Commentary on the Flora and Fauna on parts of the Silverstream Spur

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My name is David Grant-Taylor. In 2004, I retired from Industrial Research Ltd after working as a Geochemist for 29 years. I now volunteer as a member of Silver Stream Railway. My ambition is to help maintain and operate an Historical Railway, and to ensure that the setting for the entire operation reflects a desire to celebrate our past and to ensure that our operation is part of a recreational amenity that can be enjoyed by local and near local citizens without undue influence from external factors, and recognising as far as possible the duty of all citizens to the reverence for our natural environment. This drives us to ensure that recreational areas are not lost to commercial drivers, especially where the costs of those benefits are paid by local citizens and result in a loss of the amenities available to those citizens. Given that for most of us our ability to recognise native flora and fauna is restricted to the informal accumulation of information, I record that I had an upbringing more rigorous than was typical for my time, but falling short of formal education, I am able to recognise that am able to identify species, but fall short on deeper detail, so in the following I follow that path. I am confident of those assessments, especially backed by an extensive personal library.

On 11/03/24 several of us made a trip to get a better overall idea of the Fauna and Flora across the Silverstream Spur. The driver for this trip was our perception of what we believed to be shortcomings in some of the evidence around the SNA and its extent. Our perceptions are based on discrepancies between the evidence and our knowledge based on our general familiarity with the area based on our operation along our rail corridor, and on our long term familiarity with the section of our railway within about 400m of the Reynolds Bach Drive area. This is the area where most of our work is carried out so our knowledge of flora and fauna is improved in proportion to the time we spend observing it, even if it is incidental to the task in hand at the time. In my case this particular commentary focuses the flora across a fairly long distance (approximately 7km) which includes the area designated as the SNA, and other parts of the spur to look at the distribution of plants and assemblages of plants inside the SNA and inside subsections of that, and in other areas. Because of the inter connectedness of plants, animals, and physical setting and surroundings, I also comment on fauna as they relate to the setting.

This reports largely lists on species seen during the trip. As a ground proofing exercise it presents information that is impossible to refute (except in cases of misidentification). The capacity to identify species is bolstered by the use of handbooks if needed. Some ordinary logical rules can then be applied to make inferences about what the distribution of species means for the several parts of the Spur. Because I have a passing (but definitely not expert) knowledge of the categorization of areas into the various categories of special, rarity, variability , etc, I am hesitant to make strong statements in an expert field, but I feel as qualified as the next layperson to comment on the outcomes of designations of the area, and how those will impact the hopes and desires of those of us who feel the need to protect and nurture the environment which has nurtured us during our upbringing.

Parts of these notes draw on the collection of information taken during our "Field Trip" and may be repeated in other evidence presented. To properly acknowledge these sources, I note that the trip

was initiated by Jason Durry who also focussed on the "Critters" found or observed. The path positions, and time at significant points of our trip were recorded by Don Skerman, and impressive botanical specimens noted by Caleb Scott and Simon Edmonds. The information presented here is largely restricted to flora unless the presence of birds of a particular species is something I associate with the assemblage of plants. In the naming of these I have fallen back on the habits of my youth, so the naming is a bit of a mix of maori and european names.

The beginning of the track (A to B) is covered in low bush comprising five finger, seven finger, occasional beech seedlings, kamahi, manuka, occasional tawa to 1m, grasses, and of course pine in various sizes (age?). In the middle of this region, we also saw a pigeon wood near 5m tall.



As we approach the ridge line (Area B to C) the assemblage gives way to extensive areas of pine of varied size (age?) and a moderate regenerating understory with occasional pigeon wood, frequent

putaputaweta. tawa to 1m, short macropiper, infrequent totara to 1.5m, titoki up to 1.8m high, and rewarewa up to 3m tall. The understory includes short ferns, dianella, and sundry grasses. Even this area carries the usual canopy plants, but with the midstory and understory largely indistinguishable on account of its relative youth. It is infested with pines, probably a great deal of this is wildling as it does not occur in the systematic lines typical of plantation planting.

