

From: [REDACTED]
To: [REDACTED]
Subject: RE: Traps great risk to kea: advocate | Otago Daily Times Online News
Date: Tuesday, 9 May 2017 10:22:00 a.m.

Thanks for that,

Technically what [REDACTED] is saying regarding the potential risk to kea is correct, although I cannot comment on the 'scale' of the risk.

However, I'm concerned about what the article suggests DOC has said:

1. the captive trials showed that kea could actually access the trigger on an A24
2. as far as I am aware, DOC is not doing the kea monitoring or continual trap improvement as stated in the article.

Furthermore, a kaka was killed by an A24 in Boundary Stream, this would indicate that a kea would be able to trigger the trap if it so desired.

Cheers

[REDACTED]

[REDACTED]

Principal Scientist - Threats

[REDACTED]

[REDACTED]

Conservation leadership for our nature *Takina te hi tiakina te ha, o te ao turoa*

-----Original Message-----

From: [REDACTED]
Sent: Tuesday, 9 May 2017 9:53 a.m.
To: [REDACTED] <[REDACTED]@nz>
Subject: Traps great risk to kea: advocate | Otago Daily Times Online News

Hi [REDACTED]

Have you seen this - <https://www.odt.co.nz/regions/wanaka/traps-great-risk-kea-advocate> ?

[REDACTED]

From: [REDACTED]
To: [REDACTED]
Subject: Kea & A24 footage at willowbank
Date: Thursday, 14 July 2016 10:24:26 a.m.

Hi [REDACTED] & [REDACTED]

If you have access to the Rangiora S drive, the footage of A24s in A'Pass & Willowbank are in :
S drive > Kea > kea & Goodnature trials > individual folders <S:\kea\kea & goodnature A24 trials\Camera trial summary.xlsx>

Footage summary is in a spreadsheet called camera trial summary which analyses individual images.

The A'Pass footage is analysed – minimal interaction. Low kea numbers at the pass during that period. These were setup with weka excluder, baited with erayz, strike counter, empty gas canniser.

The willowbank footage is only **partially analysed** (due to the volume). This trap was set up without the weka excluder & UNBAITED. The trap height ranges from 14 – 7-8 cm as the trap has been shifted a number of times by willowbank staff. The staff advised that the novelty of the trap wore off (not sure how long this took because of camera issues) but when the trap was shifted, interest was renewed.

In the spreadsheet (camera trial summary), the footage which shows keas putting their head in the opening is highlighted in red.

I have reset the trap & camera at willowbank. There is tissue in the lure canister extending to (but not beyond) the trigger mechanism. Keas will need to push pass the trigger mechanism to remove the tissue paper. Hopefully this will be obvious on camera.

Cheers

[REDACTED]
Ranger Operations (Intensively Managed Sites)
Department of Conservation

[REDACTED]
Conservation for prosperity *Tiakina te taiao, kia puawai*

From: [REDACTED]
Sent: Tuesday, 20 June 2017 3:49 p.m.
To: [REDACTED]
Subject: kea

Giddy [REDACTED]

Sorry to hassle you, but I'm quite worried about this.

Anyway here are some notes – my thoughts which will be expanded for the advice I'm to give to [REDACTED]

See ya
[REDACTED]

The recent video footage of kea interacting with Goodnature A24 traps demonstrates that kea can, and probably will, be killed by these traps. This leads to four questions:

1. How many kea kills are acceptable?
2. How can we monitor kea kills so that we accurately know how many are being killed?
3. What should we do in the meantime?
4. Why is this more of a problem for the A24s than it is for 1080?

The BFOB tag has been tasked with coming up with a plan to answer these questions – this is the short version focussed around the kea near Arthur's Pass. This note was prepared in haste – some detail might change with more careful consideration.

1. How many kea kills are acceptable?

The kea population around Arthur's Pass National Park is declining or at best stable despite our intensive pest control efforts. A likely explanation for this is that the pest control blocks, Hawdon, Andrews, Poulter and South Branch Hurunui are adjacent large areas of private land with high stoat, rat, cat and possum densities on which there is no pest control. Without addressing pests on neighbouring land, our pest control operations may never be as effective as we need.

In the Poulter and South Branch where the A24s are to be deployed, the new traps result in an expansion of the trap network and in all three valleys the density of traps will remain much the same in the areas that are already trapped. The increase in area trapped might make things better for kea – but it might not. Remember that the benefits of A24s are not that they are better than existing traps at catching rats and stoats, it's rather that they are potentially cheaper to run. If the new trapping network was going to result in an increase in keas then we could afford to lose some to the traps, but if we're unsure whether kea numbers are going to increase at all, then we can't afford to lose none – let's be pragmatic and say that given that there are only about 100 kea in these valleys we could afford to lose no more than 1 or 2 per year. Remember these are long-lived birds that normally have high survivorship.

2. How can we monitor kea kills so that we accurately know how many are being killed.

To detect a very small number of kea kills we either have to put cameras on nearly every A24 trap, or we have to radio tag almost every kea. Say for example we put cameras on 20% of the traps – when we detected one kill we'd have to conclude that we had killed 5 birds and shut the traps down. 20% of traps is 300 cameras at a cost of \$90,000 to buy and probably a hundred thousand per year to run. Similarly if we put transmitters on 20% of the kea population, when 1 was killed we'd have to conclude that we had killed 5 and shut the traps down. Catching and monitoring kea is very expensive – also probably a couple of hundred thousand per year. Neither of these options are particularly practical nor quick.

3. What should we do in the meantime?

Its possible, even likely that young kea will be attracted to the traps and large numbers of them might be killed. Kea are inquisitive by nature and young kea particularly so. Its not unlikely that all the young kea in these valleys will be killed each year.

Until we are confident that only a very small number of kea will be killed in these traps, we can't afford to use them at sites where kea will be at risk. A possible fix is the addition of weka excluders to the traps, but this would take some time and the traps should not be set in the meantime.

4. Why is this more of a problem for the A24s than it is for 1080?

We know that 1080 kills some kea, but we argue the gains justify the losses. Why can't we apply the same argument to the A24 traps.

The traps are set continuously – 1080 is toxic often for only a few days. A kea **might** find a 1080 bait in the few days it is toxic. A kea will **certainly** find at least 1 trap in 365 days.

Young kea become increasingly less inquisitive as they age and 1080 is often used at a time when the young kea are at least 6 months old. The traps will be active throughout the inquisitive stage of keas development. The sites at which the A24s are being deployed are sites that already have a trapping network in place, and the traps that are currently in use don't catch kea. The new traps offer a cost saving and an extension of the trapped area, but there is no evidence that they kill more stoats and rats than the existing traps and they probably kill kea. The new traps will likely make already trapped sites much worse for kea.

Principal Advisory Scientist
Department of Conservation
Private Bag 5
Nelson

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Official Information Act

From:
Sent:
To:
Cc:
Subject:

Monday, 17 July 2017 9:17 a.m.
RE: Kea and Goodnature traps

Hi All,

Sorry for sending this around at the last minute but I finally found some time (on the weekend) to write a quick report on the A24 trial conducted down in Haast [DOC-3110742](#). It may add some more context to the quick updates I have sent around previously.

Cheers,

From:
Sent: Saturday, 15 July 2017 1:39 p.m.
To:
Cc:
Subject: RE: Kea and Goodnature traps

Hi

I may or may not be able to join you for the phone meeting on Monday due to family commitments. I'm writing this to hopefully contribute to Monday's meeting.

has asked the following questions and the BFOB TAG advice to date only really addresses question 2 and 3 (answer in read below)

1. exactly how much of the A24 trap networks we are referring to,
2. what monitoring plans have been put in place for the network, - cameras have been used and obtained footage of kea accessing traps but we know of no monitoring to assess the risk to kea at the population level
3. what thresholds for incidental kea capture been considered - the thresholds that make sense at a kea population level are very low see DOC-3077961
4. and what Good nature are currently doing with the in situ trap network that has already been deployed.

Below I have attempted to lay out a logical pathway using questions that will hopefully be useful for Monday's meeting.

1. Is there a risk to kea from A24 traps? Yes but the exact risk is currently unknown. There is also a risk to other native species (e.g. weka and robin) but the extent of that risk at the population level is also unknown.
2. What monitoring is required to assess the risk to kea (and other native species)? Again we address this issue in DOC-3077961 – it comes down to using heaps of cameras and radio tags over a few seasons at lots of places or on a smaller scale (at sites) for a long time. The issues are that different individual and different aged kea behave differently, they are highly mobile and they can fly away to die or be scavenged if killed by A24s so looking around traps doesn't work as a monitoring tool. Risk to kea maybe patchy through space and time.
3. What would monitoring cost? It would be very expensive and take a long time.
4. If monitoring was considered affordable who should pay for it and what should happen in the meantime?

5. If monitoring is considered too expensive what are the alternatives?

5a. Don't use A24s – fortunately there is an alternative trap (DOC 200) that doesn't carry the same non-target risk, is probably cheaper over time and possibly more effective.

5b. Use weka excluders –they may reduce stoat kill efficacy (as they do for rats) and may still pose a risk to kea (getting caught in excluders or accessing the trap by removal of excluders – this risk could be assessed in captivity).

5c. Design something to prevent non targets accessing the trap while maintaining access for stoats.

6. If A24s are replaced by DOC 200s who will pay and what will it cost?

7. If weka excluders are used who will pay, who will monitor risk to kea and who will determine efficacy? There would be a time delay and considerable expense to determine efficacy and OFP are going extinct so effective stoat control at Arthurs Pass matters now.

8. If a new excluder is designed, who will pay, who will monitor efficacy, how long will it take and what should happen in the interim?

9. What is the appropriate management action(s) at Arthurs Pass, Haast and other DOC and non-DOC sites nationally?

Hopefully this exposes some of the critical issues.

Cheers

██████████

From: ██████████

Sent: Friday, 14 July 2017 8:34 a.m.

To: ██████████ <██████████> Elliott <██████████>

<██████████> <██████████> <██████████>

Cc: ██████████ <██████████> ██████████ <██████████>

<██████████> Osorne <██████████>

Subject: FW: Kea and Goodnature traps

Hi All,

I want to have a phone meeting (or in person if it can be arranged quickly) to provide clear advice to the DDG's Operations and Biodiversity on the deployment of GA24 traps in kea habitat.

The specific points are to resolve ██████████ questions re the advice that I gave at the e-mail at the start of this chain. Re-printed here:

My recommendations for South Westland and Arthur's Pass:

1. Close down GA24 traps that have been deployed
2. Replace as many as possible with DOC traps;
3. Run smaller trials using GA24 in these sites under video surveillance, e.g. part of Hurunui site.
4. Engage Goodnature urgently to solve kea interaction CI
5. Convene Team Process to resolve critical issues of how to use GA24 traps in kea habitat.

██████████ has asked the following:

1. exactly how much of the A24 trap networks we are referring to,
2. what monitoring plans have been put in place for the network,
3. what thresholds for incidental kea capture been considered
4. and what Good nature are currently doing with the in situ trap network that has already been deployed.

I have asked for feedback on ██████████ items from ESI and WSI regions. I've got that feedback and I will circulate it as soon as we have confirmed team members.

██████████ (my PA will be following up with you to see when we can meet or call up).

Possibly Tuesday afternoon 3 onwards

██████████
Director - Operations, Eastern South Island Region
Department of Conservation—*Te Papa Atawhai*
DDI: +64 3 ██████████ | M: +64 27 ██████████
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From: ██████████
Sent: Tuesday, 11 July 2017 1:47 p.m.
To: ██████████ <██████████>
Cc: ██████████ <██████████>
Subject: RE: Kea and Goodnature traps

Hi ██████████

Are you wanting different names from those that advised before? Or a subset so you can have representatives to raise the variety of critical issues - everyone in the same team process? The first names that come to mind are:

- ██████████ for monitoring and an understanding of the functionality of Goodnature traps
- ██████████ for kea (because ██████████ and ██████████ are away)
- ██████████ as a problem solver o kea management

I would like your advice on what level of staff you will have at this team process. Will you have ██████████ or ██████████ If so you might want to invite a director from Biodiversity science.

Cheers susan

From: ██████████
Sent: Tuesday, 11 July 2017 11:22 a.m.
To: ██████████ <mkessick@doc.govt.nz>; ██████████ <██████████> Allan Ross
<██████████>
Cc: ██████████ <██████████>
Subject: RE: Kea and Goodnature traps

Hi team,

A couple of points to keep you in touch.

I'm working on the OIA from Forest & Bird – it probably should have gone to S&P / Biod, I'll forward the package to Allan, once it's well advanced for any feedback.

Please have a read of ██████████ comments back to me in the e-mail below.

From my perspective monitoring of kea is minimal – limited to video monitoring of a small number of traps; Setting of threshold figures have not been set, but advice to date has two themes: any evidence by-catch from the limited monitoring that is being done would be concerning; and the aerial 1080 approach that was developed earlier suggests that we should adopt a conservative approach.

To date support at site from Goodnature has been patchy but so has our involvement with them.

I've given advice to ██████████ but he wants some more.

I'd suggest that we set up a TP meeting very quickly that has a focus of Giving clear advice to the DDG Ops and Biod to address the emerging risk of kea non-target impacts from GA24 traps.

Can you please suggest appropriate team members. I need people skilled in design, problem solving ,predator control and kea.

I'd like to have the TP meeting run asap

██████████
Director - Operations, Eastern South Island Region

From: ██████████
Sent: Monday, 10 July 2017 9:09 a.m.
To: ██████████ <██████████> ██████████ <██████████>
Cc: ██████████ <██████████> ██████████ <██████████> ██████████ <██████████>
██████████ <██████████> ██████████ <██████████>
Subject: RE: Kea and Goodnature traps

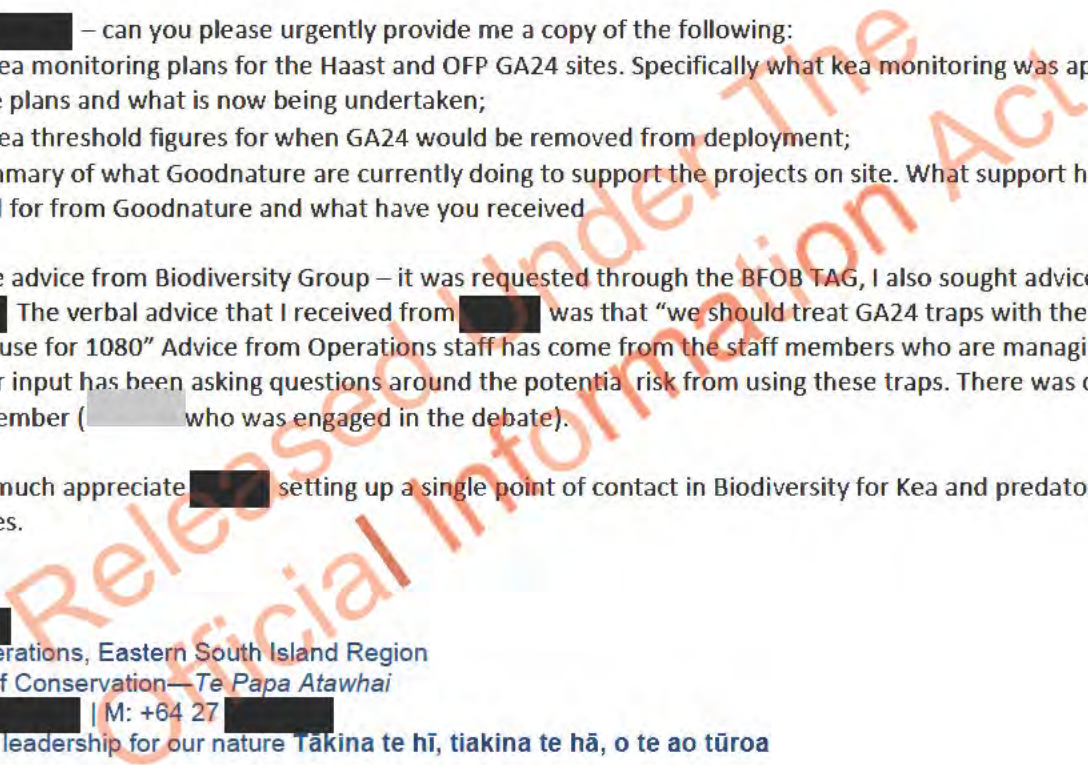
Thanks ██████████ and ██████████

- ██████████ and ██████████ – can you please urgently provide me a copy of the following:
- any kea monitoring plans for the Haast and OFP GA24 sites. Specifically what kea monitoring was approved in the plans and what is now being undertaken;
 - any kea threshold figures for when GA24 would be removed from deployment;
 - a summary of what Goodnature are currently doing to support the projects on site. What support have you asked for from Goodnature and what have you received

Regarding the advice from Biodiversity Group – it was requested through the BFOB TAG, I also sought advice from ██████████. The verbal advice that I received from ██████████ was that “we should treat GA24 traps with the same logic that we use for 1080” Advice from Operations staff has come from the staff members who are managing the projects, their input has been asking questions around the potential risk from using these traps. There was only one other staff member (██████████ who was engaged in the debate).

I would very much appreciate ██████████ setting up a single point of contact in Biodiversity for Kea and predator trapping issues.

██████████ ██████████
Director - Operations, Eastern South Island Region
Department of Conservation—Te Papa Atawhai
DDI: +64 3 ██████████ | M: +64 27 ██████████
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[REDACTED]

From: [REDACTED]
Sent: Wednesday, 2 August 2017 7:47 a.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Kea & GA24 1/08/17 -- my notes and the mission for today
Attachments: Team process GNA24 Kea 1080 meeting 010817.docx

Good morning

Please find attached my notes from yesterday's quickly assembled meeting. These are not official minutes as I haven't checked them with anyone else from the meeting but I thought it would help to bring [REDACTED] & [REDACTED] quickly up to speed. [REDACTED] this was a follow on from the initial team process meeting on 17 July that you & I missed.

I have started to put ideas into a document and I suspect that [REDACTED] G may have also. We will put these together as soon as we can this morning. If we get a first draft circulated by mid morning what would your availability be to contribute to it today? Ideally adding to the document through the middle part of the day followed up by a phone call in the afternoon.

[REDACTED] the 'put weka excluders on all traps in kea habitat before setting up a major field trial' plan will cost a lot of money (with a risk that they are then proven not to work or to affect kills). I am thinking that we park this in the critical issues list for Operations to solve. Your thoughts welcome.

Look forward to hearing from you,
[REDACTED]

From: [REDACTED]
Sent: Tuesday, 1 August 2017 4:02 p.m.
To: [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; Paul Jansen; [REDACTED]
Cc: [REDACTED]
Subject: Kea & GA24 1/08/17

Thanks for all of your input this afternoon.

[REDACTED] and [REDACTED] will start working up a process document using the contributions from today and will share with you for any feedback.

Then forward to myself and [REDACTED] for eventual discussion with [REDACTED] (Thursday)

[REDACTED]
Director - Operations, Eastern South Island Region
Department of Conservation—*Te Papa Atawhai*
DDI: +64 3 [REDACTED] | M: +64 27 [REDACTED]
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[REDACTED]
[REDACTED]

From: [REDACTED]
Sent: Thursday, 3 August 2017 5:48 p.m.
To: [REDACTED]
Subject: Fw: Updated advice for kea & weka exclusion pilot trial

FYI,
Cheers
[REDACTED]

From: [REDACTED]
Sent: Thursday, 3 August 2017 17:14
To: [REDACTED]
Cc: [REDACTED]
Subject: Updated advice for kea & weka exclusion pilot trial

Hi [REDACTED] & [REDACTED]
[REDACTED] & myself went to willowbank yesterday to check out their facilities for the trial.

Weka enclosures

They have 2 weka enclosures close to the kea aviary with 2 weka in each. They also have more weka enclosures that we didn't visit. The enclosures would be suitable to hold 1 configuration at a time. An observer is able to view 1 enclosure at a time.

Kea enclosures

There is a single kea enclosure with 13 kea which is dominated by 2 male kea who hold separate territories. The rest of the kea more or less move between the 2 territories & there is a section which the keeper advises is mainly 'inhabited' by the sub ordinates & juveniles.

The 2 territories held by the dominant males would be suitable to set up 1-2 configurations in each territory at a time. It is possible to view both territories at the same time. The 'sub-ordinate' territory although suitable to house at least 1 configuration is rather open to public viewing. Although an observer would be able to view all 3 territories, the sub-ordinate's territory is across a small body of water which would affect the time required to reach the configuration if a bird is entangled.

Orana Park are keen to assist but I believe have a limited number of kea (5?). We have not yet visited their facilities but have considered using their facility to trial any promising configuration determined from willowbank trial to allow exposure to another cohort of kea.

There has been advice from a number of people including [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] (willowbank keeper) & [REDACTED] [REDACTED]

Having considered their advice, here are some of the changes I propose:

- Have a full time observer present at the trials
- Utilise peanut butter as the bait but apply it to some flagging tape (this will help demonstrate if kea manage to get past the trigger mechanism.
- Start with 8 hours of testing per configuration & extend if required
- Move the configurations after 8 hours (separate day) to allow different kea/weka to access each configuration

I feel we ought to trial the goodnature excluder despite [REDACTED] [REDACTED] & [REDACTED] [REDACTED] reservations

We can change the wire excluder to utilise stainless mesh

We can ensure good security of the nova flo

I'm not sure if there are issues with sequentially exposing the birds to the various configurations – I need more advice on this.

Willowbank have both kea & weka available now to start the trial (they have a trial starting in Jan I believe for 6 months to try & teach deterrence to cereal pellets). We have the capacity to start the trial in the next 1 -2 weeks.

Do you want to touch base in the next 1-2 weeks to make adjustments to the trial protocol before I draw one up?

I am keen to get the trial started especially since the birds are available now.

Cheers



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[REDACTED]

From: [REDACTED]
Sent: Thursday, 3 August 2017 8:31 a.m.
To: [REDACTED]
Subject: RE: Documents Link(s) : Draft kea risk management strategy for Goodnature traps

Giddy [REDACTED] et al

My only comment is that the assessing the efficacy of a24s with excluders trial design and implementation should be rolled into one line in the table. I don't think the design is going to be complex or time-consuming and have two steps makes it seems more complex and time consuming than it will be.

Otherwise all good from my point of view.

See ya

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 2 August 2017 4:35 p.m.
To: [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]
Subject: Re: Documents Link(s) : Draft kea risk management strategy for Goodnature traps

Hi all
I will also want to hop on to this document early tomorrow morning to wordsmith so if you check the document out today please check it back in before leaving.

Thanks

Sent from my Samsung device

----- Original message -----

From: [REDACTED] <[REDACTED]>
Date: 2/08/17 4:00 PM (GMT+12:00)
To: [REDACTED] <[REDACTED]> <[REDACTED]> <[REDACTED]>
Subject: Documents Link(s) : Draft kea risk management strategy for Goodnature traps

Here is the modified document – please provide [REDACTED] with feedback before 0930 tomorrow. Highlighted areas still need input from you lot – (costs specifically)

[REDACTED] could you check that I have captured the cost risks you highlighted.

Thanks

[REDACTED]

From: [REDACTED]
Sent: Thursday, 3 August 2017 9:38 a.m.
To: [REDACTED]
Subject: RE: draft kea risk management strategy for Goodnature traps

Well done you!

From: [REDACTED]
Sent: Thursday, 3 August 2017 9:32 a.m.
To: [REDACTED]; [REDACTED]
Cc: [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]
Subject: draft kea risk management strategy for Goodnature traps

Hello [REDACTED] and [REDACTED]
Please find attached and on [DOC-3130252](#) a draft kea risk management strategy that builds on the discussion from Tuesday's meeting. [REDACTED], [REDACTED] and I contributed to this. I understand that [REDACTED] will try to find a time to review this with [REDACTED] today. I will expect to hear back from one of you on feedback and whether you / [REDACTED] would like it developed further.

One new issue since the Tuesday meeting is that the team advise that the weka excluder springs will need an additional clip to secure it to the body of the trap. Without this modification kea could pull the spring down and put their head into the trap or the excluder itself will ensnare the kea. Goodnature are understandably protective of their design so would need to agree to this before rollout.

We are conscious that the suggested approach is high risk (in terms of rolling out excluders before knowing the outcome of trials) and high cost (at least \$100k for excluders for the traps already in the field in kea habitat). We referred to our previous advice to put this in context. An option to move established traps to non-kea locations would be lower risk in that regard and I understand that BFOB could absorb a significant number in the North Island. We did not put this in the memo since this would not meet the stated requirements, but it may be worth further consideration.

Kind regards

[REDACTED]
[REDACTED]
Threats Manager Southern
Biodiversity Group -- *Kāhui Kanorau Koiora*
Department of Conservation - *Te Papa Atawhai*
Ōtautahi Christchurch Office
DDI +64 3 [REDACTED] | M +64 27 [REDACTED] | VPN 5463

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www.doc.govt.nz

[REDACTED]

From: [REDACTED]
Sent: Friday, 4 August 2017 7:58 a.m.
To: [REDACTED]
Subject: RE: Updated advice for kea & weka exclusion pilot trial

Morning

I have had a quick read before another appointment so may have got some wires crossed. My comments are:

- We need to prioritise the order in which trials occur
- I suggest that testing the **unmodified A24 weka excluder** is the first priority given that is what is proposed to be purchased at great expense and rolled out at great risk. [REDACTED] and I suspect that kea will access the trap through the top front of the spring (if the top front of the spring is not modified and secured to the trap). It would be good to gain [REDACTED] opinion once she has had a good look at the weka excluder trap combination. Most importantly we need to test this combination with kea
- Secondly I suggest we should test GN weka excluders **that have been modified** with GNs blessing written in triplicate in front of several lawyers) because this is our current preferred option to invest heavily in.
- Thirdly test your best bets as alternative kea excluders that will still potentially not discourage stoats.

Well done team for moving so fast. Good luck.

Cheers

[REDACTED]

From: [REDACTED]
Sent: Friday, 4 August 2017 7:36 a.m.
To: [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]
Cc: [REDACTED]
Subject: Re: Updated advice for kea & weka exclusion pilot trial

Thanks [REDACTED]

[REDACTED] I'm sharing this with the other advisors (in addition to [REDACTED] who have been part of [REDACTED] team process on this issue because I know they will be interested [REDACTED] comments on the various excluder options. The group had already come to the view that the weka excluder springs will need an additional clip to secure it to the body of the trap. Without this modification kea could pull the spring down and put their head into the trap or the excluder itself will ensnare the kea. Goodnature are understandably protective if their design so would need to agree to this before rollout. [REDACTED] was going to talk to you about this (when he gets back from the field), but the initial view was that perhaps it was not essential for the clip idea to be figured out or implemented in your trial.

Great work on the trial planning [REDACTED]
[REDACTED]

From: [REDACTED]
Sent: Thursday, 3 August 2017 17:47
To: [REDACTED]
Subject: Fw: Updated advice for kea & weka exclusion pilot trial

FYI,

Cheers

[REDACTED]

From: [REDACTED]
Sent: Thursday, 3 August 2017 17:14
To: [REDACTED]
Cc: [REDACTED]
Subject: Updated advice for kea & weka exclusion pilot trial

Hi [REDACTED] & [REDACTED]

[REDACTED] & myself went to willowbank yesterday to check out their facilities for the trial.

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They have 2 weka enclosures close to the kea aviary with 2 weka in each. They also have more weka enclosures that we didn't visit. The enclosures would be suitable to hold 1 configuration at a time. An observer is able to view 1 enclosure at a time.

Kea enclosures

There is a single kea enclosure with 13 kea which is dominated by 2 male kea who hold separate territories. The rest of the kea more or less move between the 2 territories & there is a section which the keeper advises is mainly 'inhabited' by the subordinates & juveniles.

The 2 territories held by the dominant males would be suitable to set up 1-2 configurations in each territory at a time. It is possible to view both territories at the same time. The 'sub-ordinate' territory although suitable to house at least 1 configuration is rather open to public viewing. Although an observer would be able to view all 3 territories, the sub-ordinate's territory is across a small body of water which would affect the time required to reach the configuration if a bird is entangled.

Orana Park are keen to assist but I believe have a limited number of kea (5?). We have not yet visited their facilities but have considered using their facility to trial any promising configuration determined from willowbank trial to allow exposure to another cohort of kea.

There has been advice from a number of people including [REDACTED]

Having considered their advice, here are some of the changes I propose:

- Have a full time observer present at the trials
- Utilise peanut butter as the bait but apply it to some flagging tape (this will help demonstrate if kea manage to get past the trigger mechanism.
- Start with 8 hours of testing per configuration & extend if required
- Move the configurations after 8 hours (separate day) to allow different kea/weka to access each configuration

I feel we ought to trial the goodnature excluder despite [REDACTED] reservations

We can change the wire excluder to utilise stainless mesh

We can ensure good security of the nova flo

I'm not sure if there are issues with sequentially exposing the birds to the various configurations – I need more advice on this.

Willowbank have both kea & weka available now to start the trial (they have a trial starting in Jan I believe for 6 months to try & teach deterrence to cereal pellets). We have the capacity to start the trial in the next 1 -2 weeks.

Do you want to touch base in the next 1-2 weeks to make adjustments to the trial protocol before I draw one up?

I am keen to get the trial started especially since the birds are available now.

Cheers

[REDACTED]

From: [REDACTED]

Sent: Thursday, 3 August 2017 4:22 p.m.

To: [REDACTED] <[REDACTED]>

Subject: RE: Request advice on kea behaviour for pilot trial to test kea & weka excluder for a stoat trap

Hi [REDACTED]

Good to hear from you – thanks for your email. Here are my thoughts on the kea exclusion trials:

Food reward:

Is Erayz to be the food reward? If the reward is something the captive kea are unfamiliar with, and they can't see it (i.e., it's hidden inside the trap) and it relies on smell as a sole cue, then it may not motivate them. I recommend the food reward be (a) something the kea recognise as food that they like, and (b) something they know is present in the trap. Smell as the sole cue may not be enough incentive (I wouldn't rely on it). If they're unfamiliar with Erayz, and you want to see whether they'll go for it, they could always be given a bit to try beforehand. If they like it and come back for more, it should be useable. Possible alternatives are butter or peanuts (in or out of the shell), or something else the captive kea are familiar with and motivated by.

Excluders:

Looking at the photos in the trial protocol you sent, there's only one excluder device that looks useable to me, and that's the extended novaflo excluder.

