

To: s9(2)(a) DoC Te Anau

From: s9(2)(a)

Subject: observations from a trip to Wet Jacket Arm/Herrick Ck March 21 – April 15 2107

Moose: the object of our trip was to see if we could find evidence that any moose had used Herrick Creek, (or if any indications were identifiable, further afield in Wet Jacket). For many years an individual moose had been using Lower Herrick Creek for a short period late July/early August, 2005-2011, and we had been targeting this animal with trail camera arrays. However, sign stopped after 2011. In 2013 we checked (over a similar three-week trip), but all sign found dated back to 2011 season; suggesting this animal had died. No sign has been seen by us between times, but friends (participants in the original 1972 NZFS moose survey) thought they identified fresh sign while hunting in the 2016 roar. This trip, then, was aimed to verify that information, & check whether a "repeat" journey might be made by the moose if they were correct, since all evidence we have suggests moose participate in a widespread "annual beat" around their chosen habitat, (rather than being "resident" in any one part of it). We found no convincing evidence on this trip, anywhere, that the area had been visited by moose in recent years.

Red deer: deer history for this area can be summarised as: first colonised from progeny of southern releases 1930s, eruptive increase to peak (25 years) around mid-1950s, crash to an "uneasy equilibrium" until the venison industry decimated remaining numbers 1970-1985, flourished thereafter in the rampant re-growth of forest to a second eruptive increase 1990-mid-2000s (25 years). Presently they remain in high numbers, but are clearly on the verge of another "crash", since they are now severely food-limited in an eaten-out forest. Numbers can be expected to plummet in just a few years – as calf-mortality & short life-span takes toll & the population faces years of low recruitment. On this trip 26 deer were seen, 4 were shot for camp meat. Females were in very poor condition (as expected), stags moderate (as expected too, being the physiology of the roar). Calves seen seemed very small for 5 months of age. The forest resembles that of 1972 when we were present for 11 weeks on the original "moose survey". Between times it had gone from desert-to-supermarket, then back again...

Possums: there were no possums present in 1972. We found some slight sign in the early-mid-1990s. Now, pellets, teeth-marks-on-trees, tracks-in-the-mud, fur, night noises, camp raiders & the odd dead animal indicate they are widespread & apparently very numerous. It is very hard to estimate densities from only casual observations, but worth noting that on our 2013 trip I had about 100 feratox baits, & used them to try to protect a few camera sites from possum interference: despite being greatly under-baited, I killed 31 possums from one site alone; 19, 17 & a dozen from 3 others. Now we have high deer numbers effects, AND heavy possum presence – & we find this a pretty distressing mix for forest welfare & its more benign inhabitants.

Birds: we'll make only a few comments – a list of unusual/notable ones, & some notes on a few species that might be of interest. The list: blue penguins, morepork, kea, kiwi, kingfisher, white-faced heron, SI robin, weka, grey duck, pigeon, tui... Secondly, notes: on

one inspection (faces south-side Wet Jacket, opposite Oke Is) we heard "kaka" for the first time, & later that day tracked the noise to see if we could spot the individual. To our astonishment we found a tui mimicking kaka calls, & watched it do so for 15 minutes. Then it was joined by 4 other tui. We have very rarely encountered tui in the eastern end of the sounds, so the tui sightings alone seemed significant, but the calls a certain surprise! Note: take care when ID-ing bird presence during surveys from bird-call!!!! We found no other tui on the trip. Weka: abundant in 1972, absent during the 1990s, first seen again 2012, this trip seen/heard throughout Herrick Ck. SI Robins: apparently absent 1990s, but a sighting near Henry Bn a few years ago, now seen throughout all but near the Sound. Kea: often heard calling high-up, or late evening/early morning. Alongside Moose Lake a family of 5 juveniles & 2 adults were found gorging themselves on Coprosma propinqua berries every time we passed, evidence of at least one successful brood! Kiwi: not much sign/calling, but water-noise at our main camp masked local night noises.

Bats: we have frequently found bats on our deer photographs, taken incidentally on trail camera deer-triggered night-shots, especially at the Top Clearing in Herrick Ck. This trip we deployed 5 acoustic detectors for DoC throughout the valley... separate report exists...

Hope these notes are of some interest.

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