

TŌREA PANGO



NELSON BRANCH BIRDS NZ. NEWSLETTER ISSUE 3. JULY 2022

Editor's notes

- This is the third edition of tōrea pango, and it's starting to feel like a decent step towards producing a sustainable bimonthly newsletter. The first couple were pretty much an experiment and I wasn't sure how long they were going to take to produce or even if there would be sufficient content of interest to make it worthwhile. Still so far so good. I would like to firm up some dates for submission and issue as I'm actually out of sync with the meetings and it needs a bit of a wiggle to line it up. So, this issue is for **July only** and then we will revert to bi-monthly as follows:

Issue	Submission deadline	Publishing date (+/- 5 days)
August /September	Sept 10th	Sept 16th
October/November	Nov 10th	Nov 16th
December /January	Dec 10th	Dec 16th

- Please keep contributions coming in. Sightings, Birding spots, Trip reports, Bird table news, Events, Photos, Conservation. Whatever -----Maybe draw the line at jokes (unless they are really funny). Many thanks to all those who have contributed so far and who have been supportive of the idea.
- I've watermarked the pages of the newsletter with Rebecca's lovely godwit photo. I understand though that if you open the letter directly **without downloading it first** then it shows as an actual picture rather than a watermark. If this is a pain, please let me know. Also, if you are having difficulty downloading, make sure you have a reasonably current version of adobe acrobat installed and as a last resort I can (reluctantly!) send you a hard copy.

Summary of last meetings

June 13th

9 members attended the June 13th meeting in the Richmond library. A number of items were discussed including;

- Paul Griffiths gave a report on his attendance at the National conference in Christchurch and his trip to see the little penguin kororā. (see report below.)
- Paul also took us through the presentations given to the National Conference by David Melville and Scott Butcher (Nelson city council) on the fernbird project.
- David Melville is trying to organize a bird count on Farewell Spit but apparently the power has been cut off. There was some discussion regarding the use of a drone for the count.

- Discussion around great crested grebes now being seen in the Top of the South. Are they expanding northwards?
- With the 2024 National conference to be hosted in Nelson it seems appropriate that Iwi should be consulted and involved. If you have contacts or connections relevant to this, Paul G would love to hear from you.

July 4th

16 members attended the July meeting.

- Robin and Sandy Toy gave an expanded version of a presentation originally given at the OSNZ conference – ‘Long term bird monitoring by a community group’ See article Bird counts in Friends of Flora’s project area, 2005-2021 below.
- Rob Schuckard spoke to the latest ‘Shorebird Assessment- Top of the South’, in particular the significance and interpretation of this data in designating the conservation status of specific local sites. See article below.
- Paul Fisher showed and talked to the fern bird poster co-produced with David Melville and presented at the OSNZ conference. A small copy of the poster is shown at the end of the newsletter.

Kaikoura birding boat trip June 9th. Report by Craig Martin

Inclement weather set the pace for our albatross encounter tour out of South Bay Kaikoura. The ocean was a bit unsettled but fine, a little bit lumpy for good photography. A good selection of birds showed up including 4 wandering (Gibson’s), 3 NZ white-capped, 1 Buller’s, and 1 black-browed albatross. Also 4 giant northern petrels, 1 Westland petrel, numerous Cape petrels, and both Hutton’s and fluttering shearwaters. An added bonus was several dusky dolphins and sightings of 4 humpback whales. Great stuff. On the way home called into Lake Elterwater and was rewarded with 2 pairs of Southern crested grebe and one dabchick, plus the usual swans, grey teal, scaup etc.



A couple of great albatross photos



Great crested grebe and dabchick at Lake Elterwater. Are the G. C. Grebes expanding North?



And what a shot. Not exactly pelagic birding but hard not to include Craig's photo of a karearea predating on a kōtare

RARE SIGHTINGS

Local sightings

- Glossy Ibis at Karamea airfield June 8th (reported by Davis Melville)
- Wilson's Phalarope, seen near Blenheim
- 4 black fronted terns seen at Tapawera (moving inland early?)

Other Sightings of National Interest

- Tree martin seen near Otaki beach
- Hudsonian Godwit, Aramoana June 12th
- Chestnut Teal, Travis Wetlands
- Chestnut Teal, Timaru
- Swinhoe's, Matsudaira's, or Tristram's Storm-petrel. (Wrecked at Muriwai West Auckland.)

