

Attachment to Evidence of Rhys James Burns  
DOC, Mt Messenger Bypass Hearing



**Mt Messenger Bypass**



Department of Conservation  
*Te Papa Atawhai*

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**Mt Messenger One-on-One Meeting – Outcomes**

<b>Topic:</b>	Avifauna
<b>Date:</b>	Monday 26 March 2018
<b>Location:</b>	T&T Hamilton
<b>Attendees:</b>	Rhys Burns (DOC), John McLennan (Mt Messenger Alliance) plus Roger MacGibbon, Laurence Barea
<b>Facilitators:</b>	Richard Duirs (DOC), Peter Roan (Mt Messenger Alliance)

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**Environment Court Practice Note:**

The participant experts, Rhys Burns and John McLennan, confirm they have read the Environment Court Practice Note 2014 Code of Conduct, and agree to abide by it (including Part 7 and Appendix 3).

The following sets out the assumptions and outcomes of this one-on-one expert meeting are agreed to by the participants, Rhys Burns and John McLennan:

Both experts acknowledge this.

**Key Facts and Assumptions:**

**Topic 1:**

1. Extent and purpose of pre-construction monitoring.
  - Australasian Bittern.
  - Ruru/morepork.
  - Kiwi.
  - Other species.

**Points of agreement:**

Bitten - survey occurred outside optimum period. 1 preliminary look. Would like pre-works survey, 1 recorder into each of Mimi and Mangapepeke catchment, in Sept / Oct. Both agree useful.

Ruru – Data has been gathered for footprint (John will send data to Rhys). Additional survey proposed in May. 8 locations in mitigation (pest management) areas for 4 nights, 2 hrs. Meets national protocols.

Kiwi - plan to capture all / most of the existing 20 birds (both sexes of each pair) in or adjacent corridor and put radio tracking devices onto all. Monitor for a month (day and night) and map territories, with a minimum of 50 independent points for each bird. Identify the most at risk birds and will review that data with Rhys and use appropriately. Rhys happy with this proposal

**Unresolved issues (and the reasons in each case):**

None

**Topic 2:**

2. Impacts on kiwi.

- Mapping territories.
- Fencing and under road tunnels.
- Protocols for eggs.

Points of agreement:

Mapping – as per above; Rhys happy

Fencing – options exist for both territories severed territories and for dispersal of sub-adults (fences & underpasses (culverts)). DOC and Alliance will work together to find solution that works best. Monitoring to check performance (camera's / radio tracking).

There is a risk of strike on the new road that is higher than on existing.

Habitat currently below carrying capacity, which means severance may not have significant impact on fitness of existing pairs / birds.

Age of kiwi eggs and nests before eggs taken to Kiwi Encounter ~~Moving of eggs~~ – John believes there is more recent information available from Kiwi Encounter. Agreed that would request this more recent information and then John and Rhys would work together to agree on a minimum age threshold for eggs and nests ~~a timing~~. Rhys will request information from Kiwi Encounter and forward information on to John (within next few days). Agreed there is a minimum threshold where no movement of eggs would occur.

Unresolved issues (and the reasons in each case):

**None – some work required as above but the work and process to resolve is agreed.**

**Topic 3**

3. Impacts on Australasian Bittern.

Points of agreement:

Agreed that low fence (kiwi fence) in marshland areas would benefit bittern, to reduce the risk of vehicle strike, if bittern are in fact present. Location of fencing to take into account location of kiwi habitat and presence of suitable bittern habitat.

No concerns in Mimi catchment.

In Mangapepeke, if bittern are present then there is a risk of vehicle strike (but don't know if they are present). No sightings in this catchment, but do close by, and in similar habitat. If bittern do get recorded in future then will look for mitigation solution, which would be fencing in future (i.e. an adaptive management approach)

Unresolved issues (and the reasons in each case):

Level of effect on bittern without mitigation not agreed. John believes this is due to unproven presence. Consequence of presence however is agreed

**Topic 4**

4. Assessments of ecological values for kereru and North Island kokako.

Points of agreement:

John happy with Rhys' assessment of kereru and kokako for value. Implications of change dealt with separately via discussion on mitigation topic. Change in value has no impact on assessment of effect. If mitigation package doesn't have the projected benefit for kokako then effect will be as significant as projected.