Novaflo:

Novaflo should be tough enough to withstand kea. I imagine they could probably put holes in it, but it doesn't give them the reward of soft materials (e.g., rubber, wire, etc.), so my prediction is that they might chew it a bit and then get bored of that. I think the two main things about the novaflo excluders will be (a) make sure that they're attached very securely, and can't be loosened or pulled off by the kea (kea are strong and very determined) (b) kea can't get stuck in them, especially smaller kea, and (c) that the excluders are long enough that they can't trigger the trap. I'd only go with an excluder that's longer than a large kea's reach, and the extended novaflo excluder looks promising for that. Kea are very flexible and stretchy (especially their necks), and their maxilla can be moved independently of the skull, extending their reach. To make sure they're motivated to reach as far as they can up into the excluder, it may be useful to put a visible, familiar food reward at the far end of the excluder device (i.e., at/near the bait compartment, if possible). That should hopefully give you an idea of whether the excluder is long enough.

GN weka excluder:

This excluder looks flimsy and like it would pose a considerable entanglement risk for kea. I would not recommend it for use with kea.

Wire basket:

I do not recommend using chicken wire under any circumstances – of any type or gauge. It's far too flimsy, and contains lead and zinc, both of which are toxic to kea. Kea will easily chew through chicken wire and ingest bits of it in the process. It also poses a considerable risk of entanglement.

Possible alternatives:

██████████ (DOC electronics team) uses a welded steel cage to protect the microphones of DOC's acoustic recorders (built with kea in mind). If you want an alternative to novaflo, I'd recommend getting in touch with him to find out more about using this material for an excluder, and maybe who to contact to get an one built. Something like this would be infinitely superior to chicken wire, and much more secure than the GN weka excluder.

The main thing to remember is not to underestimate kea. They're smart, strong, flexible, curious, and bloody persistent. I'd only go with something that's bomb-proof.

Re trial protocols:

Further to my previous comments, I wouldn't use the GN weka excluder or wire cage excluders at all, even for trials, and certainly not unattended.

Re the novaflo excluders, I'd want to be certain that the kea couldn't pull them off or get stuck in them, especially if they were to be left unattended for any time.

I agree with the recommendation that there should be an observer throughout the whole trial period.

I can't really say whether 8 hours is long enough to know whether the novaflo excluder are kea proof – the period for your initial trials (5 days) sounds more informative. Eight hours should give you at least an initial idea though, especially if you use a familiar, motivating food reward.

The same goes for the sample size as for trial period – two captive populations (>6 kea?) should at least give you an initial idea, but it may be enough. One of the problems with doing captive trials is that one or two dominant birds can prevent the others from interacting with the apparatus, therefore effectively limiting your sample size. But it sounds like most of the kea in your initial trial group got a shot at the apparatus in those trials, so that's promising. Captive trials with kea usually have a relatively small sample size, but because kea are social, their personalities are distinct, and their behaviour varies with age and sex, the larger the sample size the better data you get. Two captive institutions may be sufficient if their populations have a range of age, sex, size and personality.

That's all I can think of for the moment, I hope that it's helpful. If you have any questions please get in touch, and likewise if I think of anything else I'll let you know.

Cheers,

■

From: ■ ■ [mailto:■]

Sent: Wednesday, 2 August 2017 8:33 a.m.

To: ■

■ advice on kea behaviour for pilot trial to test kea & weka excluder for a stoat trap

[REDACTED]

[REDACTED] has advised me to contact you as a specialist on kea behaviour.

I am proposing to run a trial to test various excluder mechanisms to prevent kea & weka entering a stoat trap. The purpose of this trial is to develop excluders that are effective both at excluding kea & weka non targets but remain effective at catching stoats. There has been camera documentation of both captive & wild kea's ability to access the trigger mechanism of the trap.

The trial is 2 staged. The first stage is testing the effectiveness of various excluder configurations at preventing kea & weka access to the trigger mechanism of the trap. The second stage is to test the relative attractiveness to stoats of effective excluder configurations. Please find attached an outline of the trial. Promising configurations may then be later field tested in a more extensive trial

I have had feedback from various people on modifications to the trial.

- A full time observer should be present to be on hand in case of bird entanglement
- The wire mesh should be treated with vinegar & ensure there are no 'metal blobs' that birds could accidentally ingest
- Use a food reward as bait to maximise kea/weka interaction with the excluder configuration
- Is 8 hours of footage sufficient?
- Is exposure to a single captive population sufficient?

The trial I undertook 12 months ago to document kea interaction with the same unbaited and inactive trap was in a single enclosure with multiple kea (>6). The camera showed that multiple (>5) kea interacted with the trap & interaction continued through more than 5 days and through the night.

I have the option of running the trial at 2 local captive institutions with kea & weka.

Could you please provide me some feedback on the proposed trial?

Thanks

[REDACTED]

Ranger Operations (Intensively Managed Sites)

[REDACTED]

From: [REDACTED]
Sent: Monday, 7 August 2017 5:12 p.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: A24s & native birds

Hi [REDACTED]
I'm up to my neck in A24 issues! And will be taking this further

[REDACTED]
Director - Operations, Eastern South Island Region
Department of Conservation—*Te Papa Atawhai*
DDI: +64 3 [REDACTED] | M: +64 27 [REDACTED]
Conservation leadership for our nature **Takina te hī, tiakina te hā, o te ao tūroa**

From: [REDACTED]
Sent: Monday, 7 August 2017 5:03 p.m.
To: [REDACTED]; [REDACTED]
Subject: A24s & native birds

Hi [REDACTED] and [REDACTED]

Apologies if I've taken this too far up the chain.

As you may have heard, we're considering re-easing kākāpō onto Resolution next year, where there are A24s. We've done some initial trials of presenting A24s to kākāpō, and have some preliminary concerns about kākāpō interacting with the traps. We're also doing trials with takahē (they'll be exposed to A24s at Gouland) – it's early days, but we've seen no issues so far.

I know A24s pretty well and am sold on the value of self-resetting traps, so don't want to get in the way of their use. But I'd be keen to know the appetite within DOC for helping mitigate bycatch from native birds (e.g. with baffles), especially after the recent press around kea. If A24s will be used throughout DOC-managed habitats, we'd be keen to see mitigation methods developed for the safety of kākāpō and takahē. Is this something DOC will be supporting?

Thanks very much,

[REDACTED]
[REDACTED]
Science Advisor Kākāpō/Takahē - *Kaitohutohu Pūtaiao Kākāpō/Takahē*
Department of Conservation - *Te Papa Atawhai*

Postal address: Department of Conservation, PO Box 743, Invercargill 9840, New Zealand

Physical address: Department of Conservation, Level 7, 33 Don Street, Invercargill 9480, New Zealand

M: +64 21 [REDACTED] | W: +64 27 [REDACTED] | [REDACTED] | [REDACTED]

<http://www.kakaporecovery.org.nz> | www.takaherecovery.org.nz | www.doc.govt.nz

[REDACTED]

From: [REDACTED]
Sent: Thursday, 10 August 2017 10:12 a.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Kea-Goodnature briefing with [REDACTED] & [REDACTED] K

Hi
I suggest that "[REDACTED] has spoken with [REDACTED] and asked that the pilot studies are put on hold while we work out how to work more closely with Goodnature on it" is not necessarily a good idea because the knowledge gained from planned trials could still be useful to future decision making. I also suggest that resolving issues (learning what we need to) as quick as possible is important to kea.
Cheers
[REDACTED]

From: [REDACTED]
Sent: Thursday, 10 August 2017 10:04 a.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: Kea-Goodnature briefing with [REDACTED] & [REDACTED] K

Morena

[REDACTED] invited me to a phone meeting late yesterday to review the draft kea risk management strategy and bring [REDACTED] into the decision making. [REDACTED] and [REDACTED] hadn't met before [REDACTED] went on leave. Some key points:

[REDACTED] rang [REDACTED] yesterday to reinforce that they have a kea excluder and want to work with DOC to test it. Given that Goodnature accept that a level of risk to kea exist and want to work with us, we need to attempt to get their agreement on any excluder modifications to test.

[REDACTED] has spoken with [REDACTED] and asked that the pilot studies are put on hold while we work out how to work more closely with Goodnature on it.

[REDACTED] will be the key contact point for Goodnature on this issue. [REDACTED] asked to meet with the TAG but this is premature.

[REDACTED] is the single point of accountability for advice on this issue. [REDACTED] is the decision maker on the operational decision.

I explained that the kea risk management strategy was the best we could do with the requirement to continue to deploy GN traps in kea habitat. I answered [REDACTED] questions and sent [REDACTED] the June BFOB TAG memo and [REDACTED] report.

I understand that [REDACTED] will be reviewing the issue and may ask us some questions in working toward a decision.

Thanks
[REDACTED]

[REDACTED]
Threats Manager Southern
Biodiversity Group -- *Kāhui Kanorau Koiora*
Department of Conservation - *Te Papa Atawhai*
Ōtautahi Christchurch Office
DDI +64 3 [REDACTED] | M +64 27 [REDACTED] | VPN 5463

[REDACTED]

From: [REDACTED]
Sent: Tuesday, 22 August 2017 9:28 a.m.
To: [REDACTED]
Subject: Fw: Inquiry regarding Alternative methods to 1080

All I could find,

Cheers

From: [REDACTED]
Sent: Wednesday, 15 April 2015 16:22
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Inquiry regarding Alternative methods to 1080

Hi [REDACTED]

[REDACTED] has asked me to pass on some information regarding DOCs work with self-resetting traps. The trials I am leading have been underway since 2011 and are still ongoing – see attached for last year's project update report; it describes the results from our phase II operational scale trials that were completed at the end of the 2013/14 DOC financial year. We'll do another update report early in the next financial year (~July/August 2015) which will cover what we've been doing since we completed phase II. What I can say with some confidence, is that the mechanical reliability of the traps has been notably improved since late 2013. The significant 'step-change' in improved mechanical performance of the A24 appeared to come about with the September 2013 version of the device. Furthermore, last year we commissioned an independent engineering review of that version of the trap; the outcome of that reassured us that the A24 design was mechanically robust, although some minor changes were suggested. What data we have collected to date, plus 'faulty trap return' information we've been provided by Goodnature Ltd. both indicate that progressive improvements in mechanical performance have been gained with each of the 7 'iterations' of the trap since the Sept-13 upgrade.

The revised Phase III stage of our trials comprise observational trials of the traps to help us understand (amongst other things) how different lures and/or luring practices might improve the catch rate and further field based operational scale trials.

With the observational trials we are specifically testing:

1. A24s for stoats - Connovation's Erayz lure (*as a benchmark reliable stoat lure*) vs. the current Goodnature Ltd. long life stoat lure; this work started in Sept-14
2. A12s for possums – pre-feed paste lure refreshed once a week vs. pre-feed paste lure refreshed once a month as per Goodnature Ltd. current recommendation; this work started in Nov-14

3. A24s for rats - peanut butter pre-feed lure refreshed once a week vs. peanut butter pre-feed lure refreshed every 3 weeks as per Goodnature Ltd. current recommendation vs. a prototype lure; this work started in Jan-15

These observational trials are already revealing some interesting insights about pest animal behaviour at the devices and are certainly improving our understanding around how best to lure these devices for each target pest.

The operational scale rat control trials comprise:

1. Continuation of the phase II Onepu rat control trial (see attached) – the only difference is that the trap checking interval is more variable (i.e. between 2-4 weeks)
2. Broad scale rat control trials at Boundary Stream; 1532 A24s set at a 100m x 50m spacing across ~800ha area, checked every 2 months
3. Fiordland (Kepler) rat control trials; 543 A24s set at a 100m x 50m spacing across ~200ha area, checked every 3 weeks. Note: This trial has shown some very encouraging early results:

- A24 trial site, Pre-treatment RTT Nov-14 = 68%; post-treatment RTT Feb-15 = 0%
- Non-treatment/comparison site, Pre-treatment RTT Nov-14 = 74%; post-treatment RTT Feb-15 = 68%

It is probably a bit too early to say how the operational scale trials at Onepu and Boundary Stream are going, the rats have been reduced at both sites but not yet to the levels we'd like. Nonetheless, as mentioned earlier, the data we have collected to date certainly reassures us that the mechanical performance of the devices is much improved over the earliest versions of the A24.

DOC has also been supporting the successful possum and rat eradication operation using A24s and A12s on Native Island, just off Stewart Island (see <http://www.doc.govt.nz/news/media-releases/2015/self-setting-traps-controlling-island-rats/>). I have not personally been involved in this operation so cannot comment on it, but if you want further information on that work contact [REDACTED] (DOC National Predator [REDACTED] e-mail [REDACTED] for more information – FYI [REDACTED] is also closely involved with the Fiordland (Kepler) rat control trials mentioned above.

Cheers

[REDACTED]

[REDACTED] [REDACTED]

Scientific [REDACTED] - Threats

Department of Conservation—*Te Papa Atawhai*

DDI: +64 7 [REDACTED] | M: +64 27 [REDACTED] | VPN: 6088

Science & Capability Group

Private Bag 3072, Hamilton 3240

Level 4, Monckton Trust Building

[REDACTED]
[REDACTED]

From: [REDACTED]
Sent: Tuesday, 22 August 2017 8:16 a.m.
To: [REDACTED]
Subject: FW: Kea and 'Goodnature' A24 Traps. A Fiordland Perspective

FYI

From: [REDACTED]
Sent: Monday, 21 August 2017 1:39 p.m.
To: [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED];
Cc: [REDACTED]
Subject: RE: Kea and 'Goodnature' A24 Traps. A Fiordland Perspective

[REDACTED] – you said “It would be good to see a proper trial established to better assess actual risk to kea”
But it goes a bit further than that.

If we were proposing to use A24 traps in kakapo habitat we would not be looking to determine whether kakapo were or were not killed by the traps, we would be looking in advance to convince ourselves that they were not going to be killed.

Kea are not so rare that we should apply the same high standard to them. We need compelling evidence that they will not be killed by the traps, and we haven't got that.

I don't find trials where A24s were monitored without cameras at all convincing. We know that carcasses are dragged away by other predators and we also know there is a risk that kea, kaka or weka might suffer smashed bills and stagger away to die elsewhere. We also already have some video evidence of kea interfering dangerously with unarmed traps.

I think it would be irresponsible for us to run further trials to assess the death rate of kea, just as it would be irresponsible to try and judge the death rate of kakapo.

I am encouraged by the weka excluders – I reckon with a minor improvement they would completely exclude weka, kaka and kea from A24s. We only need to be assured of the efficacy of A24s at killing stoats and rats with the weka excluders in place.

My view is that A24s should only be run in kea habitat with modified weka excluders. We should do some quick trials in aviaries to test the excluders, though I'm reasonably convinced that that if the springs on the excluders were secured at both the front and back that kea couldn't get in. We should then test the efficacy of A24s with excluders at killing rats and stoats before we deploy anymore of them in kea habitat.

I suspect you regard me as part of an anti Goodnature trap campaign. Well I'm not. I'm part of a pro-Kea campaign and I would like to see the A24 traps working safely and well. I too am sick of anecdote, mis-information, political pressure and little fact.

[REDACTED] has done a heap of work on the effect of 1080 on kea and has good evidence that despite some deaths, kea benefit. The same standard has never been applied to A24s nor any of the other traps. I understand that you are confident that the box traps in Fiordland are pretty-well kea safe – have I got that wrong? I think it is pretty disgusting that we have run unsafe traps in the past and caught a lot of kea, but that is not an excuse for continuing to do that with A24 traps.

Enough rave.

See ya

From: [REDACTED]
Sent: Saturday, 19 August 2017 11:18 p.m.
To: [REDACTED] <[REDACTED]> <[REDACTED]> <[REDACTED]> <[REDACTED]> <[REDACTED]>
Cc: [REDACTED]
Subject: Re: Kea and 'Goodnature' A24 Traps. A Fiordland Perspective

Hi [REDACTED]

I have pretty much captured below what I recall of the small test that was done. One A12 trap was set up by the 'Chapel' near the Homer Tunnel, one by the Gertrude Track Carpark and one at Pop's Landing. All sites with habituated kea present including several delinquent juveniles. Traps were baited but not set. Traps had a block of 'blue tack' on the bite block to detect pecking and a camera on each. Traps were not obvious to the public but were visible, albeit on trees with foliage surrounding them. They were left there for close to a month. Inspection of the video retrieved over that time showed kea landing near the traps but not actively interacting. There were no signs of pecks on the 'blue tack'. This was not meant as a definitive trial but rather a quick test to see if kea immediately honed in on the traps and destroyed them or put themselves at risk. It would be good to see a proper trial established to better assess actual risk to kea. Be handy to rank this risk alongside other possum and stoat traps in use.

We have seen no evidence yet of kea interaction with A12 or A24 traps. We have avoided placing them in open habitat where interference risk would seem possibly elevated with the lack of alternative playthings. The sites where we have deployed operating A24 traps is largely outside the known range of habituated junk food kea.

With the more recent reports of interaction, it would be useful to know the type of location they were set in and how they were baited. I would also be interested to see the video footage to better understand the type of interaction observed.

I recently read a report stating that kea have been killed and maimed by A24 traps. It would be good to see if this has been reliably documented.

I am in no doubt that a kea may eventually be killed in an A24 trap but to date the level of risk deduced from observation (rather than perception) seems to me to be low. Information to date suggests a risk lower than that posed by other possum, stoat and rat control tools.

I am baffled by the anti Goodnature trap campaign that seems to be raging with a wealth of anecdote, misinformation, perception and innuendo and little fact.

Hopefully the science team can bring some more measured analysis of the actual risk/benefit of these traps with some well designed trials. Happy to help with this if the opportunity arises.

In the longer term I am optimistic these traps will be modified to all but eliminate the risk to weka and kea.

Cheers
[REDACTED]

From: [redacted] <[redacted]>
Date: 1 August 2017 at 8:21:19 AM NZST
To: [redacted] <[redacted]>
[redacted] <[redacted]>
[redacted] <[redacted]>
Cc: [redacted] <[redacted]>
Subject: RE: Kea and 'Goodnature' A24 Traps. A Fiordland Perspective

Hi [redacted]
I believe that your team did some video monitoring of traps in kea country and found no kea interaction. Could you please send me the information that describes the effort, method, timeframe, location and conclusion. I'm keen to find out why other footage is detecting interaction but not your efforts. Keen on your thoughts.
Cheers
[redacted]

From: [redacted] <[redacted]>
Sent: Wednesday, 12 July 2017 10:01 a.m.
To: [redacted] <[redacted].nz>; [redacted] <[redacted].nz>; [redacted] <[redacted].nz>
Cc: [redacted] <[redacted]>
Subject: Kea and 'Goodnature' A24 Traps. A Fiordland Perspective

Hi,
I understand there has been considerable discussion recently around the potential risks posed to kea by A24 traps. The Fiordland District has had significant experience using these traps in the South Island, as such I thought it relevant to share some observations and comments for your consideration. Please see below.
Regards,
[redacted]

Kea and 'Goodnature' A24 Traps. A Fiordland Perspective

[redacted] July 2017

There has been recent discussion around the risk posed to kea by 'Goodnature A24' traps. We have been working with these traps in Fiordland for around eight years and have had significant numbers deployed since 2014. I share our experiences to date and provide some of my thoughts.

Adaptive Management Approach

During this discussion/review process it is important there is a continuation of the considered, pragmatic, evidence-based adaptive management approach that has

been applied previously to the development of other pest control tools and approaches. Adopting an overly precautionary approach with zero tolerance for non-target kills may stifle innovation and reduce external support. If we are to achieve the 2025 stretch goals and, ultimately, a Predator Free NZ we need to take some well-calculated risks and embrace new technologies with a diversity of pest control approaches.

The recent filming of kea interacting with A24 traps has raised a level of concern that may be disproportionate to the risk. The A24 trap is the only stoat control tool we currently have that is not known to have killed kea.

There is undoubtedly potential for a kea to be killed in the A24 trap, and it must be accepted as possible that one or more kea will eventually be killed in these traps. Logically, however, this risk should be assessed against the potential to enhance kea populations by providing cost-effective, sustained suppression of stoat populations over a landscape scale. The risk to kea should also be mitigated as much as possible while still maintaining predator control efficacy.

New Zealand has a hard won and well-deserved reputation for being a world leader of innovative, solution-focused conservation management. We are now on the cusp of another quantum leap in trapping efficacy and affordability as the self-resetting and auto luring/long life bait combination develops. This development will only take place if there is continued support for the pockets of innovation and creative thinking that exist.

Putting the Level of Risk to Fiordland Kea in Perspective

- There are approximately 2300 A24 traps deployed in Fiordland, these have been operating now for around 1.2 million trap nights with no observations of a single kea fatality, injury or trap damage.
- A24 traps are deployed over 7000ha in Fiordland - around 0.5% of Fiordland kea habitat. Our current and proposed aerial 1080 management sites encompass 320,000ha, or around 24% of Fiordland kea habitat.

Given the small scale of A24 usage, the potential for a broad negative population impact on Fiordland kea from this source is minimal and should be assessed against the potential learnings and benefits. Many of these traps have been in place for two years or more and have been checked regularly. During the same period, we have had seven kea killed accessing DOC traps and one report of a kea death in a Sentinel possum trap. Subsequent improvements have been made to the DOC trap box design and trap check protocols and, to date, this has prevented further kea mortality in the DOC traps. This has been the classic process of problem identification, solution development and then implementation.

There are still many old-style DOC trap boxes operating in the South Island that have the proven potential to allow kea access and mortality.

We have no measure of kea mortality associated with aerial 1080 operations in Fiordland and our ability to measure stoat densities and impacts remains limited.

Background of Self-Resetting Trap Use in Fiordland

The Kepler Peninsula was used as a trial site from 2009 during the early stages of developing both the A24 and the A12 traps.

The potential for kea interaction was recognised at the outset and a small trial undertaken around the Homer Tunnel where a group of delinquent juvenile kea were in residence. Three traps (unset) were placed in visible locations with trail cameras on them and recorded for a month. Some kea landed on or near the traps but no kea was observed interacting in a way that would have proved fatal, nor did they damage the traps. While this was very small scale and did not demonstrate whether kea could, or would, ultimately interact fatally with the traps, it showed that this wasn't an automatically inevitable and rapid event as had been feared by some. Subsequent deployment of A24s has been in forest habitat only and while they have been in areas where kea visit, they are not high kea density areas. As with any of our current pest control methods, A24 traps have been deployed with a strong awareness of the potential for fatal kea interaction. Initially small numbers of traps were deployed and checked regularly. With no indications of kea mortality, the trapping networks have been cautiously extended.

In 2014 two trials were set up in the Kepler area in conjunction with the Fiordland Conservation Trust. Both trials were successful at reducing rats to undetectable densities. After the trial, 600 traps were left in place over 440 hectares.

The Auto Lure Pump is also being trialled at this site. This device has reduced trap check frequency and related labour costs for rat control by 90%.

A recent trial of A24 traps on Great Island (750ha) in Chalky Inlet strongly suggests that a network of A24 traps baited with 'Erayze' has killed most, if not all, stoats present. These 200 traps were deployed by four people in a day and a half with no helicopter support or track cutting. The set-up cost was significantly less than that involving conventional double set DOC 200s in a box.

Stoat Trapping Costs and Efficacy

There is a commonly repeated assertion that effective stoat trapping is not possible/effective/affordable over a large scale or in remote rugged terrain. The Fiordland experience does not support this. Stoats are being effectively suppressed over 100,000 hectares every year in Fiordland using single action DOC traps at an average annual operating cost of \$5/hectare per year. We have demonstrated improved nesting success and adult survival of kaka, kiwi, takahē, whio, weka and rock wren using this approach. Sites managed with trap networks include some of the most remote in New Zealand, and some of the more rugged. This work is in addition in to the intermittent stoat, rat and possum control we achieve as part of our Battle for Our Birds programme. This programme will be further supplemented in the future with aerial 1080 control to be undertaken as part of the Save Our Iconic Kiwi project. The combination of intermittent aerial 1080 operations providing broad ecosystem benefits by controlling possums, rats and stoats, supported by sustained suppression of stoats with trapping, can be expected to provide dramatic benefits for stoat sensitive species.

The purchase cost of an A24 is less than that of a double set DOC 200 in a 'kea proof' box - \$135 for the A24 and \$160 for the DOC trap. The efficacy of a single action DOC trap on the mainland is severely limited by trap saturation from rats and stoats during a mast year, requiring additional trap checking effort. The multi-kill function of an A24 not only reduces the number of checks needed to maintain trap

availability, but can also achieve multiple predator kills at site – enabling destruction of family groups.

The reliability of the A24 trap has improved dramatically in recent years. Operating malfunctions and gas leakages are now rare.

The Auto Lure Pump has been shown to be effective for rat control for up to 4 months. A prototype Auto Lure Pump is being tested at two stoat control sites in Fiordland. While this technology is still evolving there is the potential to reduce stoat trap checks to once or twice per year, providing dramatic operational cost savings.

The recent development of the A24 trap means that there is not yet sufficient information about this trap's operating longevity to permit meaningful cost comparisons between the operating lifecycles of the A24 and other traps. Over the operating lifetime of a trapping network, labour and associated transport is the most significant cost component.

Suggestions

1/The Department should initiate formal discussions with 'Goodnature' regarding possible trap modifications/protocols that would eliminate the possibility of kea and weka mortality or injury. Discussions should include design specifications (the trap is able to exclude kea and weka but still be effective at suppressing stoats and rats), likely timeframes to design, test and produce. Given the small value of A24 trap purchases made by DOC relative to 'Goodnature's' core export business, the Department may need to invest in design, trialling and tooling manufacture.

2/ Continue with the cautious operation of A24s in the South Island. Avoid locations where the traps are overtly conspicuous, including alpine habitat. While kea are fundamentally a forest bird and can and will, locate traps in the forest, it is possible interaction may be greater in open habitat.

Should any kea be found near A24 traps this is to be recorded and bodies brought out for examination. Be watchful for, and report, any observations of injured kea, particularly relating to the head or beak. While carcasses may be removed or scavenged by avian or mammalian predators, it would seem likely that evidence of significant kea mortality would often be visible – particularly within the island sites where stoat numbers are very low and there are no rats or cats or other mustelids.

3/ Undertake kea radio tracking at locations where A24 traps are being used to assess kea survival. As well as providing data around kea mortality, this could be developed in to a broader scoped project to assess kea chick productivity and survival. This has not yet been undertaken at a site where traps suppress the stoat population. Partnership funding may be available for such a study.

Technical advice should be sought on the minimum sample size needed for a meaningful study. The 14 operations monitored through aerial 1080 operations have averaged 14 birds monitored per site, with a median of 10 birds per site.

4/Place cameras on traps at a range of sites to monitor kea interaction. There is partner interest in contributing funding to this.

4/Undertake further trials to assess the effectiveness of an A24 trap grid targeting stoats in the South Island. There has been only limited evaluation to date. Improved stoat monitoring tools are required to facilitate both this and the evaluation of other stoat control approaches.

5/ Communicate the deficiencies and risks posed to kea by poorly designed DOC trap boxes. Make it a priority to upgrade these to a best practice kea resistant trap box.

6/ Develop a Departmental kea recovery plan that would identify potential sites and projects focused on kea security and recovery. It is notable that such an iconic species with a Nationally Endangered threat status receives so little proactive kea focused investment. I acknowledge the great work done by the Kea Conservation Trust operating with very limited resources.

██████████ ██████████

Principal Ranger (Biodiversity) — *Pouwhakahaere Koiora Taiao*

Department of Conservation—*Te Papa Atawhai*
Fiordland District Office, Lakefront Drive, PO Box 29, 9640
DDI: +64 3 ██████████ | VPN: 4834

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[REDACTED]

From: [REDACTED]
Sent: Tuesday, 22 August 2017 1:28 p.m.
To: [REDACTED]
Subject: quick update and A24 self-resetting trap trials at Trounson
Attachments: 4276 CGillies Ecol Soc talk Nov-16.pdf

Hi [REDACTED] & [REDACTED]

For your reference find attached Craig's presentation to EcoSoc late last year on the Trounson trial with A24s. The report is in the queue for writing up and publication. Thanks for your help in tracking this down.

Here is a quick up on our advice to the team process:

[REDACTED] has not made a decision yet and has spoken with [REDACTED] K about getting some further information from us. [REDACTED] is trying to set up a meeting with [REDACTED] & [REDACTED] to clear up what's needed, but it relates to ensuring we've considered and incorporated the Fiordland experience in our advice. So effectively we are on stand-by until we've know exactly what is needed, but I may be in touch soon with something to respond to

Thanks

[REDACTED]

From: [REDACTED]
Sent: Tuesday, 22 August 2017 11:25 a.m.
To: [REDACTED]
Subject: FW: Thanks for all your efforts and support with the A24 self-resetting trap trials at Trounson

Hi [REDACTED]

This is all I have on the Trounson work.

Regards

simon

From: [REDACTED]
Sent: Wednesday, 7 December 2016 11:57 a.m.
To: [REDACTED]

Subject: Thanks for all your efforts and support with the A24 self-resetting trap trials at Trounson

Hi folks,

As you know the field component of the trials of Goodnature A24's for stoat control to protect kiwi at Trounson are coming to an end, and the DOC250 trapping network is now being reinstated. I thought I should just drop you all a quick note to say thank you for all your help and support with the trials and for making sure everything went very smoothly indeed. A special thank you to [REDACTED] for all your dedicated hard work, but also to [REDACTED] and [REDACTED] (plus the Trounson volunteers) for all your help and support throughout the project.

It is a credit to the Kauri Coast team and the Mainland Island project that we were yet again able to establish a nationally (and politically) important field-trial at very short notice, with limited funds, then do the work in a rigorous fashion to obtain reliable data within the planned timeframes. We have learnt a lot about the potential of the Goodnature A24 for stoat control and the possibilities for using the device for kiwi protection. I've attached a PDF of a presentation I did on the work at the Ecological Society Conference two weeks ago; the talk generated a lot of interest and seemed to be well received.

Thanks again, and I look forward to the next time the Science & Policy Group can collaborate with the Kauri Coast team to make use of the excellent infrastructure that the Trounson Kauri Park Mainland Island offers for pest control research.