Penguin Feld trip Christchurch National Conference 2022

Report by Paul Griffiths

After the scientific papers on the Saturday and Sunday, I decided to take a trip to see the little penguins (Kororā) in Akaroa. Pōhatu Penguins is a family-run business with a long-standing history of protecting the Kororā (Little Penguin) in Pōhatu bay on the family farm. When Shireen and Francis Helps first began their conservation work over thirty years ago the penguins faced massive challenges that threatened their very existence. These challenges included predation via introduced predators such as rats, hedgehogs, cats, ferrets and stoats. Gill net fishing, unsupervised dogs and other human disturbances were also a significant part of the decrease. The colonies around the Banks Peninsula declined at an alarming rate and most disappeared altogether. Through predator trapping, monitoring, penguin rehabilitation and creating awareness over the years the Pōhatu penguin colony stabilized - and it has grown over time to become the largest colony of little penguins on mainland New Zealand. The Helps have won many awards for their work in penguin and habitat conservation and also helped found the award-winning Banks Peninsula Conservation Trust and Wildside Project. The trip to Akaroa Town takes 75 mins from Christchurch via Lake Ellesmere, Birdings Flat, Lake Forsyth, Duvauchelle Bay and Robinson's Bay. A selection of photos from the trip are shown below;



Black swans, Lake Ellesmere



Kingfisher, Birdings Flat



Shelduck at Robinsons Bay



Spotted shags and Red-billed gulls, Akaroa Harbour



Little penguin nest box



Kororā



Little penguins congregate in groups of about 20 birds at dusk to socialize before coming ashore.

Dead Penguins

Much less happy than the above story, NZ birds are making international news for all the wrong reasons. As many of you will be aware little (blue) penguins are washing up in their hundreds if not thousands on Northland shores. This apparently is not totally unprecedented and mass die offs have happened in the 70's 80's and 90's with up to 5000 dead birds reported. The scale of this year's event is probably less but the increasing awareness of and possible link to climate change has attracted the attention of international media and has been reported by CNN, the Guardian, the Washington Post and the Smithsonian magazine to name a few of the more illustrious.

Possible Projects for Nelson OSNZ

With the forthcoming hosting of the 2024 Birds NZ Conference in Nelson, it would be great to showcase the region with a buzz of birdy activity. Peter Gaze has put forward this starter list of investigative projects that members or groups of members might like to take on;

'Single species projects are always fun to focus our ornithological interest and will often lead to some enlightenment quite quickly. The region has a major such interest underway with fernbirds but there are a few others that come to mind. Please drop me a note if one or other appeals and we can work together to come up with a plan.

NZ scaup.

There has been a national publication about the drop in numbers, yet they really are becoming more widespread and more numerous in our region. In fact, there is a small publication in the pipeline on this one. However, this work could be built on, we could do counts at all likely habitats, determine

breeding sites, enter on eBird and compare this with what the various bird distribution atlases recorded in the past. There was a similar survey done in the past and if we can track that down the comparisons could be very interesting.

Royal spoonbill.

It's likely that our birds mostly head east in early spring to breed on the Wairau Lagoons. In the off season they come back this way to hang out in estuaries from Nelson Haven through to Farewell Spit. But this is a story that lacks much substance. There will be some data from past banding studies that could be teased out for starters, then if we were to organise monthly counts at all locations, including those in Marlborough, we should be able to learn more.

Red billed gull.

This is another species where our colonies (at least on the Boulder Bank) seem to be defying the national trend. I have found counts from the 1950s thru to 2018 that show this increase and if we had an up-dated count this spring this would justify a short note in one of the society's journals. Given the awkward location of the colony these days, right on the water's edge, we may need to refine our technique for this

Crested Grebe.

Not known in Nelson or Marlborough for the last few decades and yet look at what is turning up on eBird.

<https://ebird.org/newzealand/map/grcgre1?neg=true&env.minX=&env.minY=&env.maxX=&env.maxY=&zh=false&gp=false&ev=Z&mr=1-12&bmo=1&emo=12&yr=all&byr=1900&eyr=2022>

Is someone keen to organise a field trip in November to see if the birds are still breeding on Lake Matiri? Perhaps we could encourage our Marlborough colleagues to host us on a tour of all their recently established sites.

Morepork and weka

These are two other species begging clarification and description of recent trends.

For now, it would be good to know what sort of interest there is with our membership. Perhaps if you could drop me a note on what appeals and how actively you would like to pursue it? Then when we have a group of like-minded folks we could get together and come up with some cunning plans.

Peter Gaze peterdgaze@gmail.com

Success at the end of the day! Paul Fisher is banding hawks!

