps them breeding.
- But recognition that these are secondary issues to whether we have adequate release sites.
- Chatham's Rangatira birds provide top ups to the captive facilities. There is concern from local communities as to how the translocations impact the population. Key desire from this is to provide good communication to all interested in shore plover recovery.
- Motutapu has issues with predation, key concern how to manage this and how to connect everyone to communicate effectively, especially about the whakapapa of the birds.
- Cape Sanctuary relatively new in this space, but keen to know end goal. Sometimes requested not to breed too much if not places to go. Expensive job to run if can't do the full thing. Keen to understand whether mainland predator free areas could be assessed as a potential tūturuata habitat.
- Particular lessons/context regarding the Chatham's – it's a remnant population. It's there because there have never been rats on Rangatira. Shore plover were extinct on the mainland before stoats were released. If we have more islands like Rangatira could be beneficial for shore plover.
- Why the islands with bush are not holding the birds with ruru and kahu, when on other sites there are gulls and skua. Maybe to do with ruru being night predators and shore plover not very astute at night.
- Relationship management for Waikawa Island. Helping manage Helen's time. Resource hungry for biosecurity. How can we think outside the box.
- How we develop relationships with iwi at each area?
- Climate change needs to be at the forefront of everything we do.

Key themes that have come up

There were a few key themes that kept coming up through the discussion these were:

- Where to put the birds
- Avian Pox
- Genetics
- Climate Change

Last discussion points before closing

Desire to go through in more detail reason for success and failure of some of the sites

It's not just about the science but also the communities the birds are part of (whakapapa of the birds important)

Context on avian predation and the establishment phase of a new population. Comes down to small sample size. Avian predator control (APC) is not a forever thing, they can survive in the presence of avian predators – but it comes down to a numbers game. APC is a temporary

measure. What is the right number? What is manageable? Mammal predation may be a completely different story.

A point was made about difficulties of releasing waders. An example with Kaki stilts – 40 years – 1000's of birds pumped into the Mackenzie basin but population only in the low hundred's. Long term, resource intensive. However, it was raised we can't compare the black stilt to the shore plover due to them being on the mainland and susceptible to many more predators.

There is a concern about whether to continue to release at Motutapu?

One of the issues with translocations is knowing the fate of the birds. It's often put down to dispersal, but we don't always know what happened. Recent release on Motutapu – two left the island. Managed to get one back. Highlighted the importance of monitoring and different techniques for monitoring (transmitters).

Mana second release, 30 birds, which dispersed. Six were caught on the mainland and returned and put transmitters on. There was a falcon that resulted in mortalities, some observed. The benefit of transmitters, and having observers to identify issues we need to address. Issues that need to be managed will be different for different release sites.

Group talked about raptors with Laurence. Falcons an issue at Pukaha. Haven't managed ruru on sites before. Don't have a method, and not sure of appetite for controlling ruru.

Process for translocations starts with an outline for the idea. Goes through a consultation for a translocation proposal. Pulls out all the issues that might impact potential success.

Reporting for each site is done separately.

There is a process for determining other sites. Also a student who looked at islands. Need zero mammalian predators. Don't know all the islands available to us, especially as some are privately owned and also don't know the habitat for all these. But starting to compile. Need to think about the minimum population size they can support (a reasonable number of birds). MSc thesis attached.

Being mindful of the long term and what other sites might become available in the future, e.g. with various predator free projects.

Conclusion

Next session will focus on Critical Issues and start to narrow the focus on the concept of site selection and safe sites to translocate birds to.

A finishing comment

Something many of us expressed in our intros but that we didn't expressly verbalise as important context - is how much we all care! There are a lot of us passionate about tchuri wat' and working hard for their survival.