Department of Conservation
Te Papa Atawbai

Banding Newsletter 8

BirDBanD

Dec 2018

New Zealand National Bird Banding Scheme NZNBBS

Banding Banter

The 8th edition of *BirDBanD* celebrates two years of sharing news, updates and banding banter with the Banding Community. Previous newsletters can be downloaded from the bird banding webpages of Department of Conservation and BirdsNZ.

Bird Banding Symposium at AOC in Darwin, July 2019

The Australasian Ornithological Conference (AOC) is the largest biennial gathering of ornithologists in Australasia, hosted by BirdLife Australia and Birds NZ, providing a regular forum for the exchange of information and ideas between researchers and conservationists throughout the Australasian region. The Australian Bird Study Association (ABSA), in collaboration with the Australian Bird and Bat Banding Scheme (ABBBS) and the New Zealand National Bird Banding Scheme (NZNBBS), will be hosting a Bird Banding Symposium at the AOC in Darwin in July 2019.

As banding groups in both Australia and New Zealand strive to maximise the value of banding data, conversations between groups, individuals and regulators are increasingly important. Presentations will highlight how 'traditional' banding still plays a vital role in modern research, providing examples of the integration of new techniques and the potential for collaboration. Long-term banding projects will be reviewed and a forum discussion will provide an opportunity to identify how we can build on these foundations, and ensure that as an Australasian banding community we continue to deliver high-value and long-lasting banding studies.

The Banding Office would like to encourage New Zealand banders to submit abstracts for the Bird Banding Symposium by 14 December; early-bird registration closes on 19 February – see www.aocdarwin.com.

That's a Wrap: The Art (or Science) of Band Making – Sandy Taylor

The Banding Office has been making coloured plastic wraparound bands for years. They were once all made from a plastic material called Darvic but this product is no longer manufactured so, as our Darvic dwindles to sheet thicknesses only suitable for large sized bands, we have turned to Salbex, another type of plastic material. The method I use for making wraparound bands is not the only one, nor am I suggesting it is the best one, but it is the way I was taught (thanks Brent) and thousands of bands later I have a technique that works for me.

The equipment required to make wraparound bands is basic:

- metal templates in a variety of diameters
- a frying pan that will hold enough hot water to cover the template
- needle-nose pliers and long narrow tweezers
- scissors
- ruler
- bowl with cold water
- calipers and/or drill bits
- paper towel or tea towel

The trickiest part is determining the strip length and deciding the template size that will produce a band with the required internal diameter. It is surprising what a difference a millimetre makes. Strip lengths and template diameters will be different depending on the thickness of the material being used.

The method I use is the same regardless of what band size I am making. Firstly, cut each strip to size and round all four corners. Heat water in the frying pan to the point where the plastic strips become bendable (i.e. very hot) and place a couple of strips and the template in the water. Twirl strips around the tweezers (or pliers for the bigger bands) and push into the template. The plastic strip needs to be lightly flattened and pushed to the template sides so that the wrap is even and tight. Using the pliers lift the template, with the plastic strip inside, from the hot water and plunge the whole thing into cold water. Using tweezers push the plastic band out of the template and allow to dry on paper towels (not in the sun unless you want them to fade and unravel). You should measure with calipers or use the drill bits to check that the internal diameter of the band is correct.

So, what are some of the problems and pitfalls of band making? Top of the list would be cutting and shaping over 100 strips without twirling a few first to test that they make the size of band required. The consequence is either having to shorten the strip and re-shape an edge or worse must start again because the strips are too short (a waste of time and plastic!). An issue with the smaller bands is not getting a tight enough twirl on the tweezers so that the plastic strip doesn't fit into the template. When lifting the template out of the frying pan sometimes it is necessary to hold the end of the band tight against the template so that there isn't a loose flap. However, in trying to lift the template and hold the flap tight the end can shift upwards creating an uneven edge to the band. If a band doesn't look good, it can always be returned to the frying pan for another twirl.