Unresolved issues (and the reasons in each case):

None

**Topic 5**

5. Extent of area subject to edge effects.

Points of agreement:

Edge effect varies between species. Acknowledge that this effect exists. No relevant NZ data to quantify this effect. This effect 'compensated for' in the offset package if population of birds is improving (key indicators bellbird, tui, kereru, kiwi as per targets in ELMP). If benefits not being seen then adaptive approach to mitigation needed. Addition of other key indicator species is being considered.

Unresolved issues (and the reasons in each case):

None

**Topic 6**

6. Impacts of loss of emergent trees on falcon.

Points of agreement:

Agreed that loss of the 17 odd emergent trees will have some permanent impact on avifauna.

Condition of emergent trees in wider pest management area will improve and the residual effects on avifauna will be compensated for in time by the mitigation package, but these benefits will be difficult to quantify.

Unresolved issues (and the reasons in each case):

None

**Topic 7**

7. Impacts on loss of standing dead trees on avifauna.

Points of agreement:

Unresolved issues (and the reasons in each case):

Are there any of these trees – question for Nick Singers to respond.

**Topic 8**

8. Pest control benefits for kiwi.

Points of agreement:

The pest management area will benefit from the benefits coming as part of a wider mosaic network of pest management (aerial 1080 and bait station work) in the larger area.

500 ha vs 1000ha; 1000 ha will provide some level of benefit for some kiwi chicks found in this area if very low levels of stoat density are consistently achieved throughout the year by sufficient stoat control; however a bigger area is better than a smaller area. Hard to quantify level of benefit to kiwi at this scale and unknown resident kiwi numbers. Within the overall pest management area John has estimated that kiwi numbers could go from 80 to 400 birds over 30 yrs (assuming no dispersal). (John to send this population model to Rhys). This is a good outcome. ~~To degree this does rely~~ For these numbers to be fully realised, this also will rely on the wider mosaic of pest management areas continuing with their control work over this time.

Unresolved issues (and the reasons in each case):

None

#### **Topic 9**

9. Pest control benefits for other avifauna.

Points of agreement:

Agree that there will be a benefit to other avifauna from pest management area. Whether the proposal appropriately compensates those effects will be discussed at mitigation/offset meeting.

Unresolved issues (and the reasons in each case):

Laurence – believes kokako will not benefit from pest management in wider pest management area due to proposed rat management. Will come back to this issue in mitigation / offset discussion.

#### **Topic 10**

10. Impacts on avifauna due to time lag for revegetation establishment/recovery.

Points of agreement:

Acknowledge that there is a time lag.

Unresolved issues (and the reasons in each case):

None

#### **Topic 11**

11. Identify residual effects.

Points of agreement:

Severance of kiwi territories and dispersing sub adults– addressed above in topic 2

Bluffs – kiwi can fall off bluffs (both natural and manmade). Addition of cuts into the landscape could present an effect. Monitoring of existing birds during construction phase could provide an adaptive management measure. Kiwi monitoring plan could be prepared to address this (would also benefit use of underpasses / culverts). Longer monitoring could be required. Plan could be conditioned.

Other residual effects all addressed by compensation package benefits.

Unresolved issues (and the reasons in each case):

None

## Topic 12

12. Extent and purpose of post-construction monitoring for avifauna.

- Australasian Bittern.
- Ruru/morepork.
- Kiwi.
- Vehicle collision.
- Stoat monitoring.

### Points of agreement:

Bittern – as discussed above

Morepork – as above

Kiwi – as above

Vehicle strike – too hard to monitor. Pest management compensates for this effect.

Stoat monitoring will be undertaken. Techniques to be agreed with DOC.

### Unresolved issues (and the reasons in each case):

None