Cheers

██████

██████ ██████

Principal Scientist - Threats
Department of Conservation—*Te Papa Atawhai*
DDI: +64 7 ██████ | M: +64 27 ██████ | VPN: 6088

Science & Policy Group

Private Bag 3072, Hamilton 3240
Level 4, Monckton Trust Building
73 Rostrevor Street, Hamilton 3204

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[REDACTED]

From: [REDACTED]
Sent: Wednesday, 23 August 2017 6:57 a.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: Emailing - 4276 SR trap trial general summary Jul-14 - DOCDM-1440499.pdf
Attachments: 4276 SR trap trial general summary Jul-14 - DOCDM-1440499.pdf

Hi

I will check your advice table next. Please find attached report by [REDACTED] In a recent Rotoiti Mainland Island meeting we discussed how trialling A24s at Rotoiti likely had a detrimental effect on the small kaka population that was present at the time. Page 12 and the discussion in the attached document provide some insight.

Cheers

[REDACTED]

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[REDACTED]

From: [REDACTED]
Sent: Monday, 28 August 2017 3:09 p.m.
To: [REDACTED]
Subject: RE: DDG Ops Advice request Goodnature traps August 2017 - DOC-3149845.doc

Hi [REDACTED]

Could we state that the other option where just weka are present is to put the traps at 1m high? I think this was done on Native Island.

[REDACTED]

A [REDACTED] | Technical Advisor Threats (Hamilton) | Biodiversity Group | Department of Conservation
Postal Address: Private Bag 3072 | Hamilton 3240
Physical Address: 73 Rostrevor Street | Hamilton 3204
DDI: +64 7 [REDACTED] | VPN: 6078 | Mob: [REDACTED] Email: [REDACTED]

From: [REDACTED]
Sent: Monday, 28 August 2017 2:54 p.m.
To: [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED] Gi lies; [REDACTED]; [REDACTED]
Subject: DDG Ops Advice request Goodnature traps August 2017 - DOC-3149845.doc

Hi
Please check this advice to [REDACTED] and make improvements in the original document as required.
Cheers
[REDACTED]

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[REDACTED]

From: [REDACTED]
Sent: Monday, 28 August 2017 4:49 p.m.
To: [REDACTED]
Subject: Re: DDG Ops Advice request Goodnature traps August 2017 - DOC-3149845.doc

KP, I'm in agreement with other comments, perhaps we stick to kea and weka and say site based risk assessment for other species may be necessary. I think we should also suggest better reporting of non target captures for all trapping operations would help such assessments, noting that the proper channel for this is Pestlink but few people are using it and support to upgrade Pestlink is absent.

The risk to kaka is hard to assess without data but at least they are doing well on stoat free islands. Kea don't have this backstop.
Regards [REDACTED]

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From: [REDACTED] <[REDACTED]>
Sent: Monday, August 28, 2017 4:01 PM
Subject: RE: DDG Ops Advice request Goodnature traps August 2017 - DOC-3149845.doc
To: [REDACTED] <[REDACTED]>, [REDACTED] <[REDACTED]>, [REDACTED] <[REDACTED]>, [REDACTED] <[REDACTED]>, [REDACTED] <[REDACTED]>, [REDACTED] <[REDACTED]>, [REDACTED] <[REDACTED]>, [REDACTED] <[REDACTED]>, [REDACTED] <[REDACTED]>, [REDACTED] <[REDACTED]>

Hi [REDACTED]
I agree with the points made by [REDACTED] and that by [REDACTED] re raising traps [REDACTED] is an option for managing risk to weka (when traps are used for rat not stoat, control.

Additionally I am confused with following section:

Potential risk from A24s for non-target species

A24 traps might potentially catch a wide range of species, but species that are likely to be caught and which we would be particularly concerned if they were caught include, robin, weka, kea and kaka.

Where traps are to be deployed to protect critically endangered species (orange-fronted parakeets and Haast tokoeka) A24s should not be deployed until they have been:

- 1. demonstrated to be as effective at killing stoats with the weka excluders fitted as are DOC series traps and*
- 2. demonstrated to be as effective at killing rats with the excluders fitted as are A24s without excluders.*

If the traps are to be used (with weka excluders) for stoat control then why is it relevant how effective they are for killing rats? So long as non-target rat 'captures' in the traps fitted with excluders don't compromise the stoat control performance then I don't see why.

Does the following capture the intent:

Where traps are to be used for stoat control to protect critically endangered species (e.g. orange-fronted parakeets and Haast tokoeka) A24s should not be deployed until they have been demonstrated to be as effective at killing stoats (with the weka excluders fitted if required at the site) as are DOC series traps. This is to ensure that the level of protection afforded to critically endangered species is not compromised.

Have I missed the point?

Cheers
[REDACTED]

From: [REDACTED]
Sent: Monday, 28 August 2017 2:54 p.m.
To: [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>
Subject: DDG Ops Advice request Goodnature traps August 2017 - DOC-3149845.doc

Hi
Please check this advice to [REDACTED] and make improvements in the original document as required.
Cheers

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[REDACTED]

From: [REDACTED]
Sent: Tuesday, 29 August 2017 8:33 a.m.
To: [REDACTED]
Subject: RE: DDG Ops Advice request Goodnature traps August 2017 - DOC-3149845.doc

Hi again folks.

Just a point that may be worth making on this subject. I suspect the majority of A24's that are deployed (up this end of the country at least if not a few in the South island too), are being used for rat control. Many of these sites (at least those I'm familiar with) don't have weka and don't have kea....but they do have kaka – so making them go and retrofit excluders to their traps will have serious implications (both in terms of cost and potentially in terms of efficacy). And (stick with me on this...I might be joining too many dots here), the next argument/challenge I can foresee cropping-up would be folks asking why are we recommending they put an excluder on A24's but not on Philproof bait stations (we have evidence from Mt Bruce of a kaka happily pulling the base off one of those if you recall)??

Anyway, from my perspective I'm OK with a 'blanket' recommendation on how these things are used in kea country because those birds are getting pretty rare, they are notoriously curious (plus have a long history of making mischief with our pest control devices) and the expert advice is that the risk to the birds would outweigh any benefits of pest control. I'm not yet convinced that the argument is the same for kaka.

My two cents worth.

Cheers

[REDACTED]
Principal Scientist - Threats
Department of Conservation—*Te Papa Atawhai*
DDI: +64 7 [REDACTED] | M: +64 27 [REDACTED] | VPN: 6088

Biodiversity Group—*Kāhui Kanorau Koiora*
Private Bag 3072 Hamilton 3240
Level 4, Monckton Trust Building
73 Rostrevor Street, Hamilton 3204

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From: [REDACTED]
Sent: Monday, 28 August 2017 4:57 p.m.
To: [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]
Subject: RE: DDG Ops Advice request Goodnature traps August 2017 - DOC-3149845.doc

Folks

With regard to both [REDACTED] and [REDACTED] comments.

Where there are weka and no kea, traps could certainly safely placed above weka height – I think that might now be about 1.3m but I'm not sure. In the South Island, there isn't very much country with weka and no kea – perhaps just the Marlborough Sounds – all North Island weka country would fit this.

The kaka thing.

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 30 August 2017 10:20 a.m.
To: [REDACTED]
Subject: RE: A24 advice update Wednesday 8.10
Attachments: Craig's comments.docx

Hi all,
Document looks good to me – just one important comment (see attached also) and that regards the paragraph/bullet point **“Where traps are to be used for stoat control to protect critically endangered species”**. I think that whole paragraph is a bit confusing now, it sort of contradicts other parts of the document and feels a bit redundant. I think the important details regarding non-target risks and when to use weka excluders or raise the A24s are incorporated in the subsequent paragraphs so the above mentioned paragraph could probably be removed from the document.

Cheers

[REDACTED]

[REDACTED]
Principal Scientist - Threats
Department of Conservation—*Te Papa Atawhai*
DDI: +64 7 [REDACTED] | M: +64 27 [REDACTED] | VPN: 6088

Biodiversity Group—*Kāhui Kanorau Koiora*
Private Bag 3072, Hamilton 3240
Level 4, Monckton Trust Building
73 Rostrevor Street, Hamilton 3204

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3. There is evidence of a dead kaka in the North Island, picked up after 1 month as part of routine monitoring, so we would find dead kea
4. rats and stoats are scavenged by other rats and stoats, which drag their food to a cache – kea are too big to drag (but in area with pigs may be scavenged)
5. there has been evidence of dead rats/stoats under traps as part of routing monthly checking, but never a kea.

This is about risk, and ensuring any risk posed is outweighed by conservation benefit. I want to be able to use this advice as guidance for rangers – this is another tool in our pest management toolbox. Want to be clear on what pests should we use it for, what are the risks in relation to by-kill, and in these situations how should we use the traps.

Essentially I am looking for the following advice, factoring in the above points mentioned:

- Advice on what predator species to use A24s on
- Advice on what potential non-target species risk exists
- Advice on how to deploy in areas where bird by-kill is a risk, especially parrots and weka (and factoring in variability in interaction at site by individual and population – as discussed) e.g. where to use as is, where to use with an excluder, where not to use.

Thanks [REDACTED]

Appreciate your support and the work of the team.

Cheers, [REDACTED]

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[REDACTED]

From: [REDACTED]
Sent: Tuesday, 5 September 2017 3:21 p.m.
To: [REDACTED]
Subject: RE: critical issue for short-tailed bats and A24s

Kia ora tatou.

To clarify the results of the bait/lure attractiveness trial we did on captive short-tailed bats in the early 2000s, in relation to a liquid chocolate lure:

- 1) These trials showed that bats would approach and feed on every single bait/lure that we presented them with in a captive situation.
- 2) However, some baits/lures were found to be more attractive than others to the bats (e.g. they spent more time feeding on the peanut lure). The bats were not overly attracted to the chocolate lure- in fact it rated the 4th least attractive to the bats out of the 10 lures sampled.
- 3) Meat-based lures also seemed to be relatively unattractive to the bats.

The results of this suggest that a chocolate-based lure could be a fairly 'good' lure (relative to other lures) to use in short-tailed bat habitat. This is not to say a short tailed bat would not approach and interact with a device baited with a chocolate lure in the wild, but I just wanted to clarify these results.

Nga mihi,
Ali

[REDACTED]
Senior ranger (Biodiversity) - Kaitiaki Matua (Kāorau Kōiora)
Department of Conservation - Te Papa Atawhai
1 Mountain Rd, Ohakune, 4625
DDI: +64 6 [REDACTED] | VPN: 6305

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From: [REDACTED]
Sent: Tuesday, 5 September 2017 2:57 p.m.
To: [REDACTED]
Cc: [REDACTED]; [REDACTED]; [REDACTED]
Subject: RE: critical issue for short-tailed bats and A24s

Hi

Which lures are used with A24s (for rats and stoats)?

When using A24 traps for rats the lure recommended is Goodnature Chocolate formula Rat lure from an Automatic Lure Pump (ALP) that is designed to dispense 55g of the lure over 6 months. The same chocolate formula lure can also be used in a standard lure basket (recommended monthly refreshment).

When using A24 traps for stoat control Goodnature advise using their Rabbit Meat formula lure in the lure basket (recommended monthly refreshment). DOC advise that A24 traps have proven effective for stoats with Connovation Erayz rabbit block lure.

This information is from the Goodnature website and DOC advice (Director, Threats) from November 2016.

Regards

██████████
██████████
Technical Advisor - Animal Threats
Biodiversity Group—Kāhui Kanorau Koiora
Department of Conservation - *Te Papa Atawhai*
██████████

██████████ ██████████ ██████████
Sent: Tuesday, 5 September 2017 12:31 p.m.
To: ██████████ ██████████ <██████████@██████████> ██████████ ██████████ <██████████@██████████> ██████████ ██████████
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Cc: ██████████ ██████████ <██████████@██████████> ██████████ ██████████ <██████████@██████████> ██████████ ██████████
<██████████@██████████> ██████████ ██████████
Subject: RE: critical issue for short-tailed bats and A24s

Hi all
██████████ and I have had an opportunity to discuss this critical issue 'what if we are using lure on A24s that is attractive to short tailed bats?'

We suggest the following course of action:

1. Fact checking with the Threats team: ██████████ can you please confirm by reply email which lures are used with A24s (for rats and stoats)? ██████████ Off the top of my head, I've indicated to ██████████ that there are compulsory restriction around the use of certain pesticide uses where short tailed bats are present, but not specific lures. There is a performance standard specifying which lures may be used with leghold traps and cyanide, but this would not be relevant here. Can you please email to correct or clarify this for all on this email trail?
2. Once you've heard from ██████████ and ██████████ can ██████████ and ██████████ confer with ██████████ and ██████████ to confirm or revise ██████████ original advice.
3. ██████████ and I will consider this advice to look at where to go with the critical issue from there.

Thanks everyone.
██████████

From: ██████████ ██████████
Sent: Thursday, 24 August 2017 3:26 p.m.
To: ██████████ ██████████ <██████████@██████████> ██████████ ██████████ <██████████@██████████> ██████████ ██████████
<██████████@██████████> ██████████ ██████████ <██████████@██████████> ██████████ ██████████ <██████████@██████████> ██████████ ██████████
Cc: ██████████ ██████████ <██████████@██████████> ██████████ ██████████ <██████████@██████████> ██████████ ██████████
<██████████@██████████> ██████████ ██████████ <██████████@██████████> ██████████ ██████████ <██████████@██████████> ██████████ ██████████
Subject: RE: critical issue for short-tailed bats and A24s

I agree with ██████████ Pikiariki would be the ideal spot for trial like this. Would be very keen to see this happen (with the right level of support).

Supervisor Biodiversity – Kaitauawhi, Kanorau Koiora
Department of Conservation - *Te Papa Atawhai*
Maniapoto District Office, 78 Taupiri Street, Box 38, Te Kuiti 3941
Ph. [redacted]

From: [redacted]
Sent: Monday, 21 August 2017 3:27 p.m.
To: [redacted] <[redacted]> <[redacted]>
<[redacted]> <[redacted]>
Cc: [redacted] <[redacted]> <[redacted]>
<[redacted]>
Subject: RE: critical issue for short-tailed bats and A24s

Thanks [redacted] A24s have been mentioned as something to consider for Pikiariki in the future, especially given the susceptibility of bats to toxins that we use every year at this site. Piki would make a very accessible site for a study of A24s/bats, but this District would need support to do that.

From: [redacted]
Sent: Monday, 21 August 2017 2:43 p.m.
To: [redacted] <[redacted]> <[redacted]>
<[redacted]>
Cc: [redacted] <[redacted]> <[redacted]>
Subject: critical issue for short-tailed bats and A24s

Hi
I would like to highlight a potential problem of the A24 self-resetting traps which I believe is a critical issue.

There has been evidence to show that A24 traps are a risk to kaka and kea and this made the bat community ask the question – is there any risk to short-tailed bats? The recent adaptation to the traps to stop kea or kaka getting into them would not stop short-tailed bats crawling into them. The lure that is used for the A24 traps is a chocolate formula that will be attractive to short-tailed bats [redacted] et al. 2004). If anyone is considering using the A24s in a short-tailed bat area then I think a study is required to show if there is a risk to short-tailed bats.

[redacted] Jo Thorne, and [redacted] William Robertson 2004 *Evaluating the attractiveness of pest-control baits and lures to captive short-tailed bats, *Mystacina tuberculata**. Wellington: Department of Conservation.

If I need to send this on to someone else then please let me know.

Regards
[redacted]

[redacted] Technical Advisor, Science and Policy, Department of Conservation
VPN : 5078
[redacted]
Monro State Building, 186 Bridge Street, Nelson,
email [redacted]
Conservation for prosperity *Tiakina te taiao, kia puawai*
www.doc.govt.nz

[REDACTED]

From: [REDACTED]
Sent: Tuesday, 5 September 2017 2:57 p.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: critical issue for short-tailed bats and A24s

Hi

Which lures are used with A24s (for rats and stoats)?

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This information is from the Goodnature website and DOC advice (Director, Threats) from November 2016.

Regards

[REDACTED]
[REDACTED]
Technical Advisor - Animal Threats
Biodiversity Group—*Kāhui Kanorau Koiora*
Department of Conservation - *Te Papa Atawhai*
[REDACTED]

From: [REDACTED]
Sent: Tuesday, 5 September 2017 12:31 p.m.
To: [REDACTED]; [REDACTED] hurley; [REDACTED]; [REDACTED]; [REDACTED] hurley; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]
Cc: [REDACTED]; [REDACTED]; [REDACTED]
Subject: RE: critical issue for short-tailed bats and A24s

Hi all
[REDACTED] and I have had an opportunity to discuss this critical issue 'what if we are using lure on A24s that is attractive to short tailed bats?'

We suggest the following course of action:

1. Fact checking with the Threats team: [REDACTED] can you please confirm by reply email which lures are used with A24s (for rats and stoats)? [REDACTED] Off the top of my head, I've indicated to [REDACTED] that there are compulsory restrictions around the use of certain pesticide uses where short tailed bats are present, but not specific lures. There is a performance standard specifying which lures may be used with leghold traps and cyanide, but this would not be relevant here. Can you please email to correct or clarify this for all on this email trail?
2. Once you've heard from [REDACTED] and [REDACTED] can [REDACTED] and [REDACTED] confer with [REDACTED] and [REDACTED] to confirm or revise Moira's original advice.
3. [REDACTED] and I will consider this advice to look at where to go with the critical issue from there.

Thanks everyone.

[REDACTED]

From: [REDACTED]

Sent: Thursday, 24 August 2017 3:26 p.m.

To: [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]>

<[REDACTED]> [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]>

Cc: [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]>

<[REDACTED]> [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]>

Subject: RE: critical issue for short-tailed bats and A24s

I agree with [REDACTED] Pikiariki would be the ideal spot for trial like this. Would be very keen to see this happen (with the right level of support).

[REDACTED]

Supervisor Biodiversity – Kaitauawhi, Kanorau Koiora

Department of Conservation - *Te Papa Atawhai*

Maniapoto District Office, 78 Taupiri Street, Box [REDACTED]

[REDACTED]

From: [REDACTED]

Sent: Monday, 21 August 2017 3:27 p.m.

To: [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]>

<[REDACTED]> [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]>

Cc: [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]>

<[REDACTED]> [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]>

Subject: RE: critical issue for short-tailed bats and A24s

Thanks [REDACTED] A24s have been mentioned as something to consider for Pikiariki in the future, especially given the susceptibility of bats to toxins that we use every year at this site. Piki would make a very accessible site for a study of A24s/bats, but this District would need support to do that.

Released Under The Official Information Act

[REDACTED]

From: [REDACTED]
Sent: Friday, 1 September 2017 3:53 p.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: A24s - when and how to use
Attachments: DDG Ops Advice request Goodnature traps August 2017 - DOC-3149845.doc

Hello [REDACTED] and [REDACTED]
Please find attached (and on [DOC-3149845](#)) the advice requested by [REDACTED] below, noting:

- This advice includes a copy of last Friday's email on how the Trounson trap and Fiordland observations have been taken into account.
- We await direction on how you would like us to engage with Goodnature to progress the testing and modification of their excluder, with respect to kea protection and control efficacy.

Kind regards
[REDACTED]

From: [REDACTED]
Sent: Thursday, 24 August 2017
To: [REDACTED]
Subject: FW: A24s - when and how to use
Sending straight on

From: [REDACTED] Of [REDACTED]
Sent: Thursday, 24 August 2017 11:57 a.m.
To: [REDACTED]
Cc: [REDACTED] <[linkess](#)> [REDACTED]
<[REDACTED]>
Subject: A24s - when and how to use

Hi [REDACTED]
Thanks for the discussion yesterday. I think that the team has probably covered off most of the points I was raising in regards to considering the full range of data in providing their advice, so my not take long to provide back the assurance I am seeking (which I will now provide to [REDACTED] as he is back in role tomorrow).

Specifically the advice I saw appeared to be silent on data relating to 1.7 million trap nights of data from Fiordland (Lyndsay [REDACTED] I believe), plus research that [REDACTED] has done involving A24s? I just want assurance this information was part of the context considered by the TAG in providing its advice.

For whatever decision [REDACTED] makes, I wanted to be able to provide some information to use in communications, and address current mental models/statements that are circulating. It can form part of the context for [REDACTED] decision.

Different mental models include:

In relation to no evidence of dead kea:

1. Kea would be scavenged as rats and stoats are, so we would not see evidence
2. Kea may be injured and move away from the trap

[REDACTED]

From:

Sent:

Friday, 22 September 2017 9:38 a.m.

To:

Cc:

Subject:

A24 weka kill

Hi

FYI [REDACTED] gave me the number [REDACTED] of [REDACTED] who is a [REDACTED] on Kawau Island. An A24 trap with weka excluder was set close to the ground outside her kitchen window on about the 1st of September (about three weeks ago). On the morning of the 2nd (the next morning) she heard a weka in its death throws and rushed outside to find a weka with head wounds next to the trap that they euthanized. She rang DOC and F&G who contacted Goodnature on the Monday (4th September) who said they would look into improving the design. The obvious conclusion is that weka can access A24 traps even when the weka excluder is attached. Goodnature may have neglected to inform DOC of this risk!

Cheers

[REDACTED]

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Official Information Act

From: [REDACTED]
To: [REDACTED]
Subject: kea
Date: Monday, 25 September 2017 1:58:00 p.m.

Giddy [REDACTED]

I missed my chance to give you a friendly earful when I saw you in Welly last Monday – never one to miss an opportunity – here’s the earful.

I’m convinced that we’re killing keas with the A24 traps.

[REDACTED] notion that because we haven’t found any dead keas near the traps, they must be OK, is bollocks. We’ve got video evidence of keas undertaking fatally stupid behaviour with un-armed A24s. We know that bodies are dragged away from traps, we also know that keas are likely to get their bills smashed and die later away from the traps. Looking for dead kea round our traps is not good enough.

In any case keeping using the traps and measuring the rate of kea deaths and subsequently deciding whether they’re safe or not, is a foolhardy approach. Keas are very rare and killing them as a way of finding out whether the traps are a risk is not a good idea for kea. Furthermore, any robust trap monitoring we undertake will of necessity involve monitoring only a small proportion of traps with cameras. If, for example, we put cameras on 10% of the traps and find a couple of dead keas, that means we’ve killed 20 – already too many and we’ve had to deploy a shit load of expensive cameras.

I’m not sure what Good Nature says, but I think they reckon we’ve no evidence of kea deaths. But non-the-less they make weka excluders. That means that they reckon that weka can get into the traps, but kea can’t. Bollocks is the only appropriate word for this.

Our solution of unsetting traps above 900m is silly in the extreme. I’ve worked on kea they spend most of their time in the forest – the alpine parrot thing is worthy only of the Womans weekly. Sure they might find traps in the open more quickly than those in the forest, but I can’t be convinced that kea won’t eventually find a baited trap in the forest.

So quit griping [REDACTED] what do you want us to do?

I think we should unset them all, but I understand the pressures that might make this unlikely. So I reckon we should fit weka excluders to all the A24s in the South Island, that will keep most, if not all, of the kea out. Then we work out if the fitting of the excluders makes the traps less effective – but there’s no panic to figure that out, though there is a panic to stop killing keas.

I hope you appreciate this not being written in DOC-speak.

See ya

[REDACTED]
Principal Advisory Scientist
Department of Conservation
Private Bag 5
Nelson
Phone: [REDACTED]

[REDACTED]
[REDACTED]

From: [REDACTED]
Sent: Tuesday, 7 November 2017 4:28 p.m.
To: [REDACTED]
Subject: FW: A24 Intellectual property

FYI

From: [REDACTED] [mailto:[REDACTED]@goodnature.co.nz]
Sent: Friday, 3 November 2017 3:52 p.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: A24 Intellectual property

Hi [REDACTED] thanks for your thought.

It'll be great to have a constructive conversation in a room together in the near future to finalize the details.

Have a fantastic weekend.

[REDACTED]

On 3 November 2017 at 10:52, [REDACTED] <[REDACTED]> wrote

Morning

Responses in red again. As always life is not simple. It will be great to find a way through the complexity.

Cheers

[REDACTED]

From: [REDACTED] [mailto:[REDACTED]@goodnature.co.nz]
Sent: Thursday, 2 November 2017 4:43 p.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: A24 Intellectual property

[REDACTED]

There seem to be two fundamental questions here and they can be answered in isolation - that would significantly reduce cost, time and complexity. **I agree that we need to be very clear with our questions.**

First, can Kea access the trigger of an A24 with weka excluder on. I agree that this is an important question and it's great that Al's team are happy to test it. It would also be good to know that there is no risk of entanglement (e.g. toes caught) with the weka excluder.

Secondly, do A24's with weka excluders catch rats and Stoats as effectively as double set DOC 200's. There are two questions here and our primary focus has been on stoats. If a system is very ratty I suspect that there is a risk that rats could get caught in the excluder denying both rats and stoats access to the trigger. If the system is not so ratty but has stoats then it would give a clearer indication (without clogging) of stoat kill efficacy.

I would really appreciate your thoughts on how best to address the clogging issue. I know of sites where people have chosen to stop using weka excluders and raised A24 traps out of the reach of weka and robin. This is fine for rats but could negatively impact on stoat kill efficacy and would still potentially expose kea to traps. The ideal way forward would be to have an excluder that kept out non-targets but gave stoats (and rats) easy access. The heavy mesh cage that was developed/used/trailed at Dunedin Botanic Gardens that excluded kea looked as though it had potential to me. I'm trying to track down the photo and will send it to you when I get it. What are your thoughts?

If we can resolve the first one, the second provides confidence that it delivers the protection we know our current DOC200 trap networks provide.

This will not cost anyone anything but provide you the confidence to use either method with confidence, anywhere.

Al and his team will test the Weka excluder to the standard that you set, they will be on the courier today and be under test next week. Great work.

I've been offered a site to use that has a DOC trap network in place. [REDACTED] [REDACTED] has suggested 60/60 normally provides the confidence needed should the stoat capture prove high enough and historical data illustrates that they normally catch in excess of 100 across the 140 traps in this particular network. I have 70 cameras available and Goodnature will cover the cost of having the video analyzed by whoever you feel is independent. So, this should provide the answer to the first question for free with no cost implication or modification to work undertaken. Great that you see value in testing the efficacy of A24s against DOC200s and are happy to commit resources and support. Like you I would like a non-target safe A24/excluder solution that can be tested sooner rather than later. I think we have the question right: Are double set DOC 200 traps more or less effective at catching stoats than A24 traps with non-target excluders by comparing the catch rate of stoats caught in 100 of each device?

Also I'm happy with the study design: 100 double set DOC 200 traps and 100 A24s with non-target excluders will be placed alternately, 500m apart, alongside roads in native forest where stoats are believed to be present. Cameras will be placed at all traps to record the number of stoats killed and the number of stoat interactions. All traps will be baited with Erayz and checked weekly over summer 2017/18 until at least 100 stoats have been caught. Gas canisters will be replaced as required.

Ideally we need to maximise the sample size in the shortest possible time (until we have the power to get a statistically meaningful result) hence our proposal to have 500m spacings between traps where there is no pest control (1080 or previous trapping). Consequently I don't favour using an existing control site.

Are you happy to proceed here [redacted] I'll hold off on doing this until we have your commitment to support. We still need a non-target safe A24/excluder solution to test. One option is the weka excluder but even if it proves kea safe (which would be a worthwhile outcome in its self) I'm nervous that people will still favour raising A24s rather than using weka excluders because of clogging. Option two could be to trial your new prototype but I don't know how confident you are that your prototype will be non-target safe? Also as you point out it is still in development and will change – potentially significantly. Option three could be to trial a heavy mesh box? What do you think?

Regards, [redacted]

On 2 November 2017 at 10:05, [redacted] <[redacted].nz> wrote:

Hi [redacted]

Again comments in red. Good to talk this stuff through.

Cheers

[redacted]

From: [redacted] [mailto:[redacted]@goodnature.co.nz]

Sent: Wednesday, 1 November 2017 5:00 p.m.

To: [redacted] <[redacted]>

Cc: [redacted] <[redacted]>

Subject: Re: A24 Intellectual property

Perfect [redacted] when would you like to catch up to proceed here? I'm happy to come over to you or you're more than welcome to come here. I'm keen to proceed when we have something to proceed with.

I'm happy with the design of the Weka excluder, If we are to do the efficacy trial using A24s with weka excluders we need to be confident that they are kea proof, other non-target proof (there is a report of a weka being maimed and put down on Kawau Island) and that it doesn't compromise the efficacy of the A24 (clog up with rats) it has been tested with Kea and Kaka in captive environments using weka excluders in kea and kaka habitat is problematic because without cameras kills (with up to 90% scavenging) and maiming's (the animals flies away) are exceedingly difficult to observe. Testing kea behaviour in captivity is a far more reliable way of gauging risk. I think that this is worth doing if weka excluders are to be used in kea habitat and I'm assuming you'll be using the Kea-

proof ends **yes, using kea proof netting is very sensible** that we designed for a DOC200 tunnel set up? There are loads of networks that have DOC200's in kea habitat so we could add A24's to this to reduce the cost. Would you do it on monthly or six monthly trap checks for the comparison? **We propose the following study design: 100 double set DOC 200 traps and 100 A24s with non-target excluders will be placed alternately, 500m apart, alongside roads in native forest where stoats are believed to be present. Cameras will be placed at all traps to record the number of stoats killed and the number of stoat interactions. All traps will be baited with Erayz and checked weekly over summer 2017/18 until at least 100 stoats have been caught. Gas canisters will be replaced as required.** I'm aware you have been testing run-through tunnels and have been suggesting people implement this I helped the Friends of Rotoiti write up their run-through versus box trap trial last year. Run throughs may be **appropriate to use in some situations but as always non-target risk needs to be well considered,** have you put it through humane trials yet in the new format or tested it with Kea? **I don't advocate the use of run-throughs in kea country** Would be great to do the comparison with the hardware of your future too.

We are a company that constantly improves our offering so if you are waiting for it to stop changing, we may need to talk more broadly about agile methods of design. **I totally understand and support the need for continuous improvement. The issue with weka excluders is that there is no point in spending heaps to test them today if they aren't going to be used widely and are gone tomorrow. It would be great to test something that is likely to be used widely, is safe in many situations and is likely to be around for a while.** I know it's something that [REDACTED] is keen on so perhaps we can get started.

I guess this is all the stuff we can build into the trial. Let's get moving so we can do it when the stoat numbers are high. **I agree that a trial this summer would be ideal**

Let me know when you're available.

[REDACTED]

On 1 November 2017 at 15:56, [REDACTED] <[REDACTED]> wrote:

[REDACTED]

Good to have this discussion. My comments in red below.