Dropping down on a route that passes through the designated SNA, (section C to D) we moved more or less at right angles passed the area walked by Keesing, taking a shorter path downwards through the area tagged as a SNA. We agree that this is largely kamahi/beech, but in the area below the Keesing transect. We recorded dense areas of both mamaku and ponga, nice, but crowded specimens in excess of 5m tall (as measured by comparison with the tallest member of our party. The going is difficult, typical of relatively undisturbed bush, with broken wood and short fern specimens close to the bush floor. Below this, the the gulley is criss crossed with supplejack up to 40mm thick and other understorey species including infrequent rangiora. In this area we also passed a large, low rambling specimen of keikei covering a patch about 5m x 3 m. As we descended 27m of elevation from the point where (on this day) the water was permanently above ground, we sighted a nice totara 2.7m girth, and and a small tawa under 1m, holding on to the steep side of the bank. Slightly lower we recorded two beech, 3.3m girth, (notably quite small leaves), and a second of 2.5m. Beyond that was a third that had fallen in a storm last October. Through this descent we had been followed by piwakawaka. In the vicinity of the beech trees we were visited bt one gray warbler, but on playing a recording of the birds on phone, approximately five came to form a small group for a few minutes. Up to this time, I had been very concerned about the absence of insects, (or at least the visible presence of insects). The visits by these insectivorous birds led to the lightbulb moment that there must be insects there and the realisation that in general it takes more work to sight samples of biota than we might be putting in. There is likely a fair bit of stuff not seen, or reported unless surveys are very intensive. We continued down to the area known to us as Hulls Creek passing through a tangle of supplejack, mamaku and ponga, often these ferns were in excess of 5m tall. In this region the Forest /bush includes nice specimens of large canopy, the mid storey is generally fern and the lower storey is very dense, and difficult to walk. Light wells carry emerging specimens of mid size (tawa) and large size (totara) canopy trees.

Not far from the beeches we explored the stream, I would guess the flow rate at maybe 2litres per minute. The first pool exposed a good size spider, more evidence of the presence of insects. The second pool about 1m lower carried a mid sized koura in the muddy water. We photographed it and put it back where we had found it. Notably this was in a rivulet in an area that had been said to contain no permanent waterways.

The downward terrain eventually led through a short distance of pine plantation, overlooking Hulls Creek. At this point, we moved to the north-east onto a gentle ridge covered in plantation pine (area E). With a floor covered in pine needles, and understory mostly patches of fern, the area was surprising for its patches of young seedlings. These included pigeon wood, mahoe, honeysuckle, tawa, red matipo, and ferns. This poses something of a problem as the pine was planted about 30 years ago, yet patches of seedlings are trying hard to make their way into the record of regrowth. This suggests there is a mechanism for transport of seeds, some of them (tawa, pigeon wood) quite large, even though we did not see the birds likely responsible for that transport.

This then drives us back to information based on our general familiarity with the larger area which is derived during an enormously longer observation period. The list of native birds we have sighted at

the Reynolds Bach end of the railway (maybe 700m?) from the Hulls Creek area include in no particular order: gray warbler (riroriro), fantail (piwakawaka), kingfisher (kotare), woodpigeon (keruru), tui, australasian harrier (kahu), bellbird (korimako), shining cuckoo (pipiwharauroa), parakeet? (kakariki). The keruru is known for eating fruits and distributing seeds, so in a similar way to seeing a relationship between insectivores and the insects we didn't see, it seems very likely that seeds are distributed by species for which we have no definite record their presence in the area of interest.

This then drives us to a view of the spur area as a system rather than as a mosaic of disparate units. Viewing a small section as an important area, and then sectioning off a greater or lesser portion condemns the important region to a slow decline as there is no buffer area, nor contribution from the surrounding area to the survival of, in this case, the area designated as SNA.

I include a few photographs to illustrate some of the scenery from our path. They are placed in chronological order, according to the section of the path we were following.



Putaputaweta



Fernery



Pseudopanax



Beech Trees



Red Matipo



Supplejack

Finally although this panel might be constrained by definitions set out in legislation or external rules, I am ever hopeful that they will be able to recognise that a restrictive interpretation of SNA, or a version of the area in which it is refined downwards, is likely to lead to a loss of species in the area, a loss of protection by any surrounding buffer areas, and a loss of of protection given by taking a wider view of an geographical area as an ecological system.

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