The noose trap attracted L36506 banded on 12/5/22 probably a second year male. I removed the hare from the noose trap and put it in the cage with the mostly eaten roadkill possum. A new juvenile bird was attracted to the trap with improvised side entrance - so it works. As the light was fading, I banded the bird and measured the wing 417mm, probably a juvenile male with dark brown eyes and white nuchal patch.



Project - Pest Free Onetahua – Farewell Spit

This is obviously a very important conservation project happening in our local area. The project is community-led with the aim of completely removing possums, rats, stoats and feral pigs from Onetahua Farewell Spit by 2025 and preventing their return. Recently Pest Free Onetahua <http://www.onetahuarestoration.org.nz/> has put out an excellent pamphlet outlining the objectives timelines sponsorship etc. to achieve this goal. The stunning photos used in the production of the pamphlet were taken by none other than Rebecca Bowater and Bradley Shields. Here is a link to the pamphlet. Check it out!

https://mail.google.com/mail/u/0?ui=2&ik=4f7e04195e&attid=0.1&permmsgid=msg-f:1736555600838576189&th=18197c1e48b2c83d&view=att&disp=inline&realattid=f_l4t051t60

Shorebirds Assessment Top of the South

At the July meeting Rob Schuckard talked about the latest report on Shorebird data from 2012 – 2021 in the Top of the South. This is probably one of the longest running counting projects of its kind starting on Farewell Spit in 1961. Accurate counts of wader species are used to designate the significance of individual sites. Until recently counts have been twice/year but the addition of a February count is giving additional and significant data that may show the importance of certain areas previously missed. If a wader site holds > 1% of the National population then it is a site of National Importance. To be identified as a Ramsar site, an area needs to meet any one of 9 criteria. Farewell Spit is a Ramsar site because it meets Criterion 5: "it regularly supports 20,000 or more waterbirds." Changes in wader numbers have meant that some previous sites such as Westhaven Inlet where numbers have dropped are no longer identifiable as areas of National Importance. However other sites such as the Boulder Bank and Neal Park are showing increased numbers. While Rob considered it unlikely that such a designation would be given, Neal Park does at times actually hold sufficient numbers of SIPO to make it eligible as a site of National Importance! Clearly wader counts are a very important part of what this group does, with the information hopefully being used by our councils in planning and resource management.

Swallows feeding at the Glen

If you're over Netflix, here's a YouTube video from Paul Fisher of swallows feeding at the Glen. Am I right in remembering a time when they didn't even overwinter in Nelson?

<https://youtu.be/VSEb2-tCwIk>

Paul says;

'Not the best quality video taken from my phone but a marvel to watch - the title should be feeding frenzy, presumably opportunistic on the insects disturbed from the grass. The swallows were feeding mainly over the remaining uncut grass.'

Bird counts in Friends of Flora's project area, 2005-2021

Robin & Sandy Toy

At the Birds NZ annual conference, we presented an overview of the bird monitoring carried out by Friends of Flora, a community conservation group. Over the next few Tasman/Nelson newsletters, we'll cover the different monitoring methods in a bit more detail. In this edition we cover five-minute bird counts.

Friends of Flora and the Department of Conservation, aim to protect and/or return endangered and threatened flora and fauna to the Flora Stream catchment area in Kahurangi National Park. Short-term threats to birds are primarily mustelids and rats. Populations of these predators are suppressed by a landscape-scale network of 1348 double-set stoat traps (DOC150s) over 10,000ha, and aerial 1080 in beech mast years targeting rats.

Trapping aims to achieve very low stoat numbers. The benefits of reducing stoat numbers are likely to be most apparent for large bird species such as rorua (great-spotted kiwi), whio, kaka and kea, that are vulnerable to stoat rather rat predation. Targeted monitoring of rorua and whio has demonstrated increased numbers of these species and we'll cover this in future newsletters. The density of traps used for stoat control is too low to have a significant impact on rats. Rat control has been restricted to aerial 1080 following mast flowering of the beech trees. Such control also reduces possums to very low levels and kills stoats through secondary poisoning.