Cheers

[REDACTED]

From: [REDACTED] [mailto:[REDACTED][goodnature.co.nz](mailto:[REDACTED]@goodnature.co.nz)]
Sent: Wednesday, 1 November 2017 2:13 p.m.
To: [REDACTED] <[REDACTED]>
Cc: [REDACTED] <[REDACTED]>
Subject: Re: A24 Intellectual property

Great news [REDACTED] we'd love to see all methods of pest control having no impacts on non-target species, certainly, some are a real issue. Again, we really should be talking about all methods being tested in the same way so perhaps we could look at long-term outcomes as the measure?

You were asking [REDACTED] for prototypes for kea testing because AI was interested in doing some testing? He normally comes directly to us, I'll get in touch with him. We have some great partners to work with around testing field efficacy and we have worked with [REDACTED] on a broad range of projects so thanks for reminding us of him and offering his mahi. [REDACTED] is happy to help and it would be great to test your prototype with kea. As we are in development, the design could be remarkably different by the time it is in production so we'd prefer to move to our current plan. I totally agree that you should stick to your plan. Once you have a trap you think is non-target/kea proof it would be great to test its efficacy against DOC200s.

When you say 'we' would like to test the efficacy of A24's and DOC200's, thanks for including us as this would be a great opportunity to collaborate. What's the plan? A lot of work was done by [REDACTED] and I'd be really keen to have his involvement in the trial design. He's a very competent scientist with great experience with a broad range of traps and has possibly explored this very thing or could provide the answer here. Another site we could look to is Great Island, the total absence of stoats should illustrate that the traps are good at controlling them. The question that we would like to test is: Are double set DOC 200 traps more or less effective at catching stoats than A24 traps with non-target excluders by comparing the catch rate of stoats caught in 100 of each device? I agree that it would be great to have [REDACTED] as part of the team

I think the weka excluder should be fine for you to undertake your work, if the traps are apparently clogging up then perhaps that indicates there aren't many predators in the system or weka for that matter. Perhaps we could work on removing this somewhat minor issue, clogging, rather than putting off valuable research. This might inform other work and I could get them to you in the coming weeks. It would have the added benefits of allowing these larger deployments planned to move ahead seamlessly. More than happy to support you with this initiative. Testing the efficacy of A24s against DOC200s at catching stoats is not cheap so it's important to do the test with an A24 design that is going to be about for a while. Ideally we need an A24 design that can be used in different non-target circumstances (e.g. rats, weka, kea, and robin present) as is currently the case with DOC200s. My assumption is that your current non-target prototype will replace A24s with weka excluders. If correct it would be better to wait. If incorrect and A24s with weka excluders are to be the non-target combination of choice for some time then it may be worthwhile doing the efficacy trial but we would need to know that kea were safe. Have you tested kea access to A24s traps with weka excluders?

Looking forward to working with you [REDACTED] Likewise.

[REDACTED]

On 1 November 2017 at 12:53, [REDACTED] <[REDACTED]> wrote:

[REDACTED]

Great to hear from you. I'm appreciative of your offer of advice. I'm sure we want the same outcome of efficient and effective traps with acceptable non-target risk. I applaud your efforts to develop a trap that minimizes the risk to non-targets.

I did speak to [REDACTED] [REDACTED] who said "We're just testing kākāpō initially, and then takahē. During the kākāpō test we may get some kākā and kakariki interactions, although there won't be many." It would be great to test your new prototype against kea also. I spoke to [REDACTED] of ZIP and he would be happy to organise such testing. Perhaps this is underway but if not are you happy to take Al up on his offer?

We would also like to test the efficacy of A24s against DOC200 traps. We can't do that in kea country with standard A24s because of the potential risk to kea. Likewise there seems little point in testing A24s with weka excluders given their limitations (clogging up etc) and the likelihood that they will be superseded by your new developments. If your prototype can be shown to be non-target safe, how long would it take you to produce 100 that we could use in an efficacy trial? Would you be happy to loan us 100 to test?

I look forward to hearing your thoughts.

Regards

[REDACTED]

From: [REDACTED] [mailto:[REDACTED]@goodnature.co.nz]

Sent: Wednesday 1 November 2017 11:19 a.m.

To: [REDACTED] <[REDACTED]>

Cc: [REDACTED] <[REDACTED]>

Subject: A24 Intellectual property

Kia ora [REDACTED]

It's been a long time since we last spoke but understand you have been busy.

I have been informed that you are seeking confidential information on a product development that Goodnature is undertaking with other members of the scientific community within the Department of Conservation.

We have developed a productive working arrangement for this project and your involvement introduces unwanted complexity and compromises this work and its people. If you need clarity on our relationship, please get in touch.

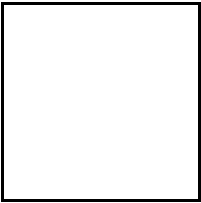
Any information that you feel you need for the productive growth and support of pest control initiatives can be sought directly from me in the future, so, feel free to give me a call or pop in for a coffee to learn about other tools and methods that you are currently unfamiliar with.

Please confirm you have received this.

Regards,

██████

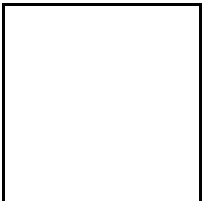
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██████ | Director | Mobile ████████ | Office [+64 \(0\)4](tel:+6404) ████████ | Address [8 Horner Street, Newtown, Wellington 6021](#). | Post PO Box 7407, Newtown, Wellington 6242

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[REDACTED]

From: [REDACTED]
Sent: Thursday, 23 November 2017 9:17 a.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: A24 Trials

[REDACTED]

I'm presuming it's ok for me to step away from this and leave it in yours, Graemes and KBs hands?
Cheers, j

From: [REDACTED]
Sent: Friday, 17 November 2017 7:26 p.m.
To: [REDACTED]; [REDACTED]
Cc: [REDACTED]; [REDACTED]; [REDACTED]
Subject: A24 Trials

Hi,

Thanks [REDACTED] for the introduction. I am definitely keen to be involved in robust trials to further assess the potential of the A24 trap for stoats and rats and how best to deploy them.

There is a great opportunity to leverage off our existing trap networks in Fiordland to undertake some well designed trials. If the science team could assist with experimental design, analysis and some operational resourcing the Fiordland team would be very happy to either assist or manage some solid trial work.

The Goodnature Company are strongly focussed around continuous improvement and we need to work positively with this progressive company to further refine the trap and bait to meet conservation requirements. [REDACTED] [REDACTED] is already working collaboratively with Goodnature to develop a modification that will give confidence around risks posed to kakapo and takahē. Concerns still exist around the perceived, actual and potential risks to kea and weka – this needs further objective study, there is a potential synergy here with the kakapo/weka work that should be built on.

We have already demonstrated the efficacy in Fiordland of A24s for sustained effective rat control and are expanding this usage into remote island situations. The evolution of the Auto Lure Pump (ALP) has made a significant difference to the cost efficacy of rat control.

The work we are doing on Great Island is very encouraging, suggesting that A24s can be an effective stoat control tool. The efficacy and cost effectiveness is likely to increase as the trap and the stoat ALP develops further. This ALP also has potential to significantly reduce servicing costs of existing DOC traps on islands.

I have no doubt that A24s and ALPs will become increasingly important parts of our pest control toolbox with the potential to dramatically reduce costs and increase efficacy. There are some operational questions that need answering, be great to progress these and I'm keen to help.

Regards,
[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 November 2017 1:58 p.m.

To: [redacted] <[redacted]> <[redacted]>
Cc: [redacted] <[redacted]> <[redacted]>
Subject: kea A24 interactions

Hi [redacted]
[redacted] recently shared some camera-trap images of kea interacting with A24 traps out on Reso, where the team also took record of a dead parrot within the trapping area (although species was not identified and specimen not collected so any association to the A24 trapping is entirely speculative). I think [redacted] is working to put them all in a dropbox folder so you can access them. [redacted] and I had a quick chat about trials of A24 traps and excluder devices as he is keen to pursue some robust trials as the use of A24 traps is expanding rapidly in the FNP.

Given the current plans for A24 trials elsewhere it may be worth you discussing with [redacted] if there are ways we can help the Fiordland team by sharing designs, data, working with them to design robust trials and possibly assisting in resourcing at some level. All discussions best had directly with you as I'm not involved in the current trial planning.

Seems like a great opportunity to work together with Ops on a common issue.
Kindest, j

[redacted] T. [redacted]
Herpetology and pest threats—*Kaihono Matanga Rahui Taonga Koiora*
Threats Unit, Biodiversity Group - Kāhui Kanorau Koiora
Department of Conservation—Te Papa Atawhai

[redacted]
Fiordland District Office
Lakefront Drive, PO Box 29, Te Anau 9600, NZ

Conservation leadership for our nature *Tākina te hi, Tiakina, te hā o te Āo Tūroa* www.doc.govt.nz

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[REDACTED]

From: [REDACTED]
Sent: Thursday, 23 November 2017 9:34 a.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: Keas/A24 Traps and Trials

FYI

From: [REDACTED]
Sent: Tuesday, 21 November 2017 4:27 p.m.
To: [REDACTED]; [REDACTED]
Cc: [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]
Subject: Keas/A24 Traps and Trials

Hi,

Please find attached the linkage to footage of a group of kea interacting with an active A24 trap on Resolution Island between September and October of this year. This trap has been in place for four months, from the camera footage there is can be seen considerable investigation of the trap but no fatalities and no hing that suggests injury. There has been a group of curious kea interacting with this trap for four months

The footage can be found at S:\Biodiversity_Team\Biodiversity ISLANDS Secretary Resolution Islands\RESOLUTION IS\Kea Footage Oct 2017. Please let me know if you can't access this link and I will look for some more cunning way to share.

Context around this footage, In response to a rat incursion on Resolution Island in July a network of DOC 200 traps, A24 traps, brodifacoum and tracking tunnels was deployed around the Disappointment Cove area. A rodent dog was also deployed at the site. No further rats have been detected to date, so fingers crossed. When putting out the toxin and traps a group of very interactive kea was present at the Disappointment Cove Hut, they had dismantled the under hut insulation and were very inquisitive. During a visit in August a trail camera was set up on an A24 trap to observe the level of kea interaction. In September this site was visited and the camera was found to have been shifted about and the only images were of kea interacting with the camera. The camera was replaced and on the next visit in November the camera card was removed. From the camera footage there is considerable investigation of the trap by these kea but no fatality and no apparent activation of the trap resulting in injury.

Several other traps on Resolution have had some gouging of the plastic surface of the trap, presumed to be kea but could possibly be kaka. The gouging was not deep enough to compromise the trap structure or gain access to bait.

During the November check of the incursion network the contractor found a very degraded parrot carcass, it was not obvious whether it was a kaka or kea. Unfortunately the carcass was not brought out but the location has been recorded so should be easy to relocate, we will collect next visit. The carcass was approximately two metres from an A24 trap and in the midst of an intensive network of boxes containing DOC 200s and brodifacoum blocks. An on-site inspection of the skull the skull revealed no sign of crushing. The cause of death of this bird remains speculative, a more detailed examination of the remains may be informative.

This information and footage has been shared with [REDACTED] who was going to pass it on to his science team colleagues. It has also been forwarded to the Goodnature Company.

The Goodnature Company is working with [REDACTED] to develop a trap modification that will ensure the safety of kakapo and takahe around A24s. There is also an adapter already on the market to exclude weka. It is envisaged

that either of these adaptations will minimise the risk to kea, it is yet to be determined how these modifications will affect the trap capture efficacy for stoats and rats.

The Goodnature A24 trap coupled with the bait dispensing Auto Lure Pump has the potential to dramatically increase our ability to control stoats over and rats over a landscape scale. The current A24 trap has demonstrated effectiveness against stoats and rats, the next step is to test an adaptation that minimises the risk to non-targets. This test needs to assess the modification effectiveness at excluding potential non targets (particularly kea, kakapo, kaka and weka) and to measure the efficacy of the modified trap in terms of killing stoats and rats.

I have discussed with [REDACTED] and [REDACTED] that Fiordland is keen to assist with any trials the science team may design to help answer these questions. Fiordland is a significant user of A24 traps and with our island programmes and mainland stoat control would envisage expanding this. If there is an opportunity to leverage off operations we already have underway, or a fresh trial site is needed we are keen to help and be involved.

Regards,

[REDACTED]

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[REDACTED]

From: [REDACTED]
Sent: Friday, 1 December 2017 12:48 p.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: 900 metre rule

Thanks for getting back to me [REDACTED]

I'm pretty sure there is no mention of a relationship between altitude and risk to kea in the kea 1080 code of practise.

Hopefully someone else knows where it came from.

Best regards,

[REDACTED]

From: [REDACTED]
Sent: Friday, 1 December 2017 12:42 p.m.
To: [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]
Cc: [REDACTED]; [REDACTED]
Subject: RE: 900 metre rule

I have no idea of where it came from - is there a link in the kea 1080 SOP?

[REDACTED]
Director - Operations, Eastern South Island Region
Department of Conservation—*Te Papa Atawhai*
DDI: +64 3 [REDACTED] | M: +64 27 [REDACTED]
Conservation leadership for our nature | *takina te hī, tiakina te hā, o te ao tūroa*

From: [REDACTED]
Sent: Friday, 1 December 2017 10:29 a.m.
To: [REDACTED] <[REDACTED]> <[REDACTED]>
<[REDACTED]>
Cc: [REDACTED]
Subject: 900 metre rule

Hi all,

I'm wondering, please, if one of you might know the origins of the idea that kea are safe from risk from A24 traps at altitudes of less than 900 metres?

A field staffer asked me yesterday why I had recommended that rule - assuming that I was associated with its making. I feel concerned that a link between my team and the 900m rule is being widely assumed by operations staff.

I promised the person that would try to find out where it came from.

Best regards,
[REDACTED]

[REDACTED]

From: [REDACTED]

Sent: Monday, 4 December 2017 3:30 p.m.

To: [REDACTED]

Cc: [REDACTED]

Subject: RE: 900 metre rule

Thanks very much for your reply [REDACTED] that clarifies things a lot. Field staff seem confused by the approach outlined in the interim advice, especially at the Haast Range where 900m is very close to treeline and kea are very commonly seen in the bush below this level. Plus, Tokoeka like high altitudes and are common above 900m. I hope we can move beyond interim advice soon.

Please consider this an offer of assistance to whoever is tasked with reviewing the camera footage, should it be somebody without much direct experience working with kea.

I'm not sure if this is the best place to right this stuff down, but better to have it out there than sitting in my head.

There seems to be a prevailing assumption that a kea killed by an A24 will drop dead below the trap, to be found by the next trapper to pass by. I have looked at the A24 in my office and reckon that a kea would likely get a smack on the base of the bill, which would probably be a mortal wound but not cause immediate death. I don't think we should expect to find the dead kea under the trap. Think how far a headless chicken manages to run!

There is also an assumption prevailing that if camera traps don't detect a kea accident then kea can be pronounced safe. This assumption is problematic because meeting it requires orders of magnitude more coverage than what we are doing.

Talking with the Haast Range field staff in Franz Josef last week highlighted a couple more interesting things about A24s that I hadn't thought about before.

- 1) Mice are tripping A24s. I think this is concerning because mice can reach high density and could potentially use up the gas supply in A24s very quickly, right when you most need to kill stoats.
- 2) A 'sprung off' A24 does not provide a food reward for a stoat. A stoat that has discovered that A24s are unrewarding and survived because the trap wasn't functioning (e.g. due to mice or rats using up all the gas), has very little reason to stick its head up one again.
- 3) Therefore, it seems likely that some stoats will get into a habit of picking up dead rodents from under traps but not ever stick their head into one.
- 4) DOC 200s avoid these potentially serious problems to some extent because they are not easily tripped by mice, they provide a food reward even when sprung off (perhaps especially when sprung off).
- 5) The best predictor of stoat capture success in [REDACTED] Christie's 2009 study was whether a rat had been captured at a neighbouring trap. I'm not sure if this is referring to double sets, but it seems likely to apply. We often catch stoats in kill traps because the stoat thinks it might get an easy meal of rat. A trap that kills and holds a rat should be more effective from this point of view than one that drops the rat out.

Overall, I think we've learned quite a lot from these A24 deployments and I would like to see them further tested and deployed at operational scales. However, I think it's clear that sites with critical populations of endangered species are not really candidates for large-scale deployment quite yet, especially if kea are present. Failure to observe deaths of kea on the cameras deployed thus far would not change this view with respect to kea risk.

Best regards

[REDACTED]

From: [REDACTED]

Sent: Monday, 4 December 2017 2:12 p.m.

To: [redacted]; [redacted]; [redacted]; [redacted]; [redacted]
Cc: [redacted]; [redacted]; [redacted]; [redacted]; [redacted]
Subject: RE: 900 metre rule

Hello all
[redacted] asked me if I knew any background on the 900m reference with respect to kea and Goodnature A24s. This will be in relation to the Interim advice staff are working to at present (See below.) This was 'interim' to a team process which had dissipated somewhat but I am working with [redacted] [redacted] to pick it up again, by assisting him to write a task assignment to have the various recent camera footage assessed by a Biodiversity science/tech advisor for what it indicates with respect to the 'purpose' below, at least for ESI region. I hope to have a draft to him on Wednesday.
Kind regards
[redacted]

From: [redacted]
Sent: Monday, 24 July 2017 8:37 a.m.
To: [redacted] <[redacted]> [redacted] <[redacted]> Harry Maher <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]>
Cc: [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]>
Subject: Kea and Goodnature traps - confirmation of approach

Dear All,

CONTEXT:
I am sending this in my role as lead Director on kea matters. I have been receiving on-going advise via a TP meeting from Biodiversity science staff about the deployment of GA24 traps in kea habitat. The science and technical experts are still very cautious in their approach to GA24 traps in kea hab tat. I am still working through the advice that they gave me to reach a clear and unequivocal approach to use of these traps. Although no kea have been killed by these traps there is a level of risk.

This is INTERIM ADVICE pending further discussion and evaluation, I am only part way through the advice from the TP meeting.

I am also trying to get hold of Kevin Hague (General Manager of Forest & Bird) to discuss as F&B has a live OIA on this topic, they have a so invested funds in the development of GA24. Last week I also spoke with [redacted] [redacted] of Goodnature, - I am hopeful that we can have an improved working relationship with Goodnature. [redacted] was strongly advocating for his product and was concerned that we would seek to add modifications in the field. Previously he had indicated that he would work with the Department to find solutions.

PURPOSE:
To deploy GA24 traps with minimal risk to kea.

Quality & Quantity:
No GA24 traps to be deployed above 900 m altitude in kea habitat.
A sample of GA24 traps to be monitored by video camera.
Camera should be activated as soon as traps are deployed.
Checking of traps to include checking for marks from kea on traps. [redacted] [redacted] from WSI has photographs of kea impact on traps so that your teams can compare.
Some traps are being deployed with weka excluder devises, and some are being deployed with experimental kea excluders.
Any use of new excluders should be monitored.
Any death of kea or evidence of injured kea or kea interaction with these traps should be reported to the local Operations Director and to me asap.

Further information.

I am working with Biodiversity Science and technical staff to determine what a threshold level for GA24 traps is. Given that traps are out in the landscape 24/7 while 1080 is only seasonally applied this risk assessment needs to be applied carefully.

I have asked [REDACTED] [REDACTED] to find a person who can work with Goodnature on this trap problem solving.

The messages that I have given in the media are:

Traps are not being deployed at high altitude sites in kea habitat.

Monitoring is being increased.

Excluders are being fitted and trailed at some locations.

Predator control is beneficial for kea.

These traps have the potential to save a huge labour cost.

Should kea impacts be detected we will review the use of these traps.

Cheers.

[REDACTED]
[REDACTED]
Director - Operations, Eastern South Island Region

Department of Conservation—Te Papa Atawhai

DDI: +64 3 [REDACTED] | M: +64 27 [REDACTED]

Conservation leadership for our nature *Tākina te hī, tiakina te hā, o te ao tūroa*

From: [REDACTED] [REDACTED]

Sent: Monday, 4 December 2017 1:57 p.m.

To: [REDACTED] [REDACTED] <MCROWELL@doc.govt.nz>

Subject: FW: 900 metre rule

Hi [REDACTED]

See email chain below—[REDACTED] is asking “if one of you might know the origins of the idea that kea are safe from risk from A24 traps at altitudes of less than 900 metres?”

I have confirmed this is not in the kea 1080 COP.

From: [REDACTED] [REDACTED]

Sent: Friday, 1 December 2017 12:48 p.m.

To: [REDACTED] [REDACTED] <[REDACTED]> [REDACTED] [REDACTED] <[REDACTED]>

<[REDACTED]> [REDACTED] [REDACTED] [REDACTED] [REDACTED]

Cc: [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

<[REDACTED]> [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

Subject: RE: 900 metre rule

Thanks for getting back to me [REDACTED]

I'm pretty sure there is no mention of a relationship between altitude and risk to kea in the kea 1080 code of practise.

Hopefully someone else knows where it came from.

Best regards,

[Redacted]

From: [Redacted]

Sent: Friday, 1 December 2017 12:42 p.m.

To: [Redacted]

[Redacted]

Cc: [Redacted]

[Redacted]

Subject: RE: 900 metre rule

I have no idea of where it came from - is there a link in the kea 1080 SOP?

[Redacted]

Director - Operations, Eastern South Island Region

Department of Conservation—*Te Papa Atawhai*

DDI: +64 3 [Redacted] | M: +64 27 [Redacted]

Conservation leadership for our nature *Tākina te hī, tiakina te hā, o te ao tūroa*

From: [Redacted]

Sent: Friday, 1 December 2017 10:29 a.m.

To: [Redacted] <wcostello@doc.govt.nz>; [Redacted]

[Redacted]

Cc: [Redacted]

Subject: 900 metre rule

Hi all,

I'm wondering, please, if one of you might know the origins of the idea that kea are safe from risk from A24 traps at altitudes of less than 900 metres?

A field staffer asked me yesterday why I had recommended that rule - assuming that I was associated with its making. I feel concerned that a link between my team and the 900m rule is being widely assumed by operations staff.

I promised the person that would try to find out where it came from.

Best regards,

[Redacted]

From: [redacted]
Sent: Wednesday, 6 December 2017 12:57 p.m.
To: [redacted]
Subject: FW: Footage of kea interaction with A24 traps

FYI

From: [redacted]
Sent: Thursday, 14 July 2016 4:08 p.m.
To: [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; Kilgour; [redacted]; [redacted]
Cc: [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]
Subject: Footage of kea interaction with A24 traps

Hi All,

I have some footage of kea interaction of A24 traps set at willowbank & at A'Pass village. The footage can be found <S:\kea\kea & goodnature A24 trials>. The spreadsheet camera trial summary worksheet 'photos' analyses the footage from each camera. The images that show kea interacting with the open end of the trap are highlighted in red. Only part of the willowbank footage has been analysed (I've only picked the SD cards yesterday afternoon).

Willowbank : Traps were, inactive (no gas in canister), unbaited without weka excluder but with strike counter. The trap was resited a couple of times at varying heights (all at or below the 14cm as recommended by goodnature)

A'Pass; Trap were inactive (no gas in canister) baited with E ayz, with weka excluder, with strike counter. Staff report kea numbers were very low during this period. However, one of the trap sites were behind the A'Pass store where kea are habituated to people etc.

I have replaced the camera & trap at willowbank with tissue paper in the lure cap. If kea can remove the tissue paper, hopefully this should be obvious on camera footage, they would have to have got past the trigger mechanism. Orana Park are also keen & ready to assist with the camera trial in their kea aviaries. I need to construct a kea proof container for the camera before installation at Orana Park.

Cheers

[redacted]
Ranger Operations (Intensively Managed Sites)
Department of Conservation
DDI: +64 3 [redacted] | VPN: 7731

Rangiora Office
32 River Road | PO B0x 340 | Rangiora | 7440

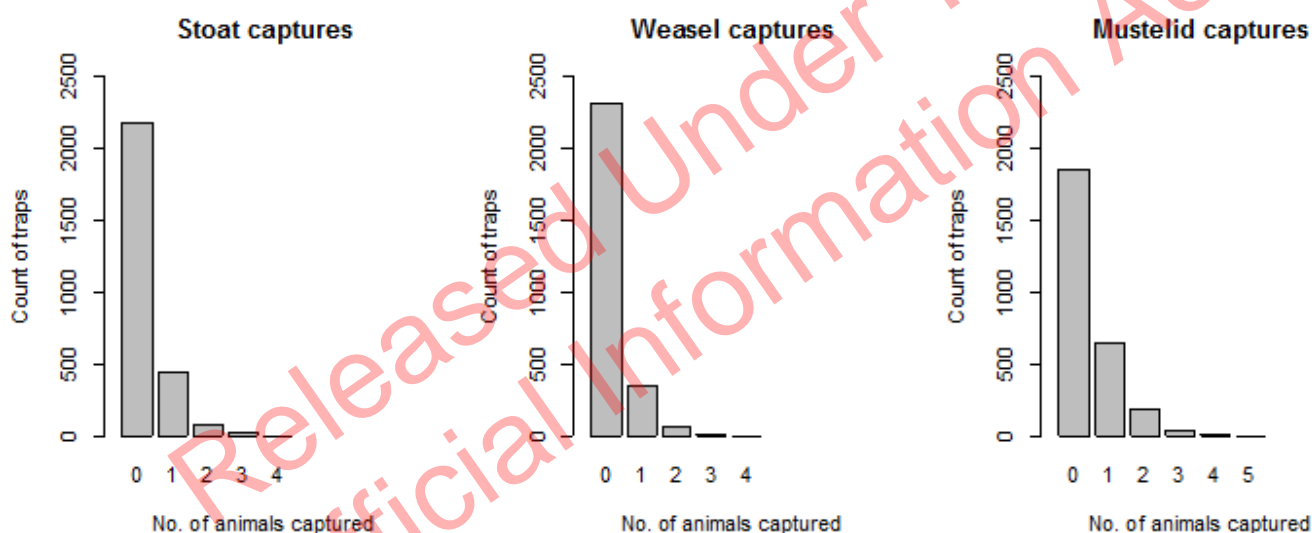
Conservation for prosperity *Tiakina te taiao, kia puawai*

From: [redacted]
Sent: Thursday, 14 July 2016 3:52 p.m.
To: [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; Kilgour; [redacted]; [redacted]
Cc: [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]
Subject: Is there an urgent need for adding A24's to the Waimakariri predator trapping network?

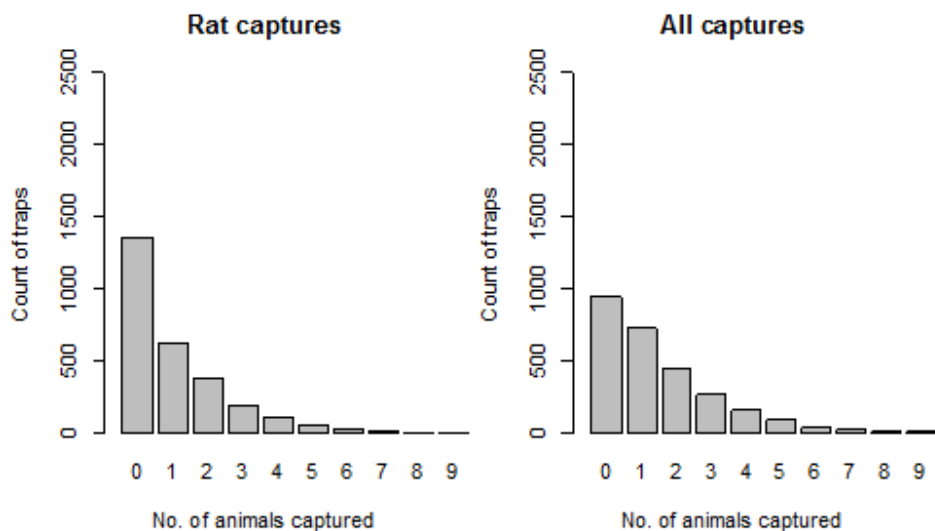
Hi All

Here are the graphs, and interpretation of the mustelid capture data, as requested from the meeting on Monday to discuss the extension of the Waimakariri predator trapping programme and addition of A24 kill traps to the network. The purpose of this email is to add to the technical advice for the inclusion of A24's in the Waimakariri predator trapping network. This information is not provided as an argument against using A24 traps, but to show there are other considerations which should be factored in prior to deciding whether to install these traps. This is especially important given the un-quantified risk to non-targets (e.g. Weka / Kea) from A24's within these Canterbury Valleys.

The A24's self-resetting capabilities, and ability to kill multiple animals without needing to be revisited will be a major advantage in some habitats. However, in the Waimakariri trapping area most of the existing traps never catch a mustelid and there is a low incidence of multiple captures at a trap. This pattern is clear in the following graphs which summarises the number of captures per trap over a 4 yr period (data is from the Hawdon, Poulter, and South Branch of the Hurunui , June 2011-Aug 2015). This suggests that these valleys have a low density mustelid population dispersed over a large spatial area, and implies that good spatial coverage of traps is more important than self-resetting ability in these Canterbury beech forest valleys. Therefore, based on this information, there does not appear to be an urgent need for adding A24's to the Waimakariri predator trapping network, as there is little likely to be gained in terms of number of animals trapped.



The rat trapping data however, shows that there are more multiple captures of ship rats, and this provides some evidence for A24's perhaps being useful as a back-up for controlling rats, and / or intensifying localized protection of OFP hotspots.



Quite happy to discuss further if there are any questions

Kind regards

██████

██████ ████████
 Science Advisor
 Threats Unit
 Science & Policy Group
 Department of Conservation—*Te Papa Atawhai*
 DDI: 03 ████████ | M: ████████

Conservation leadership for our *na ure Tākina te hī, Tiakina, te hā o te Āo Tūroa*

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[REDACTED]

From: [REDACTED]
Sent: Wednesday, 6 December 2017 1:00 p.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: kea & A24 footage
Attachments: Camera trial summary.xlsx

FYI

From: [REDACTED]
Sent: Friday, 18 November 2016 1:22 p.m.
To: [REDACTED]
Cc: [REDACTED]; [REDACTED]; [REDACTED]
Subject: kea & A24 footage

Hi [REDACTED]

I put together a flash drive with footage from Willowbank of A24s & Kea interaction and sent this to [REDACTED]

I had a chance to view some footage today that I hadn't managed to find the time to look at previously. This is from a secondary camera trial where white tissue is inserted in the bait compartment of the A24 **instead of bait**. Kea would need to push past the trigger mechanism to remove the tissue. Kea accomplished this within 13 mins of the A24 set up. Note this is with kea who have been exposed to unbaited A24 in the preceding trial.