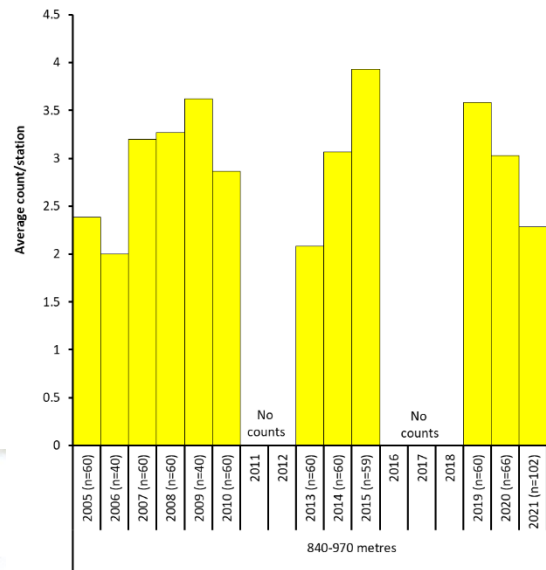
The effect of predator control on small forest birds has been monitored by five-minute bird counts (5MBC). Bird counts were initiated by Birds NZ along the Flora track in 2005 and were carried out annually until 2010. No counts were done in 2011 and 2012. In 2013, Friends of Flora took on the counts and did them in 2013-2015 and 2018-2021. There were 20 count stations, 100 m apart, each of which was visited twice on each of three days, a total of six counts/station. The count stations are between 840 and 970 m altitude.

Average counts are shown in the figures below. Note that the y-axis scale differs between species.

Most species have shown little change in counts as illustrated by bellbird.

Bellbird

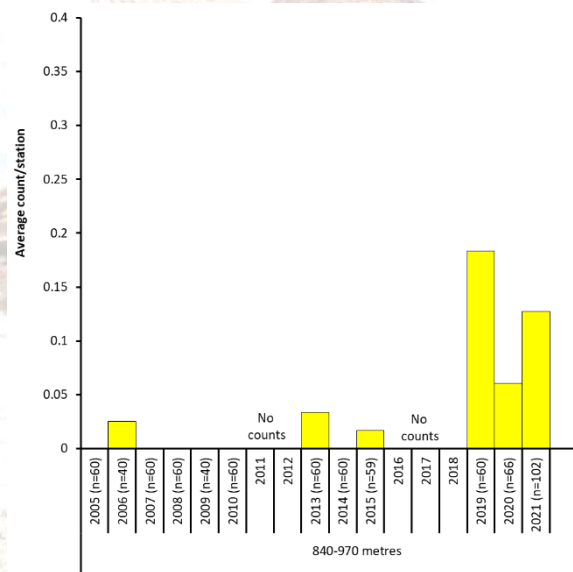
Average counts are the highest of any species and haven't varied much over time.



Many species are encountered too rarely to show trends. Weka were in this 'rarely-encountered' category, but appear to have left it, and are now relatively common.

Weka

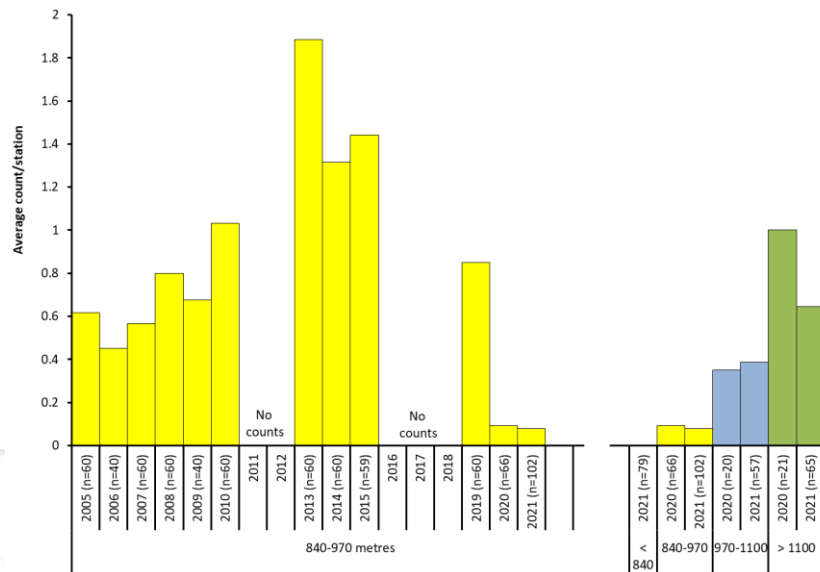
Appear to have become more common since 2015.



In 2020, a marked decline was noted in the number of rifleman. *Ad hoc* observations suggested rifleman were still being detected regularly at higher altitudes, so we did an additional single set of counts at 47 higher-altitude stations. Rifleman were detected at 20 of them. This illustrated that the counts since 2005 are not representative of the range of altitudes occurring in the Flora. So, in 2021, we expanded the number of count stations from 20 to 99, spread across altitudes from 736 to 1293 m.

Rifleman

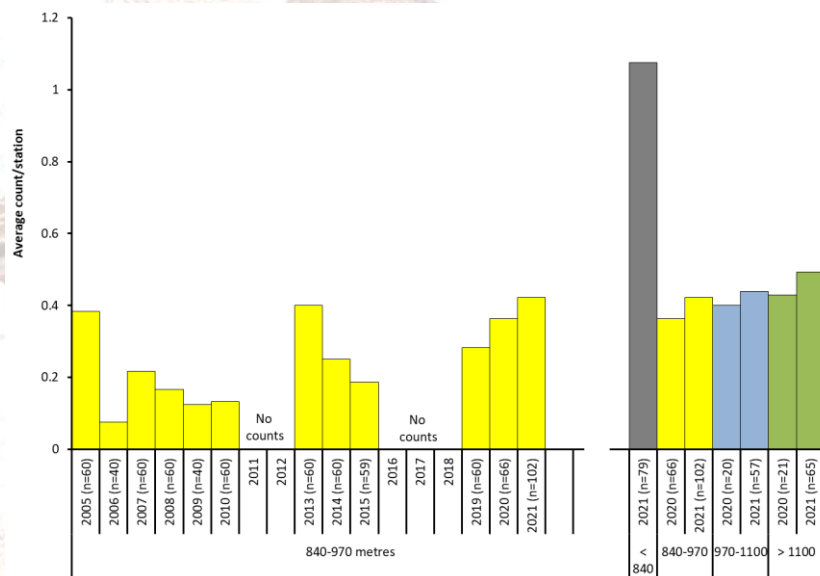
In 2020 a large decline in rifleman was observed along the Flora track (yellow bars on left of figure). The species is absent in the lowest altitude band, but becomes more common at higher altitudes (bars to right of figure). We suspect the decline was due to a period of high rat numbers.



Other species showing marked altitudinal variation, but little variation over time are robin, tomtit and brown creeper.

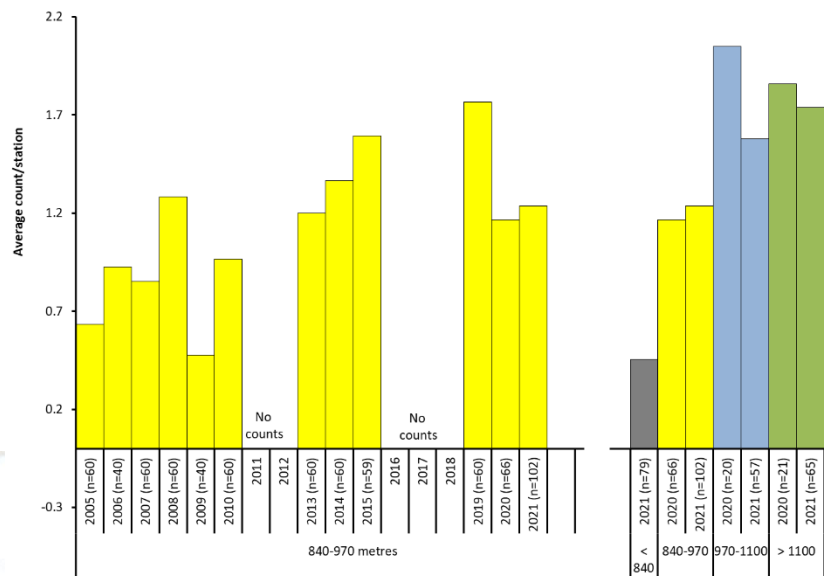
Robin

There has been little change in counts over time, but robin are much more abundant in the lowest altitude band.