<S:\kea\kea & goodnature A24 trials\Willowbank Jul 16 with tissue\IMAG0007.AVI>

It is curious that the kea interaction at willowbank is very different from captive trials done elsewhere as quoted by [REDACTED]

The attached spreadsheet documents the degree of interest by kea.

However, I appreciate this is a trial with captive kea which may not reflect what wild kea do. I also understand we need to weigh up the overall non target cost and benefit for the trapping operation as we do in aerial 1080 & other pest management operations. I believe this is where we need advice.

Cheers

[REDACTED]
Ranger Operations (Intensively Managed Sites)
Department of Conservation
DDI: +64 3 [REDACTED] | VPN: 7731

Rangiora Office
32 River Road | PO B0x 340 | Rangiora | 7440

Conservation for prosperity *Tiakina te taiao, kia puawai*

██████████ ██████████

From: ██████████ ██████████
Sent: Wednesday, 6 December 2017 12:10 p.m.
To: ██████████ ██████████ ██████████ ██████████
Subject: timing and locations of kea footage

Hi ██████████ and ██████████

Are either of you able to fill in some gaps for me on what/where/when for the video footage to date where kea were observed near GA24 traps? I just need the basic details confirmed and any links we might have. This is to help ██████████ ██████████ with some advice.

Location/timing of video footage	Ops team responsible to supply all footage/still images showing kea near traps	Relevant links
Southern Branch Hurunui Winter-spring 2017	Waimakariri Ops manager ██████████ ██████████	
Resolution Island October 2017	Te Anau Ops manager ██████████ ██████████	Images on Te Anau server
Haast June 2017	South Westland Ops manager ██████████ ██████████	DOC-3110742 Trial report
Willowbank Month? 2017	Waimakariri Ops manager ██████████ ██████████	

Thanks
██████████

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From: [redacted]
Sent: Wednesday, 6 December 2017 4:19 p.m.
To: [redacted]
Subject: RE: timing and locations of kea footage

Hi [redacted]
This directory has the photo files (willowbank and AP) and summary excel sheet – Ill see if I can find the SB one if they have been analysed
regards

From: [redacted]
Sent: Wednesday, 6 December 2017 12:10 p.m.
To: [redacted]; [redacted]
Subject: timing and locations of kea footage

Hi [redacted] and [redacted]

Are either of you able to fill in some gaps for me on what/where/when for the video footage to date where kea were observed near GA24 traps? I just need the basic details confirmed and any links we might have. This is to help [redacted] with some advice.

Location/timing of video footage	Ops team responsible to supply all footage/still images showing kea near traps	Relevant links
Southern Branch Hurunui Winter-spring 2017	Waimakariri Ops manager [redacted]	
Resolution Island October 2017	Te Anau Ops manager [redacted]	Images on Te Anau server
Haast June 2017	South Westland Ops manager [redacted]	DOC-3110742 Trial report
Willowbank Month? 2017	Waimakariri Ops manager [redacted]	\\Rgaaosvr1\Groups\$\kea\kea & goodnature A24 trials
Arthur's Pass 2017		\\Rgaaosvr1\Groups\$\kea\kea & goodnature A24 trials

Thanks
[redacted]

[REDACTED]

From: [REDACTED]
Sent: Monday, 11 December 2017 11:41 a.m.
To: [REDACTED]
Subject: RE: Next steps - A24 kea excluder trial
Attachments: Task Assignment kea interactions GA24 video - JRK 11Dec17.doc

Hi [REDACTED]

A couple of suggestions on the attached document. In the 'Purpose' you mention only Eastern South Island. Is that intentional?

Regarding peer review, as [REDACTED] supervisor I intend to review his advice – probably we'll discuss it before he puts pen to paper. If we thought that some external peer review was prudent, how about [REDACTED] I think if the advice can summarise the footage succinctly there should be no need for a reviewer to watch it all.

Best regards,
[REDACTED]

From: [REDACTED]
Sent: Friday, 8 December 2017 3:24 p.m.
To: [REDACTED]; [REDACTED]; [REDACTED]; L\Biodiversity Group Threats Managers
<S&[REDACTED]>
Cc: [REDACTED]
Subject: RE: Next steps - A24 kea excluder trial

Hello all

[REDACTED] – you are welcome to suggest updates to the draft task assignment regarding video footage (on Monday or Tuesday) or to follow the links to have a look at what's there.

We decided at the meeting to supply Purpose/Context/Critical Issues for [REDACTED] around need for a decision in parallel with this video assessment and prior to further excluder development. I volunteered at the time, but I'm happy to take draft suggestions on Monday and Tuesday to pull together for our LT on Wednesday to create a final.

Sue if this isn't on our LT agenda already can you please add it?

Thanks
[REDACTED]

From: [REDACTED]
Sent: Thursday, 7 December 2017 2:31 p.m.
To: [REDACTED] <[REDACTED]> L\Biodiversity Group Threats Managers
<S&[REDACTED]>
Subject: RE: Next steps - A24 kea excluder trial

Hello all

I have invited [REDACTED] along to our Skype catch up on Friday. He met with Goodnature yesterday and can report back. In brief the 'parrot' excluder is in development and should be available by May for testing (though I'm not sure if

that is for testing with kea or testing for stoat efficacy). They are keen to work with us. This long timeframe reinforces the need to make a decision around the current deployment based on current information.

I have drafted the TA referred to under #1 <https://doccm.doc.govt.nz/wcc/faces/wccdoc?dDocName=DOC-3237465>

See you tomorrow,

From: [REDACTED]
Sent: Monday, 4 December 2017 7:33 a.m.
To: [REDACTED] <[REDACTED]>
Cc: L\Biodiversity Group Threats Managers <[REDACTED]>
Subject: Next steps - A24 kea excluder trial

Hello [REDACTED]

Our Threats leadership team met by Skype this afternoon to follow through on your request for a lead T4 and lead scientist for the proposed A24 excluder efficacy trial. I shared with them our chat with [REDACTED] Roberts, his request for a technical review of recent video footage, and your visit to Goodnature last week. [REDACTED] consolidated the critical issues down to 4, the first 3 of which seem to us to be sequential. I list these below with what we believe to be the next steps in italics.

Purpose: Ensure A24s are safe for kea and other native bird species and that the A24s still effectively control stoats.

Critical issues:

1. What if kea are getting killed by A24s: [REDACTED] *to draft TA for Director ESI to request video footage to be viewed and assessed for conclusions by [REDACTED] Director ESI to take decision and work with other regional directors as needed.*
2. How to design an effective excluder for kea [REDACTED] *to confirm GN's current thinking on the 'parrot' excluder prototype in development: how far progressed, can we help, when would it be ready for testing with captive kea, when would they be ready to manufacture sufficient along the testing is.*
3. How to ensure the A24 still kills stoats effectively *This is dependent on #2 so we'd like to wait for your report-back to decide whether it is time to assign a science advisor. One option we think has merit would be to have an independent science consultancy run it with oversight from one of our team, though this would increase costs.*
4. How to involve GoodNature? *This is essential throughout. [REDACTED] will talk to [REDACTED] about assigning a relationship lead. We will determine later whether this person or the lead T4 would be the main contact for the efficacy trial.*

Please give me a call at any time to discuss.

Kind regards

[REDACTED]

From: [REDACTED]
Sent: Thursday, 14 December 2017 2:32 p.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: A24 task assignment timeframes

Hi, I'm in the Trio meeting and we are just finishing off the covering email for the draft task assignment. [REDACTED] hadn't actually seen it yet—I am meeting him tomorrow.

A point of clarification in the meantime: Do you already have access to all the video footage listed in the report? I'd allowed next week for the Ops teams to confirm we have the right links and to send you anything that is missing.

From: [REDACTED]
Sent: Thursday, 14 December 2017 2:07 p.m.
To: [REDACTED]
Subject: A24 task assignment timeframes

Hi [REDACTED]
[REDACTED] just pointed out that the timeframes on the A24 decision are quite long. He is available to review the footage and provide the advice over the coming week, and he has field commitments in January.

I spoke with [REDACTED] [REDACTED] just now and he is keen to shorten the timeframes if we can. I explained to him that the 2017 cohort of kea juveniles is fledging from nests about now, and these birds may be particularly at risk.

Can you please give me a ring to discuss,

Thanks

[REDACTED]

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From: [REDACTED]
Sent: Tuesday, 19 December 2017 1:10 p.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: updated task assignment

Importance: High

Hi [REDACTED] and the Ops managers
This TA is approved to get the kea GN A24 trap material to be analysed.

Can Operations Managers please ensure that they can get a copy of the kea GN A24 video images to [REDACTED] asap

[REDACTED]
Director - Operations, Eastern South Island Region
Department of Conservation—*Te Papa Atawhai*
DDI: +64 3 [REDACTED] | M: +64 27 [REDACTED]
Conservation leadership for our nature **Takina te hī, tiakina te hā, o te ao tūroa**

From: [REDACTED]
Sent: Friday, 15 December 2017 4:50 p.m.
To: [REDACTED]
Cc: [REDACTED]; [REDACTED]
Subject: updated task assignment

Hi [REDACTED]
I've made the changes we discussed for the draft task assignment on [DOC-3237465](#) (and attached). I will await an email from you to confirm the task assignment. As discussed, we'll also need you to email the 3 relevant Ops managers to ask them to get back to me to confirm whether there are any other or better links to use to access an edited version of the footage.

If it is on Monday could you please also copy in [REDACTED] and [REDACTED] since I won't be here to give them the go-ahead on viewing the footage?

Kind regards
[REDACTED]

From: [REDACTED]
Sent: Thursday, 14 December 2017 3:03 p.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: for our meeting tomorrow: draft task assignment plus broader critical issues around A24/kea

Hi [REDACTED]

My colleagues and I have put together a 'context update' for you below, along with current critical issues and some contributions. The purpose of our meeting was to give you a chance to shape the draft task assignment on [DOC-3237465](#) (including the timeframes, which I know [REDACTED] has rung you about). I'm also asking to brief you on the material below. I hope you can forgive the scope creep in the circumstances. I'm in Wellington and will get back to the office between 230pm and 3pm tomorrow—catch you at 4pm.

Purpose

Ensure A24s are safe for kea and other native bird species and that the A24s still effectively control stoats

Context

In December 2016, a decision was made to deploy traps at Haast (Tokoeka) and Arthurs Pass (Orange fronted parakeets), following on from advice from the BFOB Technical advisory and (separately) Paul Jansen.

In June 2017, █████ █████ asked for advice from the BFOB TAG [DOC-3077961](#) in response to concerning video evidence of kea accessing unset A24 trigger mechanisms. Following on from this, █████ █████ led a team process to reassess how we can safely use Goodnature traps to in kea habitat, including several science and advisors and a manager from Biodiversity group. At the request of the DDG Ops, the Biodiversity team drafted a risk management strategy DOC-3130252 on 2 August and clarified 'when and how to use A24s in kea habitat' DOC-3149845 on 1 September. In early October, the Threats advisors in Nelson responded to requests from █████ █████ (to frame the risks more simply for decision making) and from █████ █████ (for a trial design to compare the efficacy of DOC 200 and A24 traps fitted with non-target excluders). Further exploration of the efficacy trial design have brought the Threats LT to the view that:

- It is premature to assign the efficacy trial as a task until there is agreement on (a) which non-target excluder will be used, (b) the non-target excluder has been tested with wild or captive kea, and (c) sufficient excluders have been manufactured to trial. Information from Goodnature is that they will not be ready for any significant production of their early prototype excluder until at least May.
- The efficacy trial task assignment should include project and stakeholder management as well as executing the trial. Trial execution is likely to take at least one year of field work because stoats are at such low densities that it takes a long time to have confidence that observed differences are real.

A visit to Goodnature in on 6 December █████ █████ (Brent Beaven) provided additional context including:

- The kea/kakapo 'snap on' excluder is at an early prototype stage and should be ready for medium-scale production for field testing by May.
- They encourage use of weka excluders in the meantime. The company is offering to supply free kea excluders in exchange for used weka excluders when the kea/kakapo excluder becomes commercially available, as part of their product stewardship.

At present, video observations of kea interactions with GA24 traps are available from four locations, prompting a draft task assignment for an expert assessment DOC 3237465.

Critical Issues, with contributions from Threats LT in italics

1. **How to involve Goodnature throughout:** █████ █████ *remains the relationship lead. The kea-related 'purpose' requires a specific contact point that could be █████ with a Threats advisor in support.*
2. **What if kea are getting killed by A24s:** *The expert assessment of video footage is likely to be equivocal. The value is in the collation of observations-to-date in one report and in the expert interpretation. We suggest a decision should be made now, in parallel with the video assessment between the following options: (a) deploy weka excluders (and formalise the offer from Goodnature on replacement), (b) deactivate all traps, or (c) wait for Goodnature to develop alternatives.*
3. **How to design an effective excluder for kea:** *Goodnature leads this development and we (DOC Biodiversity) have offered our assistance. ZIP have also offered their support including access to their existing arrangement with Willowbank for testing unset traps with captive kea.*
4. **How to ensure the A24 still kills stoats effectively:** *This is dependent on #3 so a task assignment is on hold in the meantime.*

[REDACTED]

From: [REDACTED]
Sent: Tuesday, 16 January 2018 7:18 p.m.
To: [REDACTED]
Subject: Re: A24s

Hi [REDACTED]
Yes I am the lead Threats Manager coordinating technical and scientific advice and support relating to developing a kea / parrot excluder for the A24. I heard that you are assisting the company with testing a prototype, though I don't have any detail. It would be good to catch up however I am on leave for the next 6 days and return to a fairly full schedule. I have time free late morning and early afternoon on 5 and 7 Feb, and time free in the morning on the 9th. Perhaps send me an appt for a half hour Skype to get us started?
Cheers
[REDACTED]

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From: [REDACTED]
Sent: Friday, January 12, 2018 1:45:39 PM
To: [REDACTED]
Subject: A24s

Hi [REDACTED]
I understand that you're helping coordinate A24 work for DOC? Sorry if I've got the wrong end of the stick!

If you are, could we have a chat some time? I've been approached by Goodnature to help with some trials (baffles and lures), but have become aware that this is a pretty emotive subject, and that the relationship between DOC and Goodnature is quite broken. I've discovered that there are several different trials planned, and that the results of these are unlikely to be universally accepted. I'm sure that this is already being considered within DOC, but it'd be great to see some coordination of these trials, so that we're not duplicating effort, and that the results are accepted by everyone.

I'd also appreciate some guidance on how the trials Goodnature is proposing fit in with DOC's strategy and plans for A24 evaluation.

Cheers,

[REDACTED]

[REDACTED]
[REDACTED]
Science Advisor Kākāpō/Takahē - *Kaitohutohu Pūtaiao Kākāpō/Takahē*
Department of Conservation - *Te Papa Atawhai*
Mobile: +64 21 [REDACTED] | [REDACTED]

[REDACTED]

Postal address: Department of Conservation, PO Box 743, Invercargill 9840, New Zealand
Physical address: Department of Conservation, Level 7, 33 Don Street, Invercargill 9480, New Zealand
<http://www.kakaporecovery.org.nz> | www.takaherecovery.org.nz | www.doc.govt.nz

From: [REDACTED]
Sent: Friday, 2 February 2018 1:31 p.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: Kea safe ground control

Follow Up Flag: Follow up
Flag Status: Completed

Cheers [REDACTED] for your reply.

[REDACTED] and me just had a conversation about this. We agreed that the Trap Technology project does not preclude the need for a *Nestor* specific guideline / best practise, for a few reasons

- 1) It doesn't include hand laid poisons
- 2) It won't address potential spatial and temporal controls for reducing exposure of kea to traps (e.g. no need to trap for x months after aerial 1080, trap in pulses rather than year-round)
- 3) It doesn't allow for testing of existing tools like the Baitsafe and the Sentry+Weka Excluder on kea (Thanks [REDACTED] for showing me this Sentry+Excluder design)
- 4) It doesn't include encouragement/incentivisation for designers to invest in R&D to expand the range of kea-safe traps available for cat and possum control

So I hope we can generate a task assignment for somebody like [REDACTED] that utilises the outputs of Nick's project but extends it to produce a parrot-safe best practise and stimulate some R&D.

Best regards,
[REDACTED]

From: [REDACTED]
Sent: Thursday, 1 February 2018 1:10 p.m.
To: [REDACTED]
Subject: RE: Baitsafe stations - safe for kea?

Cheers [REDACTED]

[REDACTED] is about to "assess" X 15 of the most commonly deployed trap systems and will be including "known non target" impacts. The plan is to make this info available to both DOC staff and community groups (via Predator 2050 team) via a similar format to that used for VTAs and the Status List. This is being done as part of the Trap Technology project. My understanding is that the Trapinator is one of thosePlease give [REDACTED] a call if you want to discuss the details.

We do not want folk putting endangered species at risk through a lack of knowledge about known risks.

Regards

[REDACTED] K

From: [REDACTED]
Sent: Tuesday, 30 January 2018 12:18 p.m.
To: [REDACTED]

< [REDACTED]

Subject: RE: Baitsafe stations - safe for kea?

Thanks [REDACTED]

The risk appears not to have been understood by all!

I just tried typing 'Trapinator' into the search field on the doc website. This is what I would do if I were a member of a community group wondering what DOC knows about them. The top hit was this report

<http://www.doc.govt.nz/Documents/conservation/threats-and-impacts/animal-pests/southland/whio-protection-northern-fiordland-national-park.pdf>

which freely uses both Trapinators and Timms traps in kea habitat. There is brief mention of non-target risk to weka, but none of non-target risk to kea. Both Trapinators and Timms have both recently caught kea near Wanaka.

My two points are:

- 1) Our information about non target risk to kea from traps and bait stations should be easy to find, for both DOC staff and Community groups.
- 2) Deploying obviously-risky tools and waiting for deaths to be reported before implementing performance standards is a risky way to go when dealing with an endangered species.

Cheers

[REDACTED]

From: [REDACTED]

Sent: Tuesday, 30 January 2018 11:36 a.m.

To: [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]>

<[REDACTED]>

Subject: RE: Baitsafe stations - safe for kea?

Hi All

The trap technology project is about starting with what we know about commercially available traps efficacy, humaneness, current best practice and gradually building our knowledge. I'll raise the Trapinator risk to kea with [REDACTED] however, [REDACTED] believes the risk is/was already understood.

Regards

[REDACTED]

From: [REDACTED]

Sent: Friday, 26 January 2018 5:20 p.m.

To: [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]>

<[REDACTED]>

Subject: Baitsafe stations - safe for kea?

Hi [REDACTED]

Sorry for my tardy reply – The Bids!!!

- 1) can we find \$1600 dollars for Baitsafe stations and task [REDACTED] with coordination of presentations using ops staff?

I think your suggestion of connecting with [REDACTED] on this one is a good idea given the history of Goodnature traps and kea. We don't want to find we have a full time job assessing traps. But equally we don't want staff using unsafe traps.

MICHELLE – what is your view?

SIMON – how does this relate to the broader trap technology project?

- 2) Should we press on with the A24 task assignment? Clearly the answer is YES given the interaction with [REDACTED] in the intervening time

From: [REDACTED]
Sent: Monday, 15 January 2018 2:27 p.m.
To: [REDACTED] <[REDACTED]>
Subject: Josh's blog

Hi [REDACTED]

Happy new year! I hope you have enjoyed a bit of a break. I had a goodie, lots of sun and blue seas with the odd feed of snapper and even a crayfish. We left our boat in Whangamata and hope to bring it to Wellington in March.

Hitting my desk today, there are a couple of issues I need to raise.

The first one is the age-old problem of how to kill possums and cats without killing kea at the same time. This poor adult female stuck her head into a Trapinator, 100 of which have been deployed in the West Matukituki valley. One step forward, two steps backward. I am aware of one outfit, 'Baitsafe' that is putting design effort into a parrot proof bait station that exploits the body mass differential between kea/kaka and possums. Only a heavy beast of >1.5 kg can open it. They are used in Northland by DOC to keep rats off the possum bait, with purported success. I am wondering if you would support me to task one of the team (i.e. [REDACTED] to coordinate some presentations of the Baitsafe station to kea at a few sites across the South Island to record how they interact and guide any modifications or recommendations as to their safety for kea? It needn't cost much, but we would need \$1600 to purchase 100 of the units. I am thinking we would seek some willing Ops staff at places like Mt Cook, Te Anau, Wanaka to deploy them with cameras on them and some sort of prefeed pellet inside. I am not sure where to get the \$1600 from – maybe I could discuss with

██████████ and/or maybe OSPRI would be interested? Feel free to pass this on to ██████████ if you think that's a good idea.

The second issue is the kea A24 task assignment (DOC-3237465). I have heard through the grapevine that both Haast and Rangiora have been directed to either disarm the A24s in kea habitat or to affix weka excluders to them. This is great news. I am wondering if this means that we should stand down from the task assignment or keep working on it. ██████████ has provided a draft but I have asked him to do some more work on it. Is this necessary or should we drop it and get on with other things?

In summary

- 1) can we find \$1600 dollars for Baitsafe stations and task ██████████ with coordination of presentations using ops staff?
- 2) Should we press on with the A24 task assignment?

Best regards,

██████████

[REDACTED]

From: [REDACTED]
Sent: Friday, 9 February 2018 9:31 a.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: kea A24 reducer test
Attachments: 3rd angle orthographic projection.jpg; 20180116_112802_resized.jpg; side view.jpg

Follow Up Flag: Follow up
Flag Status: Completed

Hi [REDACTED]

[REDACTED] M gave field staff at Haast and Waimakariri two options: fit weka excluders or disarm the traps. I fully support this directive, but for field staff it is a bit like being stuck between a rock and a hard place. Field staff were ringing me up for advice on which option to take. I also received a call for advice from Greymouth office regarding a deployment of several hundred A24s at Springs Junction. The obvious choice is weka excluders, but these are expensive, heavy, they don't stack well and are purportedly prone to blocking up with dead animals. The idea of carrying hundreds of these up the Haast Range just for a stop-gap measure while awaiting Goodnature's design, and then carrying them all off the hill again in a year, seemed less than ideal. We wondered about other interim solutions. At the pipe shop in Nelson I found this pipe reducer (see photos). They are small, light, sturdy and cheap at \$2 each and they require only minor modification to fit the A24. They look to me like a potentially good stop-gap measure for retro-fitting to A24s currently deployed in kea habitat. They certainly keep kea out of harms way. Greymouth field staff (and others, including me) think that implications for stoat and rat killing efficacy need to be assessed (i.e. does it alter the encounter:kill ratio). This hasn't been addressed yet, but even if the reducer does reduce the encounter/kill ratio a bit it could still be better than the weka excluder, because the reducer will be less prone to blocking up with dead animals. The good folk at Natureland and Willowbank have deduced that we can shorten the reducer by 15-20mm and kea still can't reach the trigger, which may go some way to maintaining the encounter:kill ratio for rats and stoats. I think the pipe reducer would lessen the risk to weka too, though that is yet to be explored.

This is not intended as a long term solution (though it might end up being one) and should have no effect on the process with Goodnature. I greatly look forward to seeing what Goodnature come up with. If somebody is working with Goodnature on a list of design criteria, I would emphasize lightweight, small and stackable, and cheap (

Best regards,

[REDACTED]

From: [REDACTED]
Sent: Thursday, 8 February 2018 4:34 p.m.
To: [REDACTED]; [REDACTED]; [REDACTED]
Cc: [REDACTED]
Subject: Re: kea A24 reducer test

Hi [REDACTED]

The analysis of video footage got held up by the late arrival of the hard drive of video from the South Hurunui branch. [REDACTED] will analyse this footage and add it to his draft report next week. We have an appointment with [REDACTED] on the 19th to review and answer his questions, with a view to informing

a decision on the future deployment of the traps in kea habitat. Important context for this meeting will be an understanding of whether the current deployment is up to at the sites in kea habitat. Are you able to brief us (now by email or by joining us) on what the current status is for the DOC GA24s deployed at Waimakariri, Haast, Fiordland, and Gouland Downs.

██████ On the communication back to Goodnature, our overall plan was that ██████ and 'a' technical advisor would be the contact for Goodnature on the development of an excluder but this hasn't been formally set up yet. I will talk to her about it next week, to determine how best to relay the video footage outcomes back to them. Do you/Brent have any meetings coming up with GN that we could tack this on to?

██████ *I don't know what a reducer is or where this development fits with the parrot excluder prototype etc. Could you provide a bit more context for me?*

Kind regards

██████

From: ██████ ██████
Sent: Thursday, 8 February 2018 16:19
To: ██████ ██████ ██████
Cc: ██████ ██████
Subject: RE: kea A24 reducer test

Thanks for this ██████

Apologies, I've lost track of where we got to with collating records of recent interactions with A24's. This was the task assignment ██████ worked up at the end of last year. From memory we were going to use that data, along with the other work ██████ is doing here, to drive the design of a parrot excluder for A 24's.

I'm asking because we should get back to Goodnature with our latest info on kea risks, and try and work with them to agree on an excluder that everyone is happy to endorse.

In other words, when will we be in a position to share info with Goodnature? I'm happy to keep liaising with them, but need a steer from Threats on when you'll have info to relay and who is best to relay it.

██████ ██████
Department of Conservation
PO Box 528
Taupo 3351

██████
[WEB: www.doc.govt.nz](http://www.doc.govt.nz)

From: [redacted]
Sent: Thursday, 8 February 2018 3:19 p.m.
To: [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]>
Subject: FW: kea A24 reducer test

Hi all,
Please find attached an email from [redacted] at Willowbank and a spreadsheet of results. It seems that some males might still access the trigger if the reducers are shortened by 20mm. However, it seems they have to really try so I would suggest that 20mm cu -off should still reduce the risk substantially, possibly to an acceptable level. Of course, we might find that stoats and rats aren't affected by the degree of shortening. I will let you know when [redacted] has uploaded some videos into the cloud so you can all see the test in action.
Best regards,
[redacted]

From: [redacted] [mailto:[redacted].nz]
Sent: Thursday, 8 February 2018 10:31 a.m.
To: [redacted] <[redacted]>
Subject: RE: kea hole size test

Hi [redacted]
Attached a copy of the spreadsheet our vet student has produced. Should hopefully make sense from graphs and table. Basically shortest 2 holes are easy. Third hole is just reachable with effort for the males. Longest 2 are not reachable in all the cases we tested. Would like to try a few with only the long holes baited and then we will switch to green pipes and have a go with them. I am uploading some videos to google drive and will share them with you when they are up.
Cheers,
[redacted]

From: [redacted] [mailto:[redacted]]
Sent: Wednesday, 7 February 2018 9:05 a.m.
To: [redacted] <[redacted]>
Subject: RE: kea hole-size test

Thanks [redacted] looking forward to hearing what you reckon.
[redacted]

From: [REDACTED] [mailto:[REDACTED]]
Sent: Tuesday, 6 February 2018 12:57 p.m.
To: [REDACTED] <[REDACTED]>
Subject: RE: kea hole-size test

Thanks [REDACTED]

We have had a volunteer looking at it over the last couple of days and she is recording the interactions with the reducers. All set up fine so no worries there. We will give it a few goes with the current setup and then I can switch in some of the other pipes.

Cheers,

[REDACTED]

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[REDACTED]

From: [REDACTED]
Sent: Monday, 26 February 2018 11:09 a.m.
To: [REDACTED]
Subject: FW: A24 traps and non-targets
Attachments: DOC200 versus A24 efficacy trial - DOC-3189690.doc

FYI

From: [REDACTED]
Sent: Thursday, 12 October 2017 1:49 p.m.
To: [REDACTED]
Cc: [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]
Subject: A24 traps and non-targets

[REDACTED]

Purpose

Please find attached a proposed trial design comparing the efficacy of DOC 200 and A24 traps including a budget, as requested.

Context

A24 traps are being used in different ways on DOC managed lands and by community groups to control stoats (and rats). There has been no systematic estimates of numbers of traps in use and numbers change as new traps are rolled out. However, it is my current understanding that:

- 700 A24s with weka excluders are set at Goulard Downs
- 300 A24s without excluders are set 12cm above the forest floor and below 900m at Arthurs Pass. 40 cameras and observations at traps are being used in an attempt to assess the risk to kea
- 500 A24s at Haast without excluders
- Unknown number of A24s in Fiordland without excluders
- 420 are set at Abel Tasman targeting rats without an excluder and placed at least 1.3 m on vertical trees

Some traps are set with weka excluders, some are set without weka excluders 12cm above the ground and some are set at least 1.3m above the ground to avoid risk to weka. All different ways of setting traps have different risk profiles and all sites have different non-target risks.

The trial we propose is designed to answer the question: Are double set DOC 200 traps more or less effective at catching stoats than A24 traps with non-target excluders? We have chosen not to compare A24s without non-target excluders because of the likely risk to non-targets.

Which excluder?

Goodnature have produced a "new non-target excluder". This is being tested by [REDACTED] against kākāpō initially, and then takahē. During the kākāpō test they may get some kākā and kakariki interactions, although there won't be many. ZIP have offered to test kea interactions with excluders. The type of excluder we would use in the trial would depend the most appropriate one available at the time.

Cheers

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Thursday, 1 March 2018 9:49 a.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: weka excluder advice - 30 min Skype?

Hi [REDACTED] and I can talk when it suits you. [REDACTED] is busy. Haven't spoken to [REDACTED] yet. What time works best for you and we will aim at that.

Cheers
[REDACTED]

From: [REDACTED]
Sent: Thursday, 1 March 2018 8:40 a.m.
To: [REDACTED]
Subject: RE: weka excluder advice - 30 min Skype?

Thanks [REDACTED] Can you try to find a time with [REDACTED] and [REDACTED] (and [REDACTED] if she wants to be there)? Maybe let me know by lunchtime whether it will be today or one of the times I'm free tomorrow.

Cheers
[REDACTED]

From: [REDACTED]
Sent: Thursday, 1 March 2018 8:27 a.m.
To: [REDACTED]
Subject: RE: weka excluder advice - 30 min Skype?

I'm happy to participate.

Cheers
[REDACTED]

From: [REDACTED]
Sent: Thursday, 1 March 2018 8:18 a.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: weka excluder advice - 30 min Skype?