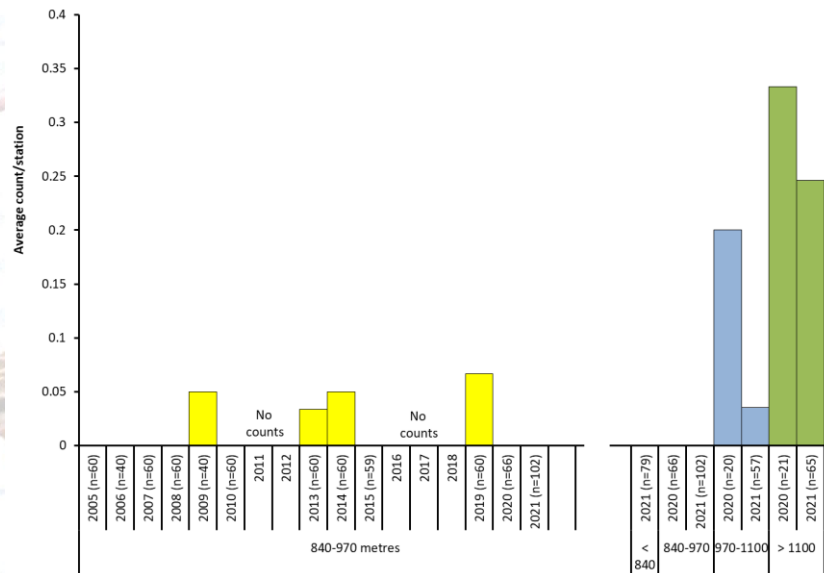
Tomtit

There has been little change in counts over time, but tomtit are more abundant at higher altitudes



Brown creeper

Have always been scarce in the Flora track counts, but counts are higher at higher altitudes.

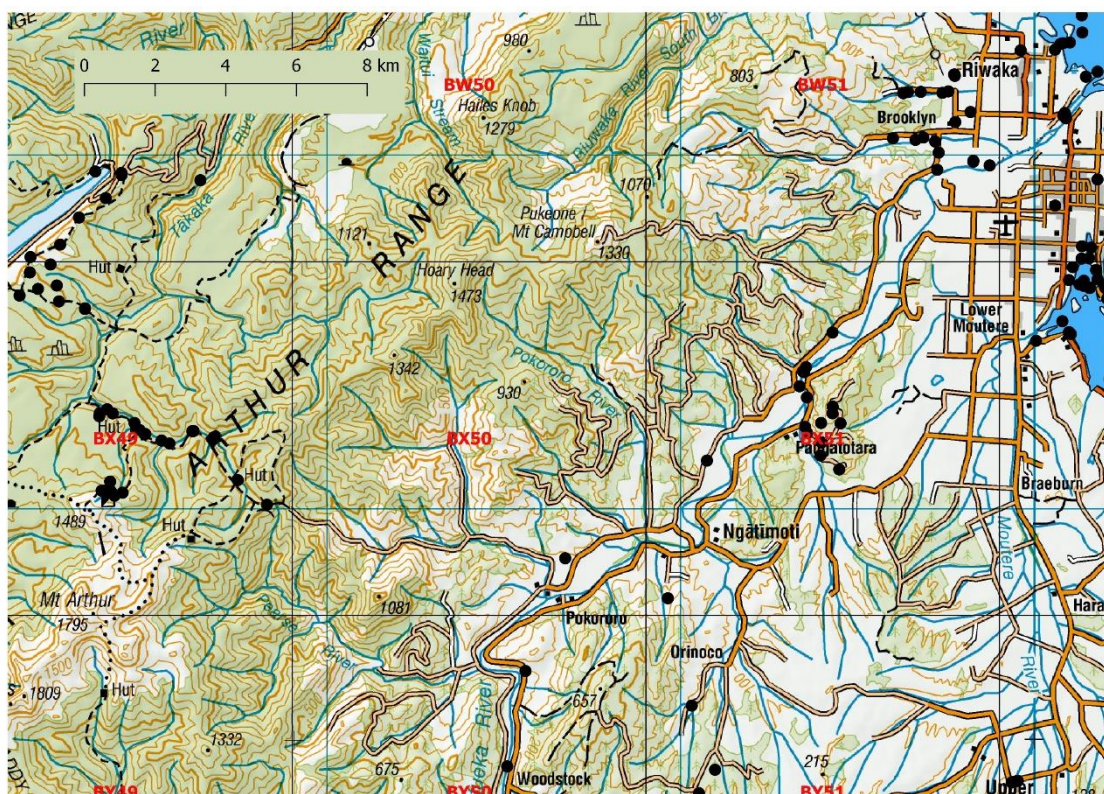


A larger sample size would be required to show subtle changes in species abundance but the long-running Flora track 5mbcs showed the recent dramatic decline in rifleman. We will continue monitoring over the range of altitudes and will try to relate species abundance to rodent abundance.