Mōrena

I'd like a bit of time with [REDACTED] and [REDACTED] to seek advice in finalizing the recommendations we came in our meeting on the Kea interactions with Goodnature A24 traps report [DOC-5405568](#) (below).

1. We need to revise the highlighted sentence below. Goodnature have some prototyping underway for an alternate parrot excluder and know that DOC is happy to trial this, however they aren't committing to taking this to market at this stage. I will review my trusty pile of printed previous advice but I definitely want to hear your thoughts on recommending weka excluders with this change in context. I note that the KCT best practice guide recommends use of weka excluders.

2. I am working with [redacted] and [redacted] this morning on some communication messages regarding the draft A24 position and risk/benefits to kea from predator control tools. We'll need at least Josh's input and I might have some questions after this morning.

I know you have [redacted] there today and [redacted] as well tomorrow. Can you give some thought to working in 30 minutes with me ([redacted] also welcome) by phone or Skype? I am free today from 12-2 and 3-4pm and tomorrow 8-10am and 1-4pm.

Thanks

From: [redacted]
Sent: Monday, 19 February 2018 10:52
To: [redacted]
Cc: [redacted]
Subject: RE: kea footage task assignment -- report for your review

Hi [redacted] and [redacted]

Thanks for a productive session this morning reviewing this report and sharing relevant context. As promised here the next steps we agreed at our meeting.

Today

[redacted] to brief [redacted] on outcomes (for her MOR with [redacted] tomorrow morning)

Tomorrow

[redacted] to advise [redacted] of Corey's assessment and make the following recommendations (modified from the report):

1. The video assessment concludes that the kea risk from operational deployment is higher than previously thought.
1. Urgent effort is required to 'kea proof' (ensure that kea can't reach the activating mechanism of) the GN A24 *To be led by Biodiversity group with Goodnature*
2. In the meantime, existing GN A24s in kea habitat should be disarmed or have weka excluders fitted. **This is an interim measure until an effective excluder or other kea proofing is available.**

After that

[redacted] to let us know when he needs support with turning this into a plan of action. Includes formal communication to key stakeholders, internal communication, and media messaging.

Kind regards

[redacted]

██████████ ██████████
██████████ ██████████
From: ██████████ ██████████
Sent: Wednesday, 7 March 2018 8:58 a.m.
To: ██████████ ██████████
Subject: FW: Carter paper
Attachments: Carter etal_2016 GoodNature traps Native Is.pdf

Hi ██████████

This paper is somewhat misleading to say the least but it does provide a reference to A24s killing weka (in first paragraph of Results section). FYI

Cheers

██████████

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[REDACTED]

From: [REDACTED]
Sent: Tuesday, 24 April 2018 3:46 p.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: Mechanical reliability of A24s using Harts hill to develop best practice >>>>>>>>>FYI
[REDACTED] No Action Required<<<<<<<<<<

Hi [REDACTED]

FYI. My response to questions [REDACTED] asked about the Hart's Hill project (see e-mail trail below) undertaken by [REDACTED]

Nga mihi

[REDACTED]

From: [REDACTED]
Sent: Tuesday, 24 April 2018 3:40 p.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: Mechanical reliability of A24s using Harts hill to develop best practice

Hi [REDACTED]

Re your questions relating to the Hart's Hill project, I asked [REDACTED] to look at the information provided and also included [REDACTED] and [REDACTED] as they are all one way or the other involved in trapping technologies and/or writing up best practice ([REDACTED] has been tasked to review all of the current best practice material on the Threats' webpages)

In a nutshell it's a "yes" to using this work to inform our current agreed best practice, both in terms of trap lay-out and density (in southern beech forest) and reliability. The reliability results (along with those from other sites e.g. Boundary Stream and Craig's shed trials) align well with the Goodnature team's recommendations regarding an expected field-life of 5 years before pulling in for servicing. Over time we would also hope to have access to information from similar studies on lay-outs across a range of forest types/environments.

Re keeping continuing the checks on a six-monthly basis, it is a nice-to-know (as we now have confidence in reliability in line with the manufacturers recommendations). It might be an option for the Goodnature Team to continue this work as it will help them with their marketing, however, its up to you as Darren's manager re his involvement given other priorities he or your team might have.

I hope this helps.

Regards

[REDACTED] K

From: [REDACTED]
Sent: Tuesday, 24 April 2018 1:31 p.m.
To: [REDACTED]
Cc: [REDACTED]

<[REDACTED]>

Subject: RE: Mechanical reliability of A24s using Harts hill to develop best practice

Hi [REDACTED]

In response to your questions:

1. I think the Harts Hills results could now be used (in conjunction with results from other sites using A24s) to inform best practice around grid lay-out of devices for maintaining control over time of rat populations
2. I think the mechanical reliability data from the 52 closely monitored devices could now be used (in conjunction with results from other sites and our trial data) to inform best practice

Cheers

[REDACTED]

[REDACTED] [REDACTED]

Principal Scientist - Threats

Department of Conservation—*Te Papa Atawhai*

DDI: +64 7 [REDACTED] | M: +64 27 [REDACTED] | VPN: 6088

Biodiversity Group—*Kāhui Kanorau Koiora*

Private Bag 3072, Hamilton 3240

Level 4, Monckton Trust Building

73 Rostrevor Street, Hamilton 3204

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From: [REDACTED] [REDACTED]

Sent: Monday, 23 April 2018 3:06 p.m.

To: [REDACTED] <[REDACTED]>

Cc: [REDACTED] <[REDACTED]> Alastair [REDACTED] <[REDACTED]>

Subject: FW: Mechanical reliability of A24 using Harts hill to develop best practice

Hi [REDACTED]

As discussedinformation/reports provided by [REDACTED] on the Harts Hill project.

Two questions have been posed re 1) the potential for the results to be used now to inform best practice around grid lay-out of devices for maintaining control over time of rat populations and 2) mechanical reliability of the devices based on the x52 closely monitored devices. Would you mind looking at the material provided and providing comments on the above questions.

Out of interest wouldn't it have been good to know how many devices across the full project sample of 467 were replaced during the time period ?

Thanks.

[REDACTED] K

From: [REDACTED] [REDACTED]

Sent: Monday, 16 April 2018 5:40 p.m.

To: [REDACTED] <[REDACTED]>

Cc: [REDACTED] <[REDACTED]>

Subject: Mechanical reliability of A24s using Harts hill to develop best practice

Kia ora [REDACTED]

[REDACTED] has been developing agreed best practice to look at the mechanical reliability of A24s using a network of A24 traps in Harts Hill near Te Anau.

A bit about the project:

- As part of the 'Kids Restore the Kepler' project a network of A24 traps has been running at the Harts Hill mainland site since 2014. The wider project also involves the control of stoats, possums and rats across a broader 3000 ha area. Harts Hill allows the testing of the mechanical reliability of A24 traps over time in a challenging environment.
- This project was set up to evaluate the CO2 use and mechanical reliability of the Goodnature A24 self resetting trap in an operational setting over the 6 month periods between CO2 canister replacements.
- A network of 467 A24 traps was originally deployed on a 100m x 50m grid across 200 ha of Harts Hill in November 2014, including additional traps at 50m spacing around the perimeter (average density 2.3 traps/ha). Since April 2015 the Harts Hill project grew to 600 ha and 100 m x 100 m spacing's.
- The two trap lines (M and N) consisting of 52 traps were continued to be allocated to develop CABP and assess mechanical reliability
- [REDACTED] visits this site twice a year in July and November. Every trap is then weighed to establish the remaining CO2.
- What [REDACTED] has found to date is the CO2 available in the A24 traps at this trap layout density was enough to reduce a beech mast/plague event population of rats from 68% pre-treatment to 0% and sustain control out to the 6 (May 2015), 12 (Nov 2015) and 20 (Jun 2016) month CO2 replacements
- As well as reducing the rat population within the project area, other pests including stoats and mice were observed killed by the A24s without exhausting the available CO2.
- [REDACTED] intends to put together the final report over the next month but the overall outcome of this work is that A24's are mechanically reliable over the long term while providing constant control of rats to target levels.

Few reports from this project are:

- Attached is a report by Gerard Hill that discusses the A24 rat control block during the same period of time that the reliability project has run.
- May 2015 - Rat Control (A24) 100m x 50m Harts Hill Fiordland DOCCM 2562031
- Aug 2015 - Rat Control (A24) 100m x 100m Harts Hill Fiordland DOCCM 2582594
- Goodnature A24 Mechanical Reliability Report DOCCM 2562029
- Goodnature A24 Mechanical Reliability Report 2 DOCCM 2800562
- Goodnature A24 Mechanical Reliability Report 3 DOCCM 2800564

Therefore:

- I am checking with you if this work is ready to be incorporated into any review or establishment of best practice for rat control?
- Additionally, is there a requirement to continue with the 6-monthly checks that has been done to date to further establish/investigate the mechanical reliability of these traps?

If you have any further questions about the protocol or the results, please feel free to get in touch with [REDACTED]

Kind Regards,

[REDACTED]

From: [redacted]
Sent: Monday, 2 July 2018 11:55 a.m.
To: [redacted]
Cc: [redacted]
Subject: RE: A24 traps and Kea's

Hi all,

Any queries about A24s and kea should go through [redacted] [redacted] [redacted] has team members specifically assigned to the task of ensuring adequate safety of kea, and other non targets, during pest control operations, including trapping operations.

Best regards,

[redacted]

From: [redacted]
Sent: Monday, 2 July 2018 9:33 a.m.
To: [redacted]
Cc: [redacted] <[redacted]@[redacted].nz>
Subject: RE: A24 traps and Kea's

Hi [redacted]

As far as I'm aware there aren't any specific guidelines for A24s in kea habitat as of yet (I've CCed in scientists [redacted] and [redacted] in case there have been recent developments that they know of).

Given that small-scale trials have shown there is potential risk to kea from A24s without any exclusion device fitted, in my opinion the safest thing in kea habitat would be to either use different traps that are better known to be kea-proof (e.g. DOC in Fiordland have experience with making kea-proof trapboxes for DOC200s), or to fit the Goodnature nontarget excluder devices (look like giant slinkies).

If you use the excluder devices, again as far as I'm aware there haven't been any large-scale trials completed yet on whether fitting these affects the efficacy of the traps as far as controlling predators goes. Hopefully [redacted] or [redacted] will correct me if I'm wrong about this.

Cheers!

[redacted]
Science Technician
Nelson Office
Department of Conservation - *Te Papa Atawhai*

VPN: 5080
Work mobile: [redacted]
Personal mobile: [redacted]

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From: [REDACTED]
Sent: Friday, 29 June 2018 1:37 p.m.
To: [REDACTED] <[REDACTED]>
Subject: A24 traps and Kea's

Hey [REDACTED]

It was very nice to meet you at the Animal Pest Control course last week!

I was wondering if you would be able to point me in the right direction to find out what the kea guidelines are for A24 Goodnature traps? We have some at the Mackay hut on the Heaphy and while there doesn't seem to be any Kea's up there right now, there were some this time last year. The traps need gas refills but [REDACTED] mentioned the Kea so I thought I should check it out first!

Regards

[REDACTED]
Senior Ranger Biodiversity – Bathurst Project
Department of Conservation, Buller District Office
DDI: +64 3 [REDACTED] | VPN: 5305 | Cell Phone: [REDACTED]
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[REDACTED]

From: [REDACTED]
Sent: Wednesday, 18 July 2018 7:09 p.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: A24Goodnature traps and bird excluders

Kia ora [REDACTED] – if you are talking about the new ones under development, then yes, parrot excluders is correct. They were also doing work on an alternate weka excluder but our focus was on the parrot excluder so I'm not sure how advanced the alternate weka one is at this point.

Best
[REDACTED]

From: [REDACTED]
Sent: Wednesday, 18 July 2018 3:05 p.m.
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: A24Goodnature traps and bird excluders

Kia ora [REDACTED]

Thanks for the update. The last I heard the were being marketed as 'parrot' excluders (not weka). Do you know if that's changed?

Thanks,
[REDACTED]

Science Advisor Kākāpō/Takahē *Kaitohutohu Pūtaiao Kākāpō/Takahē*
Department of Conservation *Te Papa Atawhai*
Mobile: +64 21 [REDACTED]

Postal address: Department of Conservation, PO Box 743, Invercargill 9840, New Zealand
Physical address: Department of Conservation, Level 7, 33 Don Street, Invercargill 9480, New Zealand
<http://www.kakaporecovery.org.nz> | www.takaherecovery.org.nz | www.doc.govt.nz

On 17/07/2018, at 11:01, [REDACTED] wrote:

Kia ora koutou
Just keeping you in the loop with this conversation.

In terms of updates: Goodnature have taken on board a new designer/engineer solely focussed on the new excluder. They hope it will be ready for 'tooling' in the next 3 weeks which means the product would be available around September.

A study design for efficacy has been put together and is with [REDACTED] for review. He will hope to get to that this week and will then send through to me (so maybe next week?) – I've asked him to add his thoughts around role clarity/investment etc for the research.

I should add that [redacted] [redacted] was keen to be involved and to see these deployed – I think it was Hope Valley (but don't quote me on that).

Thanks

[redacted]

From: [redacted] [redacted]

Sent: Tuesday, 17 July 2018 10:58 a.m.

To: [redacted] [redacted] [redacted]

Cc: [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted]

[redacted]

Subject: RE: A24Goodnature traps and bird excluders

Kia ora [redacted]

Just to let you know that I've spoken with [redacted] at Goodnature. I explained that you are in contact with Sean already and will continue to work with him. A bit of extra context: [redacted] has the impression that there is a centre line of DOC200s not catching stoats which may be giving you some confidence. I shared the information you had, was that you were concerned because the DOC200s along the track were catching stoats (I personally would be less worried about the traps still looking new and shiny I think that is just an outcome of their product not an indicator of efficacy)

I focussed on your key concern regarding the lack of investment into research that proves its ability to perform.

We agreed that this is a problem for the weka excluders. There had been discussion last year with [redacted] [redacted] about designing a research plan to test efficacy, but the methodology was not agreed between ourselves and Goodnature and the context was shifting because of our growing concern around the risk to kea from interacting with the traps. Weka excluders are being used around Bottlerock by ZIP, however the context there is that rat/stoat numbers are very low and weka numbers are very high so they would be scavenging any kills. So again, not an efficacy trial.

I took the opportunity to reiterate the importance of efficacy research. The new context for you to be aware of, is that we ([redacted] [redacted] [redacted] [redacted] and I) are working with Goodnature as they are designing an alternate excluder. While still work in progress, it is looking promising and all going well [redacted] is keen to deploy some in time for this breeding season. This will need to tie into efficacy research and a study design is being put together by Goodnature which we will then review and work through implementing (roles, accountabilities, funding etc to be determined). We have agreed to focus efforts into this new option which is smaller and lighter and [redacted] has said that they are open to exchanging excluders if this planned new one is effective.

Doesn't offer you any immediate solutions I'm afraid, but brings you into the loop of what is hopefully coming.

I will forward this email to [redacted] [redacted] (Southern Threats Manager), [redacted] and [redacted] so they are all in the loop with this conversation too.

Ngā mihi

[redacted] [redacted]

Director Threats, *Kaihautū Ao Mōrearea*
Biodiversity Group *Kāhui Kanorau Koiora*

[redacted]

From: [REDACTED]
Sent: Monday, 9 July 2018 2:36 p.m.
To: [REDACTED]
Cc: [REDACTED]

Subject: RE: A24Goodnature traps and bird excluders

Hi [REDACTED]

Thanks for your prompt reply. Attached are 2 maps showing the operational area and locations of the A24 traps. All the traps and tracks were installed during winter 2017, have been first set in October and checked in November 2017.

Along the Heaphy track we have re-positioned 125 DoC150 single set traps that were previously used along Cave Brook and Big River (3rd attached map) These kill traps are our current monitoring tool since tracking tunnels don't seem to work that well with stoats.

With the A24 grid working we were expecting no more stoat kills in these traps but we still pick up 1-2 stoats each time these traps get checked. Eight stoats in 8 months doesn't seem a lot but naturally Gouland does not support a high stoat population which is the reason some fauna (ie kiwi fernbird whio) have done relatively well there in comparison to more productive ecosystems. Also a reason the site was picked as a 2nd mainland Takahe refuge.

The A24 photo shows how almost all traps currently look, pristine and shiny. At our last check we had one trap that killed a mouse and evidence on that bird excluder of that kill was obvious.

I think if GN wants to sell a trap (or in this case an attachment to it) they should invest in the research that proves its relative ability to perform. Currently they shy away from this intellectual investment and rather use DoC's reputation and name to promote their product. Totally coincidental that I learnt about their reply to a prospective customer and only because the correspondent, [REDACTED] works for a Golden Bay community group. That [REDACTED] knows us GB staff was not known to GN.

Thanks for your support in this matter, again I am happy to deal with GN directly but think it may be a stronger message if it came from you.

Ultimately I am keen for GN to properly field test their gear so that we can all be certain that it's fit for purpose.

Thanks [REDACTED]

Check date	Checked by	Affiliation	Check period	Line Name	Tunnel ref	Bait type	Catch
2/11/17	[REDACTED]	DOC	1	Heaphy Track	HT14	Erayze #8	Stoat
2/11/17	[REDACTED]	DOC	1	Heaphy Track	HT8	Erayze #8	Stoat
26/01/18	[REDACTED]	DOC	3	Heaphy Track	HT75	Erayze #8	stoat
8/03/18	[REDACTED]	DOC	4	Heaphy Track	HT26	Erayze #8	stoat
7/03/18	[REDACTED]	DOC	4	Heaphy Track	HT121	Erayze #8	Stoat
5/04/18	[REDACTED]	DOC	5	Heaphy Track	HT 79	Erayze #8	Stoat
5/04/18	[REDACTED]	DOC	5	Heaphy Track	HT 99	Erayze #8	Stoat
5/06/18	[REDACTED]	DOC	6	Heaphy Track	HT25	Erayze #8	stoat

From: [REDACTED]
Sent: Friday, 6 July 2018 5:39 p.m.
To: [REDACTED] <[REDACTED]>
Cc: [REDACTED] <[REDACTED]> <[REDACTED]> <[REDACTED]>
<[REDACTED]>
Subject: RE: A24Goodnature traps and bird excluders

Kia ora [REDACTED]
Thanks for raising this issue. At this point, I'm just acknowledging that I've received it, and don't have any fast answers for you. I was not aware that you have installed weka excluders – our review was that the excluders do reduce kea risk, but we have not looked into efficacy, although I had the impression that GoodNature had done some work into this. I will follow up with them on this too.

As part of understanding this issue and best supporting a way through here and getting some good advice together - a few extra questions for you: are you doing any tracking tunnel monitoring of stoat numbers? How long have you had the A24 with excluders installed?

Ngā mihi

[REDACTED]
[REDACTED]
*Director Threats, Kaihautū Ao Mōrearea
Biodiversity Group Kāhui Kanorau Koiora*
[REDACTED]

From: [REDACTED]
Sent: Friday, 6 July 2018 3:12 p.m.
To: [REDACTED] Bil <[REDACTED]>
Cc: [REDACTED] <[REDACTED]> <[REDACTED]> <[REDACTED]>
<[REDACTED].nz>
Subject: A24Goodnature traps and bird excluders

Dear [REDACTED]
apologies for this somewhat left field approach but I think this may be an issue that requires contact from a higher level

Context:

A few years ago your predecessor [REDACTED] sent out a memo that encouraged Area Offices to use Goodnature traps for new trapping initiatives. Our office here in Golden Bay has since purchased and installed >1000 of those traps and for rat control in smaller reserves these traps proved to be a very effective tool.

In 2016 our office engaged in a Partnership with Air New Zealand which aimed to reduce stoats at Goulard Downs along the Heaphy Track. That project covers about 6000ha to create the pest reduced conditions required to translocate Takahe which did happen earlier this year.

We decided to use A24 traps for this operation because of the logistics of installing them being a lot easier than manufacturing and transporting wooden boxes with DoC200 traps to this remote location. Also there was the assurance by GoodNature that these traps could control stoats

effectively. This assumption is now supported by [REDACTED] Wilson's stoat control experiment on Great Island in Fjordland NP.

Because Gouland is kea habitat we were required to install these traps (720) with bird excluders. These excluders make access to the traps for any animal more difficult and as far as I know there haven't been any field tests yet how the excluders may impact on the efficacy of the traps.

At Gouland, which is naturally low in stoat numbers, these traps have been operational for a year now. Almost all of the traps look as new and shiny as they did when they were installed and we wonder if these traps work considering that we still catch stoats in doc200 traps along the Heaphy Track. We have since installed one trap with an excluder near our office with a camera attached and this trap hasn't caught a stoat yet.

I have approached GN and one of their staff, Sean oBrian will visit the Gouland area with me next month to discuss our concerns

Issue:

One of our local community groups have enquired about purchasing some A24 traps and queried the A24 efficacy for stoats when using bird excluders (they want to protect weka). Below is the correspondence with Good Nature:

In summary GN uses the Gouland project to promote their excluders knowing that we have serious concerns about the efficacy.

I am very happy to raise this issue with GN directly but as I see this as a national issue (GN promoting a device that hasn't been field tested using DoC as a guarantor) I thought this is better addressed from a national level.

Thanks for your consideration and advice in this matter

[REDACTED]
[REDACTED]
Senior Ranger- Supervisor Biodiversity
Kaitiaki Matua, Kanorau Koiora
Department of Conservation—*Te Papa Atawhai*
[REDACTED]

Conservation for prosperity *Tiakina te taiao, kia puawai*

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[REDACTED]
[REDACTED]

From: [REDACTED]
Sent: Monday, 6 August 2018 4:34 p.m.
To: [REDACTED]
Subject: FW: FW: Goodnature kea excluder

fyi

From: [REDACTED]
Sent: Monday, 6 August 2018 4:34 p.m.
To: [REDACTED] <[REDACTED]@goodnature.co.nz>; [REDACTED] <[REDACTED]>
<[REDACTED]@goodnature.co.nz>
Cc: [REDACTED] <[REDACTED]>
Subject: RE: FW: Goodnature kea excluder

Sounds great, thanks [REDACTED] – looping in [REDACTED] and [REDACTED] for their info too.

[REDACTED]

From: [REDACTED] <[REDACTED]@goodnature.co.nz>
Sent: Monday, 6 August 2018 3:01 p.m.
To: [REDACTED] <[REDACTED]>
<[REDACTED]@goodnature.co.nz>
Subject: Re: FW: Goodnature kea excluder

Hey [REDACTED] that all sounds good... [REDACTED] is in the loop here she'll be planning the further pen testing and has undertaken all the work to date. We'll compile a short set of the Kea interactions (any opportunity where they have pushed it to *their* physical limit) on the 3D prints, after we complete the next round of tests, including the Orana Park rounds, to limit the footage for you all.

I'll share this work with a slightly wider group one or two practitioners who currently use A24's and to current science collaborators, to ensure we haven't missed anything. That will involve a few computers renders and the video.

This is likely to have an impact on delivery, potentially two weeks with the extra testing rounds, but we'll try to keep the toolmakers ready for the final design.

We'll make changes to the testing plan and get it over to you for the meeting on the 22nd with [REDACTED] and others.

Take care, keep warm.

[REDACTED]

On Fri, Aug 3, 2018 at 6:00 PM [REDACTED] <[REDACTED]> wrote:

Hi [REDACTED] – what are your thoughts about the below? Happy to help, and I'm sure ZIP would be too with contacts. Let me know.

Many thanks

[REDACTED]

From: [REDACTED]
Sent: Friday, 3 August 2018 2:19 p.m.
To: [REDACTED] <[REDACTED]> <[REDACTED]>
Cc: [REDACTED] <[REDACTED]>
Subject: RE: Goodnature kea excluder

Hi [REDACTED]

Thanks for your mail. That's great to hear that they have a prototype ready for testing.

We would happily view the video footage from Wgtn Zoo. We can't afford a special trip to Wgtn in the next fortnight, unfortunately. I am intending to come to Wgtn to present some kea-1080 talks once both of my papers are online, but I think that will be too late.

I think a good next step would be to have the prototypes challenged by a few more captive kea. Orana park would be a good start as they have quite a few birds which have proven very keen to put new things to the test. If we can clock up three-five aviaries where kea have tried and failed to get their heads into the danger zone, including females (which are smaller than males), then I suspect that we could probably move to rolling them out quite quickly. Ideally there'd be an efficacy testing stage, but at the sites with A24s currently in the field I would be happy just to roll them out on the basis that anything is better than a deactivated A24 or an A24 without an excluder (and probably better than an A24 with a weka excluder).

By the way, how are you getting on with establishing an advisory group along PAG lines for traps after that team process you ran in Wellington?

Best regards,

[REDACTED]

From: [REDACTED]
Sent: Thursday, 2 August 2018 4:18 p.m.
To: [REDACTED] <[REDACTED]> <[REDACTED]>
Cc: [REDACTED] <[REDACTED]>
Subject: Goodnature kea excluder

Kia ora [redacted] and [redacted]

As I think you are both aware, Goodnature has been busy designing a kea excluder/shroud for the A24s. We are working through a team process later this month on a design for field testing efficacy and [redacted] [redacted] is likely to be providing input to that. But I discussed with [redacted] today that it would be great to share the design they have with you both to get your feedback on it from kea expert perspective.

I think the excluder is looking good – follows that basic concept you had on just extending the shroud. It is simple, light design, and will be easy to install.

They've tested it with the captive kea at Wellington Zoo and are confident that the kea can't get their heads up to the trigger area. [redacted] is really happy to share the video footage and keen for you to take a look too.

[redacted] has invited either one of you to come to Wellington to visit them and take a look, but if you can't afford the time to do that (and I'm looking for feedback within the next fortnight), please suggest what you might need in order to provide your comments. Not asking for your endorsement, just your advice and comments around how likely this is to minimize risk to kea.

Let me know what will work best for you.

Nga mihi

[redacted]

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--

[redacted] [redacted] | Director | Mobile [redacted] [redacted] | Address 8 Horner Street, Newtown, Wellington 6021. | Post PO Box 7407, Newtown, Wellington 6242

[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 August 2018 2:13 p.m.
To: [REDACTED] Nicholas Gorman; [REDACTED]
[REDACTED]@goodnature.co.nz
Subject: DOC Goodnature meeting 22 August : Parrot Excluder: Resource for the meeting
Attachments: Field Trials for Animal Pest Operations SOP - DOCDM-51573.pdf

Good afternoon,

When I sent the agenda, I omitted to send out the attached Standard Operating Procedure: Field Trials for Animal Pest Operations, as a resource for the meeting to draw upon .

I draw your attention in particular to:

- The general process for best practice field trials (the flow chart in Section 2 Process)
- Steps 1 & 4 Identify and define the Question and Step 5-7 around making design decisions

Kind regards,

[REDACTED]

[REDACTED]
[REDACTED]
Workflow Coordinator - Threats
Pou Whakahaere- Toi Morearea
Biodiversity Group
Kahui Kanorau Koiora
Department of Conservation—*Te Papa Atawha*
DDI: +64 4 [REDACTED] | VPN: 8079
M: [REDACTED]

Conservation House
PO Box 10 420, Wellington 6143 | 18-32 Manners Street, Wellington 6011

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From: [redacted]
Sent: Thursday, 16 August 2018 2:03 p.m.
To: [redacted] Nicholas Gorman; [redacted]
[redacted]@goodnature.co.nz
Cc: [redacted]
Subject: DOC Goodnature parrot Excluder meeting 22 August 2018

Follow Up Flag: Follow up
Flag Status: Completed

Good afternoon,

This meeting is confirmed for 22 August 2018 at Conservation House. Please find below the agenda.

I look forward to seeing you there, in person, or by skype.

Kind regards,

[redacted]

Wednesday 22 August 2018 1-4pm Conservation House: G.03 and by Skype

Attendees: [redacted] (Facilitator), [redacted] (Threats Manager), [redacted] (Threats Advisor), [redacted] Gorman (Threats Advisor), [redacted] (Landscapes Manager Predator Free 2050), [redacted] (Goodnature), [redacted] (Goodnature).

Purpose of the meeting:

To agree to a trial approach to test the efficacy of the Goodnature Parrot Excluder.

1pm	Welcome and introductions
1.10 pm	Context: 1. [redacted] Mor on (DOC), 2. [redacted] (GN)
1.30 pm	Critical Issues: How to; What if.
2.30 pm	Trial question: discussion and agreement
	Trial design: size and other site requirements, time of year, frequency & length of trial, number of traps, monitoring, staff, reporting and any other aspects
3.30 pm	Roles – Who is accountable for what aspect?
3.45 pm	Next steps and close

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From: [REDACTED]
Sent: Wednesday, 22 August 2018 2:51 p.m.
To: [REDACTED]
Subject: draft trial design

Is the catch rate of A24s (stoats and rats) fitted with the shroud the same as A24s without the shroud?

Parameters

Site requirements:

Single site with both rats and stoats

Preferably a new site requires pest control into the future (so traps can be used ongoing e.g. Mapara?)

Layout: Alternating sequence of traps (shroud/ no shroud)

Measurement method:

Need to discriminate between pests caught (rats/stoats/mice/hedgehogs)

Cameras are the best current method for this with a re-setting trap

Potential for secondary benefit of the trial to start learning about beacons (further consideration needed)

ACTION – Future briefing on the potential for the beacons as a measurement option/supplement

Number of traps

Would aim to detect very small difference for his question, for example:

Treatments: Traps with shrouds, traps without

100 traps per treatment: 50 with cameras all 100 with beacons

This sample size will give confidence that a small difference between treatments would be detected

Trap spacing

100 metre spacing of traps (so that we can assume that a stoat would encounter both types in a short space of time)

Lure attractive to both rats and stoats:

Could use new Goodnature automated lure dispenser as designed and tested with both stoats and rats (various Fiordland locations)

Timing: Start in spring when stoats become active through to early winter

Size of site:

Needs to accommodate sufficient lines at 100m spacing (200 traps total)

Current best practice is for lines are 800-1000m apart

For trial purposes could be a single long line

[REDACTED]
Threats Manager Southern
Biodiversity Group -- *Kāhui Kanorau Koiora*
Department of Conservation - *Te Papa Atawhai*
Ōtautahi Christchurch Office
DDI +64 3 [REDACTED] | M +64 27 [REDACTED] | VPN 5463

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[REDACTED]
[REDACTED]

From: [REDACTED]
Sent: Thursday, 23 August 2018 4:28 p.m.
To: Nicholas Gorman
Subject: Re: Query re Goodnature shroud trial

Nicely done thanks [REDACTED] I think [REDACTED] will appreciate your prompt reply given the pressure we've introduced by this last minute entry.
[REDACTED]

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From: [REDACTED]
Sent: Thursday, August 23, 2018 4:07:43 PM
To: [REDACTED] Hunter
Cc: [REDACTED]
Subject: Query re Goodnature shroud trial

Hi [REDACTED]

[REDACTED] has asked me if I could quickly address a question that you have around the proposed trial coming out of yesterday's process meeting with Goodnature, which if I understand correctly revolves around the focus on the 'small question' of whether the addition of the (parrot excluder) shroud alters A24 efficacy as opposed to the 'big question' of what is the most effective available stoat trap.

There's two aspects to this – firstly that the trial will be happening in the context of A24s having been deployed in kea habitat then deactivated in the face of concerns about the risk to kea. As a decision has been made that where deactivated traps are still in place they are to have the new shroud added (pending final approval regarding kea safety) and be re-set, there is a need to understand whether these sites will still be able to maintain effective predator control.

Secondly the trial as planned will be carried out in partnership with Goodnature to some extent. This would be unlikely to happen if other trap designs were to be involved.

Hope that clarifies,

[REDACTED]
PH [REDACTED]

██████████

From: ██████████
Sent: Thursday, 23 August 2018 12:14 p.m.
To: ██████████
Cc: ██████████
Subject: Kea excluder video

Hi ██████████

██████████ and I thought it might be best if any feedback we had on Goodnature's video footage would be best collated at one point, rather than sent back to them individually. As your input is the most crucial to giving the go/no-go decision, just wanted to see if you're happy to be that collation point or not, before passing on that suggestion to ██████████ & ██████████

Also my thoughts after viewing the footage are below (so if you haven't yet watched it yourself and want to retain independence, stop reading now! ☺)

Am satisfied that the shroud modification addresses both kea ability to access 'danger area' of trap and risk of entanglement.

Two things to note however, neither critical IMO but first one especially probably needs some more eyes to confirm that:

- ~1:05 on first view I thought I could see some independent movement at the front of the shroud – wondered if there could be enough to create a gap between trap lip and top of shroud that could be worked at. On second view I thought the trap+shroud was moving as a whole so not creating this possibility. This was the only period in the full set of sequences that I thought I saw any such movement.
- While no birds were getting close to the danger zone, it looked like the distance that birds could get into the shroud varied between sets, with Wellington Zoo > Willowbank 'location 2' > other Willowbank sets. I think this is because the different sets allowed different amounts of 'head-room' around the shroud entrance, with a perfectly vertical mounting being the optimal set. So operators would probably have to be aware of this when selecting trap sites. HOWEVER I think to create enough head-room to enable trigger access would require the trap to be set immediately above a significant overhang which would be pretty poor trap placement anyway... The sloped mounting of Willowbank 2 probably reflects the kind of variation away from the optimum that we see in the real world.

██████████
Technical Advisor, Threats
Biodiversity Group
Department of Conservation – Te Papa Atawhai
PH +64 27 ██████████

Ōtautahi Christchurch Office
Level 3, Grand Central, 161 Cashel St, Christchurch 8011
Private Bag 4715, Christchurch Mail Centre, Christchurch 8140

[Redacted]

From: [Redacted]
Sent: Friday, 24 August 2018 1:23 p.m.
To: [Redacted]; [Redacted]
Cc: [Redacted]
Subject: RE: Kea excluder video

Hi [Redacted]

I viewed the video footage yesterday and I think it looks really good as far as I can tell. As [Redacted] mentioned, it would be really good to hold one in the hand to get a sense of its robustness, but I am happy to endorse a roll-out onto currently deployed A24s in kea habitat just on the basis of the videos.

I don't have the time to be the central collation point, nor does [Redacted] so you could be it if you like!

Best regards,
[Redacted]

From: [Redacted]
Sent: Thursday, 23 August 2018 12:14 p.m.
To: [Redacted] <[Redacted]> <jkemp@doc.govt.nz>
Cc: [Redacted] <[Redacted]>
Subject: Kea excluder video

Hi [Redacted]

[Redacted] and I thought it might be best if any feedback we had on Goodnature's video footage would be best collated at one point, rather than sent back to them individually. As your input is the most crucial to giving the go/no-go decision, just wanted to see if you're happy to be that collation point or not, before passing on that suggestion to [Redacted] & [Redacted]

Also my thoughts after viewing the footage are below (so if you haven't yet watched it yourself and want to retain independence, stop reading now! 😊)

Am satisfied that the shroud modification addresses both kea ability to access 'danger area' of trap and risk of entanglement.

Two things to note however, neither critical IMO but first one especially probably needs some more eyes to confirm that:

- ~1:05 on first view I thought I could see some independent movement at the front of the shroud – wondered if there could be enough to create a gap between trap lip and top of shroud that could be worked at. On second view I thought the trap+shroud was moving as a whole so not creating this possibility. This was the only period in the full set of sequences that I thought I saw any such movement.
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Technical Advisor, Threats
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Department of Conservation – Te Papa Atawhai
PH +64 27 [REDACTED]

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Private Bag 4715, Christchurch Mail Centre, Christchurch 8140

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Official Information Act

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On 24 August 2018 at 15:54, [REDACTED] <[REDACTED]> wrote:

Hi All,

Thanks [REDACTED] for sending the link to the dropbox files of captive kea interacting with shrouded A24 traps. I have viewed the videos three times. [REDACTED] is in the field until the middle of next week, so I am writing on his behalf as well as mine.

It appears from the videos that the shrouds greatly reduce, if not completely eliminate, the chance of a kea reaching the trigger and suffering a blow from the striker. It's hard to tell how robust the shroud is from the videos, but as far as I can see they look sufficiently robust to withstand a sustained attack from a persistent kea. I am happy to take others' word that they are suitably robust.

I see no reason why we shouldn't proceed quickly to retrofit these shrouds to all A24s currently in the field in kea habitat. Obviously, trap users should be encouraged to report any removal of shrouds by birds in the field, but it seems likely to me that the removal rate will either be zero or near zero. I would view a very low removal rate by kea as tolerable in the light of the likely benefits to kea and other large birds from stoat control. I don't think we need to spend more resources monitoring shrouded A24s with cameras in the hope of getting more footage of kea interacting with them.

Best regards, and thanks,

[REDACTED]

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[REDACTED]

From: [REDACTED]
Sent: Monday, 10 September 2018 4:37 p.m.
To: [REDACTED]
Subject: FW: DOC Goodnature parrot Excluder meeting 22 August 2018 GILLIES & MURPHY REPLY

From: [REDACTED]
Sent: Monday, 10 September 2018 4:29 p.m.
To: [REDACTED] <[REDACTED]>
Subject: FW: DOC Goodnature parrot Excluder meeting 22 August 2018

From: [REDACTED]
Sent: Wednesday, 29 August 2018 11:22 a.m.
To: [REDACTED] <[REDACTED]>
Cc: [REDACTED] <[REDACTED]> <[REDACTED]>
Subject: RE: DOC Goodnature parrot Excluder meeting 22 August 2018

Hi [REDACTED]
Yeah I've been discussing this with [REDACTED] just now and am happy to lead this trial – largely on the assumption that significant preparation work won't need to happen until next calendar year (which will give me time to complete write-up of the previous SR-trap work) and that the bulk of the data collection will be happening next season anyway.

Re-the captive trials? I'm not sure that there is necessarily any great need for these at this stage. From what I can make out from the footage of the rapid prototype excluder, I cannot imagine rats or stoats getting easily snagged on, or in it (which was considered to be the problem with the metal weka excluder) or being prevented from accessing the trigger. In my view the main question is whether or not fitting a parrot excluder to an A24 affects the catch-rate of rats and stoats; I would be happy to do some observational pilot trials in the field (for rats at least) of the production version once it comes out if that would make life easier? FYI I have a small number of 'clear shroud A24s' that enable direct filming of the target animals inside the traps; I could deploy these either set, or unset at Pureora and film any animal interactions.

Cheers

[REDACTED]
Principal Scientist - Threats
Department of Conservation—*Te Papa Atawhai*
DDI: +64 7 [REDACTED] | M: +64 27 [REDACTED] | VPN: 6088

Biodiversity Group—*Kāhui Kanorau Koiora*
Private Bag 3072, Hamilton 3240
Level 4, Monckton Trust Building
73 Rostrevor Street, Hamilton 3204

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From: [REDACTED]
Sent: Wednesday, 29 August 2018 4:20 a.m.
To: [REDACTED] <[REDACTED]>
Subject: Fw: DOC Goodnature parrot Excluder meeting 22 August 2018

Hi [REDACTED]

I think it would be good if you could lead 2 but you may not want to go back there?!

Cheers

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 29 August 2018 03:50
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: DOC Goodnature parrot Excluder meeting 22 August 2018

Thanks [REDACTED]

Off the top of my head, happy to do 1 as long as ZIP were happy sharing facilities (which I don't see as a problem) - we could offer to help pay for some of the animal husbandry time. Getting enough stoats in captivity will be a problem though, depending on when you want the trials done. Getting enough rats shouldn't be a problem. The Lincoln AEC committee only meets every couple of months, so that could delay things. If [REDACTED] had the time, I think it would be good if he could lead 2 & 3, because of his past experience with tria ing the traps. I'd be happy to support [REDACTED] if needed.

I'll read through all the emails and get back with other comments,

Cheers

[REDACTED]

[REDACTED] [REDACTED] was at the conference and is heading to the Rocky Mountains on holiday as well :)

From: [REDACTED]
Sent: Tuesday, 28 August 2018 18:25
To: [REDACTED]
Cc: [REDACTED]
Subject: Fwd: DOC Goodnature parrot Excluder meeting 22 August 2018

Hi [REDACTED]

This is message 1 of 4, to provide context for the questions we have for your feedback. Once you have reviewed all four, the questions are basically:

- 1) How you would be placed to get AEC approval and run a small pen trial to observe rat and stoat interactions with some A24s fitted with new design parrot excluders (to be manufactured in 6-8 weeks time)
- 2) Whether you would be interested and have capacity to be lead scientist for the proposed efficacy trial, supervising 2 FTE technicians, OR
- 3) Whether you would be interested and have capacity to be lead scientist supervising a consultant/contract to run for the proposed efficacy trial

I copy in [redacted] who will be asking [redacted] to consider 2 & 3, as well as whether he could draft the field trial in more detail and with some costing in the near future.

More messages to follow, bear with me :)
Maybe we could Skype to discuss if that's easier?

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From: [redacted]
Sent: Wednesday, August 22, 2018 10:03:34 PM
To: [redacted]
Cc: [redacted]
Subject: FW: DOC Goodnature parrot Excluder meeting 22 August 2018

Hello [redacted] and [redacted]
Here is the record of the meeting you were unable to make yesterday. Sorry for leaving you off the distribution list, we will keep you informed as the next steps progress.

From: [redacted]
Sent: Thursday, 23 August 2018 8:04 a.m.
To: [redacted] <anthompson@doc.govt.nz>; Nicholas Gorman <[redacted]>
[redacted] <cgillies@doc.govt.nz>; [redacted] <[redacted]>
<[redacted]@goodnature.co.nz>; [redacted] <goodnature.co.nz>
Cc: [redacted] <[redacted]>; [redacted] <[redacted]>
Subject: DOC Goodnature parrot Excluder meeting 22 August 2018

Ata mārie
Please find attached and on <https://doccm.doc.govt.nz/wcc/faces/wccdoc?dDocName=DOC-5559621> a record of yesterday's meeting. If I have missed or misunderstood anything please let me know today and I will update the record and re-circulate.

I copy in [redacted] and [redacted] so that they have the background to commenting on the kea footage and the indicative timeframe below:

NEXT STEPS

ACTION: [redacted]

WHO: [redacted]

WHEN* [redacted]

Load kea footage and any supporting resources on DROPBOX and share this meeting participants, [redacted] and [redacted]

T: +64 4 [REDACTED]

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From: [REDACTED] [REDACTED]

Sent: Thursday, 23 August 2018 8:04 a.m.

Subject: DOC Goodnature parrot Excluder meeting 22 August 2018

Ata mārie

Please find attached and on <https://doccm.doc.govt.nz/wcc/faces/wccdoc?dDocName=DOC-5559621> a record of yesterday's meeting. If I have missed or misunderstood anything please let me know today and I will update the record and re-circulate.

I copy in [REDACTED] and [REDACTED] so that they have the background to commenting on the kea footage and the indicative timeframe below:

NEXT STEPS

ACTION:	WHO:	WHEN*
Load kea footage and any supporting resources on DROPBOX and share this meeting participants, [REDACTED] [REDACTED] and [REDACTED]	[REDACTED]	Done ☺
Videos viewed and comments and questions sent to [REDACTED] and [REDACTED]	[REDACTED] and/or [REDACTED]	This week ideally
Feedback to meeting participants, [REDACTED] and [REDACTED] on: <ul style="list-style-type: none"> • Draft trial question and design parameters • Urgency of trial start and trial length (1 or 2 seasons) • Who and how to progress planning • Who and how to progress an R&D agreement including communication requirements 	[REDACTED] or delegate	Thursday 30 August
Pending decision on trial design, a future demonstration with Goodnature on the potential for the beacons as a measurement option/supplement	[REDACTED]	TBC

*Michelle's ideas post-meeting

Thanks for a productive couple of hours and in anticipation of continuing the conversation.

Ngā mihi nui

[REDACTED]

[REDACTED] [REDACTED]

Threats Manager Southern
Biodiversity Group -- *Kāhui Kanorau Koiora*
Department of Conservation - *Te Papa Atawhai*
Ōtautahi Christchurch Office
DDI +64 3 [REDACTED] | M +64 27 [REDACTED] | VPN 5463

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[redacted]
[redacted]
From: [redacted]
Sent: Monday, 10 September 2018 4:33 p.m.
To: [redacted]
Subject: FW: DOC Goodnature parrot Excluder meeting 22 August 2018 [redacted]

From: [redacted] <[redacted]@goodnature.co.nz>
Sent: Friday, 31 August 2018 1:29 p.m.
To: [redacted] <[redacted]>
[redacted] <[redacted]>
[redacted] <[redacted]>
[redacted] <[redacted]>
[redacted] <[redacted]>
Subject: Re: DOC Goodnature parrot Excluder meeting 22 August 2018

Hi [redacted]

The A12 kea work was done before I joined Goodnature, but I have done some digging to find you some answers. In August 2011, in the context of trialing the field efficacy of the A12s, [redacted] advised in writing that two of our possum traps had been set aside to use for kea non-target trials. [redacted] recollection is that you undertook that testing yourself and that a number of juvenile kea engaged with the traps, and that no welfare issues were raised then. We are also not aware of any issues that have been raised since then. As I understand it, it is on that basis that the A12s have been treated as a kea-safe option. Maybe [redacted] has some more detailed information on this as the A12 trials went ahead based on the testing that DOC performed at the time?

I also found that around the same time the Wellington Regional Council undertook testing of the A12s with juvenile kaka at Wellington Zoo. Again, no welfare concerns were raised. However I don't have access to any reports or footage at the moment.

Cheers,
[redacted]



Goodnature Limited
[redacted]
Bio-Attractant Designer

8 Horner Street, Newtown, Wellington 6021, NZ
PO Box 7407, Newtown, Wellington 6242

Phone: +64 4 [redacted]

www.goodnature.co.nz

On 30 August 2018 at 10:17, [redacted] <[redacted]> wrote:

Hi [REDACTED] you're welcome. Hey do you have some footage or some rationale about why A12s can be considered safe for kea? I've been promulgating them as a kea-safe option but got questioned today about the evidence for this, and I couldn't answer very well. Is it because you need >1kg of weight on the trigger to set it off?

Cheers,

[REDACTED]

From: [REDACTED] <[REDACTED]@goodnature.co.nz>

Sent: Monday, 27 August 2018 1:31 p.m.

To: [REDACTED]

Cc: [REDACTED]

[REDACTED]

[REDACTED] <[REDACTED]@goodnature.co.nz>; [REDACTED]

[REDACTED]

Subject: Re: DOC Goodnature parrot Excluder meeting 22 August 2018

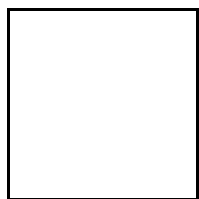
Hi [REDACTED]

Thank you very much for looking through the footage so quickly! That's great news that you are happy with the excluder!

We're really looking forward to now moving on to the efficacy trial.

Cheers,

[REDACTED]



Goodnature Limited

[REDACTED]

Bio-Attractant Designer

Ata mārie

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I copy in [REDACTED] and [REDACTED] so that they have the background to commenting on the kea footage and the indicative timeframe below:

NEXT STEPS

ACTION:	WHO:	WHEN*
Load kea footage and any supporting resources on DROPBOX and share this meeting participants, [REDACTED] [REDACTED] and [REDACTED]	[REDACTED]	Done ☺
Videos viewed and comments and questions sent to [REDACTED] and [REDACTED]	[REDACTED] and/or [REDACTED]	This week ideally
Feedback to meeting participants, [REDACTED] and [REDACTED] on: <ul style="list-style-type: none">• Draft trial question and design parameters• Urgency of trial start and trial length (1 or 2 seasons)• Who and how to progress planning• Who and how to progress an R&D agreement including communication requirements	[REDACTED] or delegate	Thursday 30 August
Pending decision on trial design, a future demonstration with Goodnature on the potential for the beacons as a measurement option/supplement	[REDACTED]	TBC

*Michelle's ideas post-meeting

Thanks for a productive couple of hours and in anticipation of continuing the conversation.

Ngā mihi nui

[REDACTED]

[REDACTED]

Threats Manager Southern

Biodiversity Group -- *Kāhui Kanorau Koiora*

Department of Conservation - *Te Papa Atawhai*

Ōtautahi Christchurch Office

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From: [REDACTED]
Sent: Thursday, 16 August 2018 2:03 p.m.
To: [REDACTED] Crowel <[REDACTED]> <[REDACTED]> <[REDACTED]> <[REDACTED]> <[\[REDACTED\]@goodnature.co.nz](mailto:[REDACTED]@goodnature.co.nz)>; <[\[REDACTED\]@goodnature.co.nz](mailto:[REDACTED]@goodnature.co.nz)>
Cc: [REDACTED] <[REDACTED]> <[REDACTED]> <[REDACTED]>
Subject: DOC Goodnature parrot Excluder meeting 22 August 2018

Good afternoon,

This meeting is confirmed for 22 August 2018 at Conservation House. Please find below the agenda.

I look forward to seeing you there, in person, or by skype.

Kind regards,

Wednesday 22 August 2018 1-4pm Conservation House: G.03 and by Skype

Attendees: [redacted] (Facilitator), [redacted] (Threats Manager), [redacted] (Threats Advisor), [redacted] Gorman (Threats Advisor), [redacted] (Landscapes Manager Predator Free 2050), [redacted] (Goodnature), [redacted] (Goodnature).

Purpose of the meeting:

To agree to a trial approach to test the efficacy of the Goodnature Parrot Excluder.

1pm	Welcome and introductions
1.10 pm	Context: 1. [redacted] (DOC), 2. [redacted] (GN)
1.30 pm	Critical Issues: How to; What if.
2.30 pm	Trial question: discussion and agreement
	Trial design: size and other site requirements, time of year, frequency & length of trial, number of traps, monitoring, staff, reporting and any other aspects
3.30 pm	Roles – Who is accountable for what aspect?
3.45 pm	Next steps and close

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From: [redacted] <[redacted]@goodnature.co.nz>

Sent: Monday, 27 August 2018 1:31 p.m.

To: [redacted]

Cc: [redacted]

<[redacted]>

<[redacted]@goodnature.co.nz>; <[redacted]>

<[redacted]>

Subject: Re: DOC Goodnature parrot Excluder meeting 22 August 2018

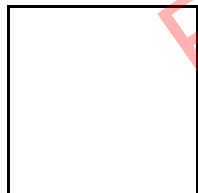
Hi [redacted]

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Cheers,

[redacted]



Goodnature Limited

[redacted]
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8 Horner Street, Newtown, Wellington 6021, NZ

PO Box 7407, Newtown, Wellington 6242

Phone: +64 4 [redacted]

www.goodnature.co.nz

On 24 August 2018 at 15:54, [redacted] <[redacted]> wrote:

NEXT STEPS

ACTION:	WHO:	WHEN*
Load kea footage and any supporting resources on DROPBOX and share this meeting participants, [REDACTED] and [REDACTED]	[REDACTED]	Done 😊
Videos viewed and comments and questions sent to [REDACTED] and [REDACTED]	[REDACTED] and/or [REDACTED]	This week ideally
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[REDACTED] ideas post-meeting

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Ngā mihi nui

[REDACTED]

[REDACTED]

Threats Manager Southern

Biodiversity Group -- *Kāhui Kanorau Koiora*

Department of Conservation - *Te Papa Atawhai*

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DDI +64 3 [REDACTED] | M +64 27 [REDACTED] | VPN 5463

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From: [REDACTED]
Sent: Thursday, 16 August 2018 2:03 p.m.
To: [REDACTED] <[REDACTED]@doc.govt.nz>; [REDACTED] <[REDACTED]@doc.govt.nz>; [REDACTED] <[REDACTED]@goodnature.co.nz>; [REDACTED] <[REDACTED]@goodnature.co.nz>
Cc: [REDACTED] <[REDACTED]>
Subject: DOC Goodnature parrot Excluder meeting 22 August 2018

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Kind regards,

[REDACTED]

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Attendees: [redacted] (Facilitator), [redacted] (Threats Manager), [redacted] (Threats Advisor), [redacted] Gorman (Threats Advisor), [redacted] (Landscapes Manager Predator Free 2050), [redacted] (Goodnature), [redacted] (Goodnature).

Purpose of the meeting:

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3.45 pm	Next steps and close

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██████████ ██████████

From: ██████████ ██████████
Sent: Monday, 10 September 2018 10:36 a.m.
To: ██████████ ██████████
Subject: FW: Next steps - A24 kea excluder trial

From: ██████████ ██████████
Sent: Saturday, 9 December 2017 6:35 p.m.
To: ██████████ ██████████ <██████████>
Subject: RE: Next steps - A24 kea excluder trial

Nice one ██████████ you did a good job of facilitating an effective team process on Friday.

Regarding the task assignment below I have nothing to add to it but want to make the following comments;

- You and ██████████ are right, we need to base decisions on evidence, so this task is worth doing despite my impatience.
- A collation of all recent kea interactions with A24's will be a valuable output from this task. I notice we have lots of snippets of information, usually anecdotal, but no one seems to have a complete picture.
- When this material is collated, we should share it with Goodnature as a courtesy, and ask for any information or trial results, etc that they can add to it. We should make our own decisions, but share information with them openly and seek their constructive input.

██████████ ██████████
Department of Conservation
PO Box 528
Taupo 3351

██████████
WEB: www.doc.govt.nz

From: ██████████ ██████████
Sent: Friday, 8 December 2017 3:24 p.m.
To: ██████████ ██████████ <██████████> ██████████ ██████████ <██████████> ██████████ ██████████ <██████████>
L\Biodiversity Group Threats Managers <S&██████████>
Cc: ██████████ ██████████ <██████████>
Subject: RE: Next steps - A24 kea excluder trial

Hello all

██████████ – you are welcome to suggest updates to the draft task assignment regarding video footage (on Monday or Tuesday) or to follow the links to have a look at what's there.

We decided at the meeting to supply Purpose/Context/Critical Issues for ██████████ ██████████ around need for a decision in parallel with this video assessment and prior to further excluder development. I volunteered at the time, but I'm happy to take draft suggestions on Monday and Tuesday to pull together for our LT on Wednesday to create a final.

Sue if this isn't on our LT agenda already can you please add it?

Thanks
██████████

From: [REDACTED]
Sent: Thursday, 7 December 2017 2:31 p.m.
To: [REDACTED] <[REDACTED]> L\Biodiversity Group Threats Managers
<[S&](#)[REDACTED]>
Subject: RE: Next steps - A24 kea excluder trial

Hello all

I have invited [REDACTED] along to our Skype catch up on Friday. He met with Goodnature yesterday and can report back. In brief the 'parrot' excluder is in development and should be available by May for testing (though I'm not sure if that is for testing with kea or testing for stoat efficacy). They are keen to work with us. This long timeframe reinforces the need to make a decision around the current deployment based on current information.

I have drafted the TA referred to under #1 <https://doccm.doc.govt.nz/wcc/faces/wccdoc?dDocName=DOC-3237465>

See you tomorrow,
[REDACTED]

From: [REDACTED]
Sent: Monday, 4 December 2017 7:33 a.m.
To: [REDACTED] <[REDACTED]>
Cc: L\Biodiversity Group Threats Managers <S&PTATManagers@doc.govt.nz>
Subject: Next steps - A24 kea excluder trial

Hello [REDACTED]

Our Threats leadership team met by Skype this afternoon to follow through on your request for a lead T4 and lead scientist for the proposed A24 excluder efficacy trial. [REDACTED] shared with them our chat with [REDACTED] his request for a technical review of recent video footage, and your visit to Goodnature last week. [REDACTED] consolidated the critical issues down to 4, the first 3 of which seem to us to be sequential. I list these below with what we believe to be the next steps in italics.

Purpose: Ensure A24s are safe for kea and other native bird species and that the A24s still effectively control stoats.

Critical issues:

1. What if kea are getting killed by A24s: [REDACTED] *to draft TA for Director ESI to request video footage to be viewed and assessed for conclusions by [REDACTED] Director ESI to take decision and work with other regional directors as needed.*
2. How to design an effective excluder for kea [REDACTED] *to confirm GN's current thinking on the 'parrot' excluder prototype in development: how far progressed, can we help, when would it be ready for testing with captive kea, when would they be ready to manufacture sufficient along the testing is.*
3. How to ensure the A24 still kills stoats effectively *This is dependent on #2 so we'd like to wait for your report-back to decide whether it is time to assign a science advisor. One option we think has merit would be to have an independent science consultancy run it with oversight from one of our team, though this would increase costs.*
4. How to involve GoodNature? *This is essential throughout. [REDACTED] will talk to [REDACTED] about assigning a relationship lead. We will determine later whether this person or the lead T4 would be the main contact for the efficacy trial.*

Please give me a call at any time to discuss.

Kind regards



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From: [REDACTED]
Sent: Monday, 10 September 2018 10:42 a.m.
To: [REDACTED]
Subject: FW: critical issue for short-tailed bats and A24s

From: [REDACTED]
Sent: Tuesday, 5 September 2017 5:26 p.m.
To: [REDACTED] <[REDACTED]> <[REDACTED]> <[REDACTED]> <[REDACTED]>
<[REDACTED]> <[REDACTED]> <[REDACTED]> <[REDACTED]>
Cc: [REDACTED] <[REDACTED]> <[REDACTED]> <[REDACTED]>
<[REDACTED]> <[REDACTED]> <[REDACTED]> <[REDACTED]>
Subject: RE: critical issue for short-tailed bats and A24s

Hi All
Having heard back from [REDACTED] and [REDACTED] I'm a bit confused:

- The bat mortality event at Pureora was associated with Ratabate, which is diphacinone in a paste, so isn't this also prohibited where short-tailed bats are present?
- Ratabate is partly made up of peanut butter, so shouldn't peanut butter be prohibited as a bait or lure where there are short-tailed bats present?

Regarding the chocolate lure in A24s, surely with the information that is available we just don't know the risk that this poses to st bats, so this should be robustly tested before they are used (and the same for any other lures which appear in the future).

Cheers
[REDACTED]

From: [REDACTED]
Sent: Tuesday, 5 September 2017 3:21 p.m.
To: [REDACTED] <[REDACTED]> <[REDACTED]> <[REDACTED]> <[REDACTED]>
<[REDACTED]> <[REDACTED]> <[REDACTED]> <[REDACTED]>
Cc: [REDACTED] <[REDACTED]> <[REDACTED]> <[REDACTED]>
<[REDACTED]> <[REDACTED]> <[REDACTED]> <[REDACTED]>
Subject: RE: critical issue for short-tailed bats and A24s

Kia ora tatou.

To clarify the results of the bait/lure attractiveness trial we did on captive short-tailed bats in the early 2000s, in relation to a liquid chocolate lure:

- 1) These trials showed that bats would approach and feed on every single bait/lure that we presented them with in a captive situation.

From: [redacted]
Sent: Tuesday, 5 September 2017 12:31 p.m.
To: [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]>
<[redacted]> [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]>
<[redacted]> [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]>
Cc: [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]>
<[redacted]>
Subject: RE: critical issue for short-tailed bats and A24s

Hi all
[redacted] and I have had an opportunity to discuss this critical issue 'what if we are using lure on A24s that is attractive to short tailed bats?'

- We suggest the following course of action:
1. Fact checking with the Threats team: [redacted] can you please confirm by reply email which lures are used with A24s (for rats and stoats)? [redacted] Off the top of my head, I've indicated to [redacted] that there are compulsory restrictions around the use of certain pesticide uses where short tailed bats are present, but not specific lures. There is a performance standard specifying which lures may be used with leghold traps and cyanide, but this would not be relevant here. Can you please email to correct or clarify this for all on this email trail?
 2. Once you've heard from [redacted] and [redacted] can [redacted] and [redacted] confer with [redacted] and [redacted] to confirm or revise Moira's original advice.
 3. [redacted] and I will consider this advice to look at where to go with the critical issue from there.

Thanks everyone.
[redacted]

From: [redacted]
Sent: Thursday, 24 August 2017 3:26 p.m.
To: [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]>
<[redacted]> [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]>
Cc: [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]>
[redacted] <[redacted]@doc.gvt.nz>; [redacted] <[redacted]> [redacted] <[redacted]>
Subject: RE: critical issue for short-tailed bats and A24s

I agree with [redacted] Pikiariki would be the ideal spot for trial like this. Would be very keen to see this happen (with the right level of support).

[redacted]
Supervisor Biodiversity – Kaitauawhi, Kanorau Koiora
Department of Conservation - Te Papa Atawhai
Maniapoto District Office, 78 Taupiri Street, Box 38, Te Kuiti 3941
Ph. (07) [redacted] VPN 6379, [redacted]

From: [redacted]
Sent: Monday, 21 August 2017 3:27 p.m.
To: [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]>
<[redacted]> [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]>
Cc: [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]>
<[redacted]> [redacted] <[redacted]> [redacted] <[redacted]> [redacted] <[redacted]>
Subject: RE: critical issue for short-tailed bats and A24s

Thanks [redacted] A24s have been mentioned as something to consider for Pikiariki in the future, especially given the susceptibility of bats to toxins that we use every year at this site. Piki would make a very accessible site for a study of A24s/bats, but this District would need support to do that.