July 2022 Atlas News: Tasman/Nelson. *Robin Toy*

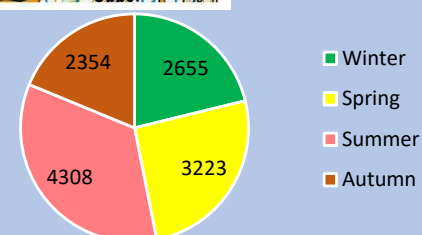
There is a lot of information to help you decide where to atlas on the eBird atlas website under 'About-supporting materials. For example, you can download topographic maps of every square, and kml files showing every location at which counts have been done in each season or overall. Kml files can be imported into Maps.Me, Google Earth or any other mapping programme. Below is an example of winter count locations around Motueka, 2019-2021 (all the black spots). Plots like this don't show the effort at each count station, so use this tool in conjunction with the Atlas Effort tool to focus your atlasing in the squares with least effort.

12,540 checklists have been submitted for Tasman/Nelson, which is 2258 more than in our March



newsletter. Well done all contributors! Autumn remains the least well atlased month, but there are still two to go. We only have 1.5 winters to go, so don't hang back.

Finally, the square with the greatest number of species in Tasman is BW52,— it includes most of the Motueka sandspit and has had 82 species recorded. In Nelson, the honours go to BX54, the Wakapuaka wetlands and BX55, the square to its east, both of which have 65 species. So, if you want to boost your personal atlas list, they'd be good squares to visit, but if you want to benefit the atlas, go somewhere else! Keep safe and have fun atlasing.



- The number of lists in Nelson in summer is exactly the same as in winter (1056), the number of species is also the same (73)

Fern Bird Poster Sorry -I couldn't download it so this is just a screenshot. Still, it gives an idea of what a thing of beauty it is. It is apparently downloadable but at this stage I'm not sure where from. If do you want an electronic copy maybe contact Paul F.

Describing the moult of the South Island Fernbird: can birds be aged and sexed in the hand?

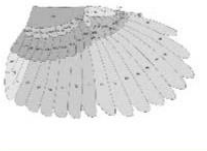
Paul R. Fisher¹ & David S. Melville²

¹27 Lud Valley Road, Hira, Nelson, 7071, New Zealand wildlands.nelson@gmail.com
²1261 Dovedale Road, RD 2 Wakefield, Nelson 7096, New Zealand david.melville@xtra.co.nz

Abstract


The timing, extent and sequence of moult for juvenile and adult Fernbird (*Poodytes punctatus*, Quoy & Gaimard; all five subspecies are Threatened - At Risk) has not been described with only very limited information from museum specimens and postgraduate studies. The morphology and moult of adult (n=41) and juvenile (n=8) Fernbird was described and photographed over the first year, as part of a Nelson OSNZ/Nelson City Council conservation project at the Wakapuaka Flats, Nelson Haven to study the local distribution and abundance of birds prior to implementing a predator control programme. The key learnings from describing the moult are presented.

Fernbird Wing Feather Structure



Fernbird wings have a broad, relatively short and rounded - adapted to life in low and dense scrub where they feed, nest and avoid predators. The wing has 10 primaries (P), with the nine functional primaries used for assessing moult, along with the nine secondaries (S), including three tertials (T).

Fernbirds have 10 primary coverts (PC) and greater coverts (GC), though the total GCs may vary to nine feathers.




Adult Fernbird wing (August) with primaries, secondaries and tertial feathers labelled.

Moult in body feathers, tail, tertials, median and marginal coverts appear to commence early in the sequence of post-breeding moult, when all feathers are eventually replaced.

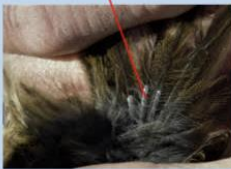
Feathers are readily worn and ruffled from movement within dense scrub habitat, making them difficult to assess for wear and age.

Juvenile Feather Growth and Moult




Juvenile moulting greater and median coverts

The larger flight feathers continue growing after fledging (January) - as seen by the sheath on the tail feathers. The downy feathers are grown in the nest and are a feature that can be used to distinguish juvenile from adults.




Post-Juvenile moult involves a partial wing moult with most primaries and secondaries retained. Moult is well underway in March, the wing shows active moult in the outer greater coverts, median and lesser coverts and alula one.



Pin feathers and sheaths of outer four primaries, indicative of post-juvenile eccentric moult in Fernbirds - a phenotype found in other open-scrub dwelling birds and possible adaptive evolutionary response to ecological or other environmental change such as transition from forest to open habitat (Guallar et al., 2021).
DOI 10.1093/ornithology/ukaa070

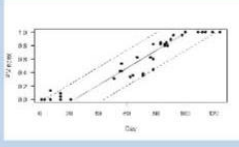
Replaced outer three primary coverts with darker centres, fresh and wider margins - associated with eccentric moult of outer primaries (late April).