From: [redacted]
Sent: Monday, 21 August 2017 2:43 p.m.
To: [redacted] <[redacted]> [redacted] <[redacted]> [redacted]
<[redacted]>
Cc: [redacted] <[redacted]> [redacted] <[redacted]>
Subject: critical issue for short-tailed bats and A24s

Hi

I would like to highlight a potential problem of the A24 self -resetting traps which I believe is a critical issue.

There has been evidence to show that A24 traps are a risk to kaka and kea and this made the bat community ask the question – is there any risk to short-tailed bats? The recent adaption to the traps to stop kea or kaka getting into them would not stop short-tailed bats crawling into them. The lure that is used for the A24 traps is a chocolate formula that will be attractive to short-tailed bats [redacted] et al. 2004). If anyone is considering using the A24s in a short-tailed bat area then I think a study is required to show if there is a risk to short-tailed bats.

[redacted] Jo Thorne, and [redacted] William Robertson 2004 *Evaluating the attractiveness of pest-control baits and lures to captive short-tailed bats, *Mystacina tuberculata**. Wellington: Department of Conservation.

If I need to send this on to someone else then please let me know.

Regards

[redacted]

[redacted] Technical Advisor Science and Policy, Department of Conservation

Monro State Building, 186 Bridge Street Nelson,
email [redacted]
Conservation for prosperity *Tiakina te taiao, kia puawai*
www.doc.govt.nz

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: A24Goodnature traps and bird excluders
Date: Monday, 9 July 2018 2:36:09 p.m.
Attachments: [AirNZ_Gouland_Current.jpg](#)
[\[REDACTED\].stoaat Gouland project 2016 \(A24\).jpg](#)
[trapping network Gouland Downs.jpg](#)
[20180405_101254.jpg](#)

Hi [REDACTED]

Thanks for your prompt reply. Attached are 2 maps showing the operational area and locations of the A24 traps. All the traps and tracks were installed during winter 2017, have been first set in October and checked in November 2017.

Along the Heaphy track we have re-positioned 125 DoC150 single set traps that were previously used along Cave Brook and Big River (3rd attached map) These kill traps are our current monitoring tool since tracking tunnels don't seem to work that well with stoats.

With the A24 grid working we were expecting no more stoat kills in these traps but we still pick up 1-2 stoats each time these traps get checked. Eight stoats in 8 months doesn't seem a lot but naturally Gouland does not support a high stoat population which is the reason some fauna (ie kiwi fernbird whio) have done relatively well there in comparison to more productive ecosystems. Also a reason the site was picked as a 2nd mainland Takahe refuge.

The A24 photo shows how almost all traps currently look, pristine and shiny. At our last check we had one trap that killed a mouse and evidence on that bird excluder of that kill was obvious.

I think if GN wants to sell a trap (or in this case an attachment to it) they should invest in the research that proves its relative ability to perform. Currently they shy away from this intellectual investment and rather use DoC's reputation and name to promote their product. Totally co-incidental that I learnt about their reply to a prospective customer and only because the correspondent Alec Milne, works for a Golden Bay community group. That Alec knows us GB staff was not known to GN.

Thanks for your support in this matter, again I am happy to deal with GN directly but think it may be a stronger message if it came from you.

Ultimately I am keen for GN to properly field test their gear so that we can all be certain that it's fit for purpose.

Thanks [REDACTED]

Check date	Checked by	Affiliation	Check period	Line Name	Tunnel ref	Bait type	Catch
2/11/17	[REDACTED]	DOC	1	Heaphy Track	HT14	Erayze #8	Stoat
2/11/17	[REDACTED]	DOC	1	Heaphy Track	HT8	Erayze #8	Stoat
26/01/18	[REDACTED]	DOC	3	Heaphy Track	HT75	Erayze #8	stoat
8/03/18	[REDACTED]	DOC	4	Heaphy Track	HT26	Erayze #8	stoat
7/03/18	[REDACTED]	DOC	4	Heaphy Track	HT121	Erayze #8	Stoat
5/04/18	[REDACTED]	DOC	5	Heaphy Track	HT 79	Erayze #8	Stoat
5/04/18	[REDACTED]	DOC	5	Heaphy Track	HT 99	Erayze #8	Stoat
5/06/18	[REDACTED]	DOC	6	Heaphy Track	HT25	Erayze #8	stoat

From: [REDACTED]
Sent: Friday, 6 July 2018 5:39 p.m.
To: [REDACTED]
Cc: [REDACTED]; [REDACTED]; [REDACTED]
Subject: RE: A24Goodnature traps and bird excluders
Kia ora [REDACTED]

Thanks for raising this issue. At this point, I'm just acknowledging that I've received it, and don't have any fast

answers for you. I was not aware that you have installed weka excluders – our review was that the excluders do reduce kea risk, but we have not looked into efficacy, although I had the impression that GoodNature had done some work into this. I will follow up with them on this too.

As part of understanding this issue and best supporting a way through here and getting some good advice together - a few extra questions for you: are you doing any tracking tunnel monitoring of stoat numbers? How long have you had the A24 with excluders installed?

Nga mihi

Director Threats, *Kaihautu Ao Morearea*
Biodiversity Group *Kahui Kanorau Koiora*

From: [REDACTED]

Sent: Friday, 6 July 2018 3:12 p.m.

To: [REDACTED]

Cc: [REDACTED]

Subject: A24Goodnature traps and bird excluders

Dear [REDACTED]

apologies for this somewhat left field approach but I think this may be an issue that requires contact from a higher level

Context:

A few years ago your predecessor [REDACTED] sent out a memo that encouraged Area Offices to use Goodnature traps for new trapping initiatives. Our office here in Golden Bay has since purchased and installed >1000 of those traps and for rat control in smaller reserves these traps proved to be a very effective tool.

In 2016 our office engaged in a Partnership with Air New Zealand which aimed to reduce stoats at Goulard Downs along the Heaphy Track. That project covers about 6000ha to create the pest reduced conditions required to translocate Takahe which did happen earlier this year.

We decided to use A24 traps for this operation because of the logistics of installing them being a lot easier than manufacturing and transporting wooden boxes with DoC200 traps to this remote location. Also there was the assurance by GoodNature that these traps could control stoats effectively. This assumption is now supported by [REDACTED] Wilson's stoat control experiment on Great Island in Fjordland NP.

Because Goulard is kea habitat we were required to install these traps (720) with bird excluders. These excluders make access to the traps for any animal more difficult and as far as I know there haven't been any field tests yet how the excluders may impact on the efficacy of the traps.

At Goulard, which is naturally low in stoat numbers, these traps have been operational for a year now. Almost all of the traps look as new and shiny as they did when they were installed and we wonder if these traps work considering that we still catch stoats in doc200 traps along the Heaphy Track. We have since installed one trap with an excluder near our office with a camera attached and this trap hasn't caught a stoat yet.

I have approached GN and one of their staff, Sean O'Brien will visit the Goulard area with me next month to discuss our concerns

Issue:

One of our local community groups have enquired about purchasing some A24 traps and queried the A24 efficacy for stoats when using bird excluders (they want to protect weka). Below is the correspondence with Good Nature:

In summary GN uses the Goulard project to promote their excluders knowing that we have serious concerns about the efficacy.

I am very happy to raise this issue with GN directly but as I see this as a national issue (GN promoting a device that hasn't been field tested using DoC as a guarantor) I thought this is better addressed from a national level. Thanks for your consideration and advice in this matter

Senior Ranger- Supervisor Biodiversity
Kaitiaki Matua, Kanorau Koiora
Department of Conservation—*Te Papa Atawhai*
DDI: +64 3 [REDACTED]
Conservation for prosperity *Tiakina te taiao, kia puawai*
www.doc.govt.nz

From: [REDACTED]
Sent: Thursday, 5 July 2018 12:37 p.m.
To: [REDACTED] <[REDACTED]>
Subject: Fwd: [## 15034 ##] A24s

Hi [REDACTED]
Thought this might interest you!
Nina

Begin forwarded message:

From: [REDACTED]
Date: 3 July 2018 at 12:48:13 PM NZST
To: [REDACTED]
Subject: Fwd: [## 15034 ##] A24s

----- Forwarded message -----

From: [REDACTED]
Date: 3 July 2018 at 10:02
Subject: Re:[## 15034 ##] [REDACTED]
[REDACTED]
Cc: [REDACTED]

Kia ora [REDACTED]
Thanks for your email and sorry about my delayed reply I was waiting to speak to a couple of our field experts to see if we have any published trial material to share, but unfortunately we don't.
While we don't have any trial data as such that we can share, we do know that the traps work with weka excluders attached when targeting stoats. We have a new work of 720 traps with weka excluders attached targeting stoats in Goulard Downs in Kahurangi National Park. These traps were deployed to protect a population of takahe that were reintroduced to this area several months ago:
<https://www.doc.govt.nz/news/media-releases/2018/wild-takahe-return-to-kahurangi/>
Regarding kea and Goodnature traps, we've never had any incidents reported or experienced of kea being killed or injured by A24s or A12s. We've had traps deployed in kea habitat for some time now, equating to about 1.5 million continuous trapping nights with no reported issues. You can always use a Weka Excluder if you have doubts (the 1.5 million trapping nights mentioned above have not used Weka Excluders on the traps). We take non-target protection seriously and it informs our design process and best-practice guidelines to manage non-targets and keep the traps species specific. Please let me know if you have any further queries.
Thanks,
Roisin

--



[REDACTED]

Kia ora Good Nature,
we are a community group looking into purchasing a number of your A24s with weka excluders for stoat control. Can you please point us towards any evidence that these actually work (i.e that stoats still enter and are killed and that weka are excluded) as we are having trouble finding it online.
We are also very interested in any trial work occurring with A24s with excluders and kea interactions as most of our traplines have resident kea in their vicinity.



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From: [REDACTED]
Sent: Thursday, 20 September 2018 2:27 p.m.
To: [REDACTED] <[\[REDACTED\]@doc.govt.nz](mailto:[REDACTED]@doc.govt.nz)>
Cc: [REDACTED] <[\[REDACTED\]@doc.govt.nz](mailto:[REDACTED]@doc.govt.nz)>; [REDACTED] <[\[REDACTED\]@doc.govt.nz](mailto:[REDACTED]@doc.govt.nz)>
Subject: FW: RE: Emailing: Gouland A24 Trap kill results

H [REDACTED]
We had an issue with [REDACTED] target (weka) bycatch when we last checked our A24 traps at Gouland. Please refer to [REDACTED]'s trip report [https://doccm.doc.govt.nz/wcc/faces/wccdoc?dID=5584141&dDocName=\[REDACTED\]5579083](https://doccm.doc.govt.nz/wcc/faces/wccdoc?dID=5584141&dDocName=[REDACTED]5579083) and correspondence below.

Please also read my email with options to [REDACTED]

I have talked to [REDACTED] and he has raised this with [REDACTED]

We now have to decide what path to take.

In order to do so could we arrange a meeting (maybe via Skype) when it suits you?

I am away tomorrow and back Wednesday so any time end of next week would work.

Thank for setting this up, from recent experience I know you are really good at that

Thanks heaps and be in touch soon

Hans

From: [REDACTED]
Sent: Thursday, 20 September 2018 1:56 p.m.
To: [REDACTED] <[\[REDACTED\]@doc.govt.nz](mailto:[REDACTED]@doc.govt.nz)>
Cc: [REDACTED] <[\[REDACTED\]@doc.govt.nz](mailto:[REDACTED]@doc.govt.nz)>
Subject: RE: Emailing: Gouland A24 Trap kill results

[REDACTED]
As discussed.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
Operations Manager – Pou Matarautaki
Takaka District Office
Department of Conservation – Te Papa Atawhai
DDI: [REDACTED]

Conservation leadership for our nature *Takina te hi, Tiakina, te ha o te Ao Turoa*
www.doc.govt.nz

-----Original Message-----

From: [REDACTED]
Sent: Monday, 17 September 2018 11:54 a.m.
To: [REDACTED] <[\[REDACTED\]@doc.govt.nz](mailto:[REDACTED]@doc.govt.nz)>; [REDACTED] <[\[REDACTED\]@doc.govt.nz](mailto:[REDACTED]@doc.govt.nz)>
Cc: [REDACTED] <[\[REDACTED\]@doc.govt.nz](mailto:[REDACTED]@doc.govt.nz)>; [REDACTED] <[\[REDACTED\]@doc.govt.nz](mailto:[REDACTED]@doc.govt.nz)>; [REDACTED] <[\[REDACTED\]@doc.govt.nz](mailto:[REDACTED]@doc.govt.nz)>

Subject: FW: Emailing: Gouland A24 Trap kill results

Hi [REDACTED]

Below is a link to [REDACTED] report from our last trap check at Gouland Downs.

Context:

1. In winter 2017 this office established 688 A24 GN traps to control stoats, 125 DoC 200 traps were placed along the Heaphy track to monitor performance 2. The A24's were baited monthly with Erayze bait, because of the risk to kea and other birds they were fitted with GN bird excluders. There was a suspicion that these traps were relatively ineffective as no target or non-target species were ever seen near the traps. Also some stoats were regularly caught in the DoC200's along the track.
3. In June 18 the A24's were first baited with a GN prototype stoat lure that is dispensed from GN automatic lure pumps (stoat ALP's) These ALP's require 3 month maintenance intervals 4. Last week these lure pumps were first replaced, they seem more attractive to target species but also to weka. Up to six (4 confirmed) weka managed to get past the bird excluders and got killed. 2 stoats were caught on the Heaphy DOC200 network.
5. The Te Anau Takahe team was immediately informed but they don't think there is a risk for Takahe getting past the excluders into the traps.

Purpose:

This email is to raise up the line (OM and Directors) 2 issues:

[REDACTED]
[REDACTED]
[REDACTED]
2. Technology: the traps are obviously not performing that well, both in their efficacy and also for excluding weka as non-targets.

Options to mitigate:

1. close all traps

Pros: no more non target kills

Cons: we would potentially jeopardise the Takahe project during the pending breeding season by not controlling predators

[REDACTED]
2. Continue with the new lure pumps for another 3 months and await results (non-target, target and Takahe chick survival)

Pros: no extra cost

[REDACTED]
Likely to be best outcome for Takahe and all other native fauna except weka

Cons: Likely to kill more weka

Risk of being blamed to "cover up" if there is no clear PR strategy

3. Visit all traps once more and attempt to "fix" the problem using cable ties to better attach bird excluders to traps

Pros: Likely to be best outcome for Takahe and all other natives. May work for weka

Be seen to take this issue serious and do the best we can

Easiest to explain in a PR strategy

Cons: No guarantee this approach will work for weka

Unplanned cost (expensive and time consuming)

I personally would prefer option 2 as weka are causing significant damage to all 4 Powelliphanta species in that area. Gouland is a significant stronghold for Powelliphanta who are still not recovering from decades of possum and rat predation. The recent recovery of weka over the entire park a mixed blessing and certainly detrimental to Powelliphanta snail recovery. Also the impact of weka on Takahe chicks has not been verified. There is some evidence that weka predate kiwi and who eggs and chicks.

However, A24's are not approved for killing weka and if we decided to target weka in certain areas then this would need its own strategy using approved humane control methods.

So really option 3 is the one with the lowest risk to both objectives, a good outcome for all protected species and a management decision that can be best defended. The only issue of course cost, time and other missed opportunities

Actions required:

[REDACTED] Liaise with Goodnature and explain that their bird excluders don't work for weka when using the new prototype ALP's. Discuss the way forward the bird excluders were a significant expense and don't deliver.

[REDACTED] and [REDACTED] Consider the options and repercussions above and advise how to best proceed.

Consider a PR strategy that best reflects our objectives

Thanks for your collective considerations and advice

[REDACTED]
Senior Ranger- Supervisor Biodiversity

Kaitiaki Matua, Kanorau Koiria

Department of Conservation—Te Papa Atawhai

DDI: +64 3 5258207 [REDACTED]
[REDACTED]

www.doc.govt.nz

-----Original Message-----

From: [REDACTED]

Sent: Friday, 14 September 2018 4:45 p.m.

To: [REDACTED] <[REDACTED]>

Subject: Emailing: Gouland A24 Trap kill results

Hi Guys

Here is a spreadsheet with all the comments staff wrote out using the app, from fur to feathers to dead Weka and scratches...

Also here is a quick report/ summary with photos. Sorry it is very rushed so [REDACTED] it would be great if you could read it and add to it if you need to.

<https://doccm.doc.govt.nz/wcc/faces/wccdoc?dID=5584141&dDocName=DOC-5579083>

Have a great week and will most likely see you Friday for the meeting with [REDACTED]

Cheers



Your message is ready to be sent with the following file or link attachments:

Gouland A24 Trap kill results

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From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: videos
Date: Thursday, 27 September 2018 4:28:12 p.m.
Attachments: [image001.png](#)

Dear [REDACTED]

I have got problems sending GN our video files from our Totaranui camera. There is really only one good one "weka excluder 1" that clearly shows a weka going all the way through an excluder and eating some bait.

These files sit on our Takaka Q drive that you should be able to access.

Would you be able to get these files to GN?

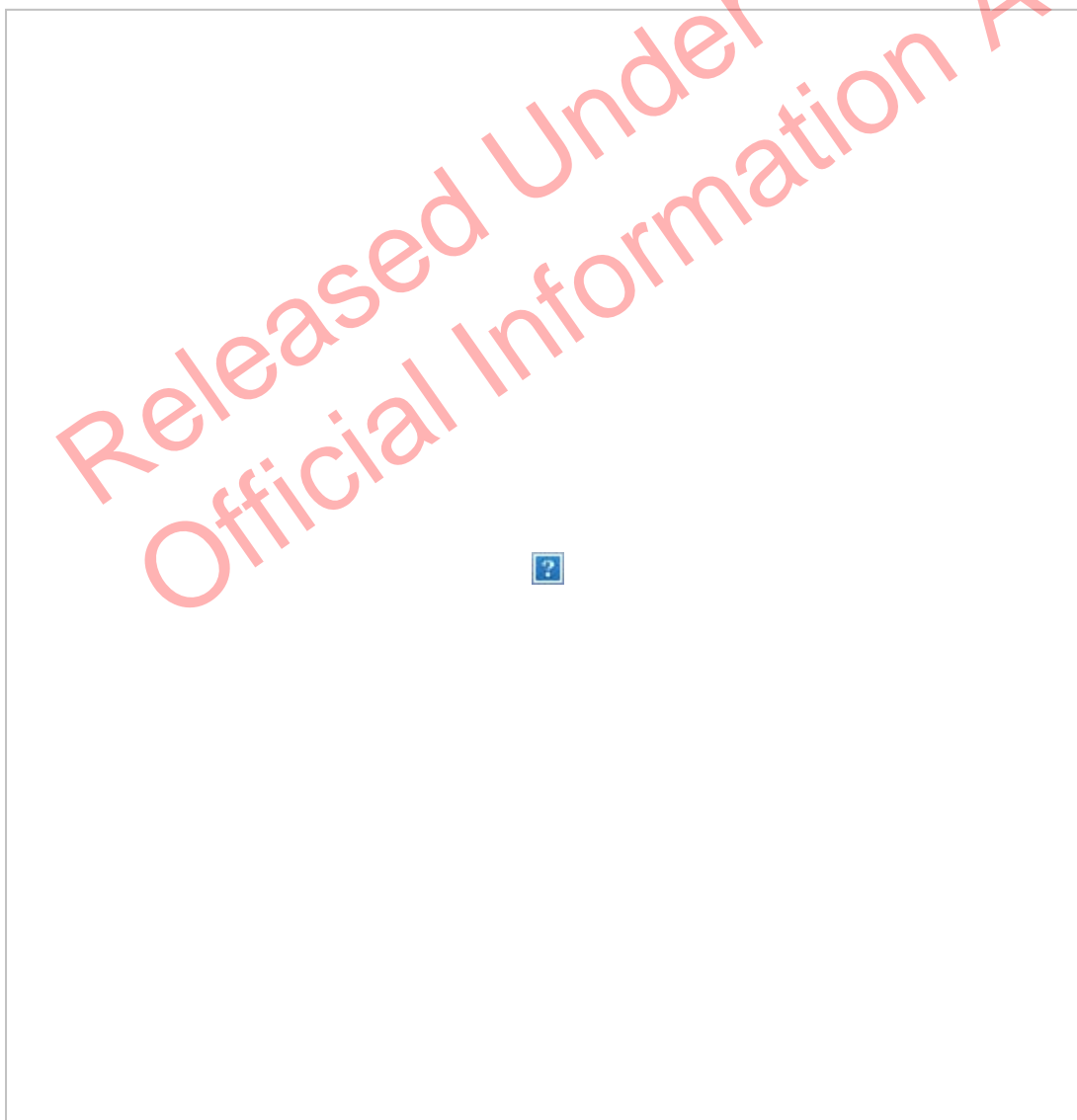
I think this is a national issue as DOC and some community groups are already using these traps and excluders to trap stoats and to protect weka.

Thanks for some advice how to best proceed

All the best

[REDACTED]

PS I am in Wellington next Tuesday Wednesday for my AEC meeting so could drop by for a chat. Could even visit GN, they have repeatedly invited me for a guided tour, but over to you to advise how to best do this.



From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: Latest Goulard takahe maps
Date: Thursday, 27 September 2018 4:55:14 p.m.

Hi [REDACTED] and [REDACTED] feedback from the Takahe team fyi
Thanks [REDACTED]

From: [REDACTED]
Sent: Thursday, 27 September 2018 4:52 p.m.
To: [REDACTED]
Subject: RE: Latest Goulard takahe maps
Nice one [REDACTED]

We are happy to help if you need some extra weight to lean on GN, we accept that the risk to takahe is most likely less than it is to weka, but that doesn't mean that there is no risk to takahe. We would be keen to see this resolved, especially before we have takahe chicks hatching (late Dec). It seems to me like you bought a product for a purpose, and that product is failing in that purpose (for whatever reason).

Cheers,
Jas.

From: [REDACTED]
Sent: Thursday, 27 September 2018 4:38 p.m.
To: [REDACTED] <svandewatering@doc.govt.nz>
Subject: RE: Latest Goulard takahe maps

Hi Jas, very interesting just like "sex in the city" or similar soap, we still negotiate with GN what to do with those weka kills,
Thanks for keeping us in the loop

All the best
[REDACTED]

From: [REDACTED]
Sent: Thursday, 27 September 2018 12:45 p.m.

Subject: Latest Goulard takahe maps

Hi guys,

[REDACTED] was in Goulard Downs last week. He found all but one of the birds. Visuals on quite few on them and they are still looking good. There has been quite a bit of "days of takahe lives" with some pairs splitting up, some sub adults being kicked out of the family group, and some birds clumping together (it's a takahe party around the enchanted forest). Lily, Rerehu and Dalrachney have split up. Tompl has left her parents and is M A M ki's in the bush just North of the downs. Mahia has found Tihaka and they have paired up... so much gossip! Also Hyde and Tommet me have finally found both Saxon public and staff huts and were seen eating grass off both lawns. Kapakapanui is still living at [REDACTED] Mackay hut. The birds were all still quite visual and not looking cagey/secretive, this combined with the still-fluid social situation means nesting is not happening just yet. We have delayed our planned nesting/egg candling trip for a few weeks to ensure nesting when we are up here. Looking at either the last week of October or the first week of November.

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Takahe Ranger - Recovery Sites

Department of Conservation - *Te Papa Atawhai*
Te Anau Office, Lakefront Drive, Te Anau, 9600
PO Box 29, Te Anau, 9640
Phone

Conservation leadership for our nature - *Takina te hi, Tiakina, te ha o te Ao Turoa*
www.takaherecovery.org.nz - Sign up to our newsletter [here](#)
cid:image001

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From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: A24 Observations Totaranui
Date: Friday, 28 September 2018 12:01:08 p.m.
Attachments: [Work Diary A24 Bird Excluder Monitoring.docx](#)
[20180927_092928_1538002989059_resized.jpg](#)
[20180927_093210_1538002993899_resized.jpg](#)
[20180927_092945_1538002990845_resized.jpg](#)
[20180927_093220_1538002992492_resized.jpg](#)
[image001.png](#)
[image002.png](#)

Hi team, my email to [REDACTED] below, who I hear is on sick leave.

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We have good video footage from Totaranui that shows

1. Weka excluder does not work at all, weka easily manoeuvres neck through the entire

length of the excluder

2. Kea excluder does not exclude weka at 500mm or below which makes that device unsuitable for stoat control
3. Our proposed extension (photos attached) does exclude that Tootaranui weka. This 150mm extension using 80mm PVC pipe brings the length of the excluder to 400mm from the entrance to the trap which has been a proven distance on our DOC 200 trap boxes in the Abel Tasman

The video files are too large for me to email but Head Office in Wellington will be able to access these files through a shared drive. I suggest you contact them to access a copy. They can contact me for the file path.

I am interesting to see the testing and evidence that Goodnature would have collected when the "weka excluder" was developed and before it was marketed as such. Surely you would have conducted similar tests?

We purchased these excluders in good faith that they would exclude weka

We plan to drop all our other work and fit all the 688 traps at Gouland with that extension pipe and use cable ties to secure the traps properly to the excluders. There will be a considerable cost doing that work financially (approx. 15k) and there is also lost time and opportunity as spring is the busy time of our work. I would very much appreciate your consideration how you feel you can contribute to fixing this local issue.

I leave it to you to deal to the national repercussions this incident may create
hope to hear from you soon

██████████
Senior Ranger- Supervisor Biodiversity
Kaitiaki Matua, Kanorau Koiora
Department of Conservation—*Te Papa Atawhai*
DDI: +██████████ | VPN: 7671
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From: ██████████
Sent: Thursday 27 September 2018 12:18 p.m.
To: ██████████
Cc: ██████████ ; ██████████
Subject: FW: A24 Observations Tootaranui

Hi ██████████

██████████ield observations attached, I didn't realise he was also testing the kea excluder. From the video which I have to send you separately because of their size, there is one that shows a weka getting through the excluder to the bait with ease showing that this device doesn't exclude weka even if the coil was properly attached.

The kea excluder seems no barrier for weka either unless the trap is attached at >750mm.

We plan to test 2 modifications (photos attached)

1. extend length with a PVC pipe
2. reverse the excluder so that the narrow end is the entrance. (reduce from 70mm to 60mm)

Best video is "weka Excluder 1"

We still wait for a decision how to best proceed at Gouland from Tier 3 and 4 managers.

Thanks

██████████
Senior Ranger- Supervisor Biodiversity
Kaitiaki Matua, Kanorau Koiora
Department of Conservation—*Te Papa Atawhai*
DDI: +64 3 5258207 ██████████ VPN: 7671
Conservation for prosperity *Tiakina te taiao, kia puawai*

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From: [REDACTED]

Sent: Thursday, 27 September 2018 11:16 a.m.

To: [REDACTED] <[REDACTED]>

Cc: [REDACTED] <[REDACTED]> [REDACTED] <[REDACTED]> Steve Deverell

<[REDACTED]>

<[REDACTED]>

Subject: A24 Observations Totaranui

Hi [REDACTED]

Attached is a short work diary of the actions I took for the A24 Excluder "research" at Totaranui, there is also link to the to the video footage included.

As discussed this morning I'm heading to Totaranui now to put the adjusted traps out and hopefully we get some footage soon. My plan was to leave them out there until next week (Trapping Totaranui area) so that we don't have to spend additional time on picking it up again.

Cheers,

[REDACTED]

[REDACTED]

Ranger, Biodiversity - *Kaitiaki Kanorau Koiora*

Department of Conservation—*Te Papa Atawhai*

DDI: +64 [REDACTED]

Takaka Office

62 Commercial St | [REDACTED]

[REDACTED]

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From: [REDACTED]
Sent: Monday, 1 October 2018 8:50 a.m.
To: [REDACTED]@doc.govt.nz>
Cc: [REDACTED]@doc.govt.nz>; [REDACTED]@doc.govt.nz>;
[REDACTED]
Subject: Re: Weka exclusion

Morena all.

Hans, thanks for the call and for the frank conversation - I really appreciate talking directly to the issues and how we can work together to resolve what's arisen.

I thought I'd capture here what we discussed to ensure we have a dialogue of what's going on in one place.

- I am arranging for two Goodnature staff to come over and help deploy the modifications which you and your team have devised.
- We have extended an offer of making any of the parts for your modifications to free up time but it sounds like you have it all underway and don't need that
- You have offered to help us with the development of a moulded version (obviously we respect that you'll only have limited time available!) to ensure we capture all field requirements and locations.

I'll have [REDACTED] keep in touch with his movements and ensure we continue to support as best we can from here.

Talk soon,
[REDACTED]

On Fri, Sep 28, 2018 at 2:09 PM [REDACTED] wrote:

Kiaora [REDACTED] I called again this morning and left you a message to talk through the observations and recent events.

We have had good success with the weka excluder to date and in understanding the timeline of incidents, you have too. My understanding is that you recently deployed our newly developed stoat lure and this may have increased the desire for weka to interrogate the trap. This is not something we could have foreseen in the testing of the excluder some 8 years ago

and as you can imagine we have not had this happen in that time.

We had given the parrot excluder to [REDACTED] to understand what work is needed to make that product capable of excluding weka as part of our constant innovation of gear. Our work with him is ongoing and we never intended you to use this at this stage. We will continue our work on that and provide you with this product the moment becomes available at our expense.

We are a company which takes pride in our ability to control stoats and rats for the benefit of our native species. All methods of pest control in New Zealand have suffered non-target issues and we are committed to ensuring that we create a pragmatic solution to help you here - as we have with numerous other tools on the conservation estate, like the kea excluding ends for DOC200's, as an example.

I will further extend our offer to go to the site and make the modification to the hardware, in this busy period of your work, with our field team and me personally. We are happy to make the parts for the modifications you've tested should you wish.

We are happy to discuss your final comment further, directly or in a 'national' forum as you suggest, as all methods of pest control have their non-target issues that we should all talk about.

My details are below [REDACTED] I'm happy to receive your call any time of day.

Best
[REDACTED]

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