Feathers have fine barbules (hairs without interlocking hooks) along margins

Timing of moult and ageing birds

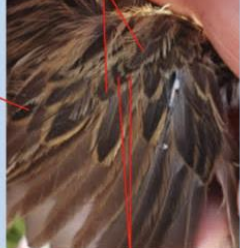
Primary Molt Score
The moult R Package (Erni 2022, Ver 2.2.1, <https://cran.r-project.org/package=moult>) was used to estimate the moult duration for adult birds post breeding. The Primary Molt Index (PMIndex) is the sum of the molt scores (0=old to 5=new) divided by 45 (9 fully grown primaries x 5). The primary moult start date was set at 1 January (MPIndex=0) with moult complete with MPIndex=1. Primary moult was completed in 78 ± 5 days and 50% birds started primary moult by 24 January ± 3 days.



Adult Fernbird wing (late February) showing active primary moult: P1-P9 moult score 555310000
Note: 1=feather pin hidden by coverts; the old primaries are pale brown with worn, ragged edges compared to the darker brown new primaries.



Old feather wear is notable for adults in early March, post breeding. Very worn (pale) coverts with abraded margins.



New (darker) T8 mid tertial


New (darker) coverts, probably replaced before current primary wing moult

Juvenile and adult ageing criteria


Juvenile	Adult
Juvenile Fernbirds can be reliably aged up to completion of their post juvenile moult.	Most adult birds commence post breeding body moult in December and wing moult in January.
Black tongue spots (December).	Primary feather moult occurring in all birds by late February, with secondary moult commencing in March.
Tail and wing feathers not fully grown, sheaths may be present.	Adult primary moult is completed by mid April and most secondary moult by the end of April.
Juvenile birds moult all greater coverts, some median and marginal coverts and alulae (full extent unknown).	
Juvenile birds may show eccentric moult in outer primaries and respective coverts in April.	

Sexing Fernbirds – guess which bird is the male?


Adult pairs were captured and banded in August and March at their breeding territories, providing an opportunity to compare male and female plumage characteristics prior to breeding and during moult. Different pairs are shown to illustrate the common features used to sex individual birds. Individuals were sexed using a combination of morphometric measurements and the extent of eyestripe.



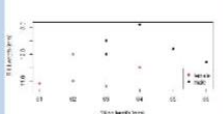
Male birds were observed with a more 'robust' bill and broader pale eyestripe, which is more 'sinuous' in shape, accentuated behind the eye, compared to females.



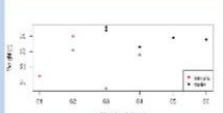
March: Note the head feather moult occurring at the base of the bill, which will affect the feather to bill length measurement.



Best (1973; MSc, Snares Is Fernbird *P. punctata caudata*, n=38) and Harris (1986, PhD Otago, South Is Fernbird *P. punctata punctata*, n=17) described sexual dimorphism for most body measurements, with wing and tail providing the best discriminant function. However, their birds were sexed based on behaviour in the field.



Preliminary analysis of breeding pairs (n=6) captured together in August concurred with these studies, with sexual dimorphism observed in wing and bill length and weight. Tail length was compromised by missing feathers or moult.



Acknowledgments and future studies:

Santi Guallar assisted with assessing moult, producing figures and advice for ongoing moult studies. Peter Bradshaw provided GIS support for improving the figure illustrating feather codes. Sincere gratitude to all involved with the project including the Nelson OSNZ team and Nelson City Council for initiating the predator trapping programme and providing a small environmental grant to cover banding equipment. Future studies will include ongoing analysis of moult, and additional genetic analysis to confirm the sex of birds. This study is planned to continue for a further four years to assess productivity, density, dispersal and recruitment of birds in response to implementing predator control measures.

Next Meetings

Meetings for the next three months are planned as follows:

Aug 1st *George Daly* and *Trevor James* will talk on the work at the Waimea Delta (The ex-O'Connor/Pearl Creek area)

Sept 5th *Josh Kemp* will speak on his research into kea and what has been learnt about the threats to their breeding success. We will learn how this knowledge can influence useful management of the risks. *Katherine Chamberlain* is also confirmed for this date.

Oct 3rd *Ron Moorhouse* will speak on the work of Project Janszoon in the restoration of birdlife in Abel Tasman National Park. He will focus particularly on the successful return of pateke, whio and kaka.