The Banding Office does not hold stocks of wraparound bands; they are made to order. We have found that over time the wraparound coils loosen so we prefer to supply bands that are 'freshly' made. Also, it is Murphy's Law that however many bands we have in stock the one size and colour we don't have is the one that is required urgently! Therefore, there are delays with supply as band making is fitted in and around Banding Office work. I have trained someone (L3 bander) in Wellington who will be sharing the load, but I would also encourage experienced banders to seek out training with approved band makers with the aim of making their own bands. The advantage being that as an expert bander working with a species you know best you are in the ideal position to tailor a band to fit perfectly. If you are interested in learning about wraparound band making, then contact the Banding Office (bandingoffice@doc.govt.nz).

A word of warning: just like badly made metal bands, shoddy wraparounds can also cause damage. Banding is a tool for assisting in the monitoring and conserving of species. It defeats this purpose if poorly made and fitted bands fall off, become a problem to the bird, or worse.

Testing their mettle: rates of wear in metal bands

Troy Makan is running an experiment using a lapidary tumbler to "test the mettle" of stainless steel versus incoloy (nickel-chromium alloy) bands. So far, the bands have been tumbled and abraded (with stones and silicon carbide grit in water) for over 500 hours.

We are interested in comparing the legibility, thickness, edge sharpness and structural integrity of these materials. Although this does not necessarily represent the kind of wear exerted on bands over tens of years on long-lived birds, it should provide us with a good comparison of rates of wear between the two metals.

New versus tumbled bands

Shane Baylis and colleagues from Monash University, together with the Australian Bird and Bat Banding Scheme (ABBBS), have investigated rates of wear in metal bird bands using routinely archived returned bands at the ABBBS. In their *Journal of Field Ornithology* paper, available as an early view at https://onlinelibrary.wiley.com/doi/abs/10.1111/jofo.12268, they show that published estimates of band wear are upwardly biased toward rapid-wearing bands on certain species. In a novel approach, they weighed bands that had been returned to the Banding Scheme and compared these weights with the estimated original weight of the bands (obtained from weighing retained unused bands), plotted against the number of years each band was worn by a bird.

Which metal do *you* think will last the longest?

The NZNBBS also have bins of returned bands (though unfortunately not routinely catalogued or archived) and we are interested in doing a comparative study. We would therefore like to request that bands that have been removed from birds be sent to the Banding Office. If you do return worn bands, please let us know a bit about the state of the bird when you removed the band - the best bands for estimating wear rates will be bands that were kept because of the state of the *bird*, rather than because of the state of the *band*. In general, this will mean that we're most interested in bands that came from freshly-dead birds, but if you have bands from a study where all bands on recaptured birds were removed and replaced, regardless of condition, the removed bands are also very useful. Please contact us before sending any bands.

Did you know?

marking, in relation to an animal, means—

(a) marking that animal by any method for the purpose of distinguishing that animal or animals of that type from others; and

(b) includes affixing or applying to, or implanting in, that animal, for the purpose of distinguishing that animal or animals of that type from others, any band, ring, clip, tag, electronic identification device, or paint, or any other thing

Animal Welfare Act 1999

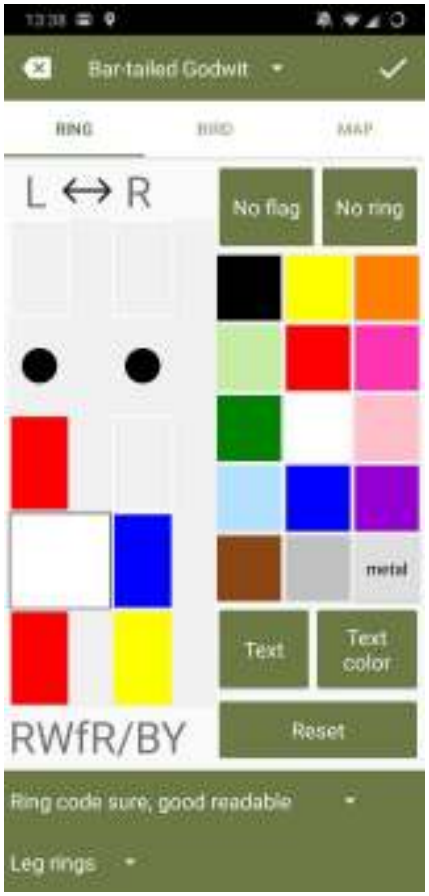
BirdRing Mobile App - Mario Huizinga (The Netherlands)

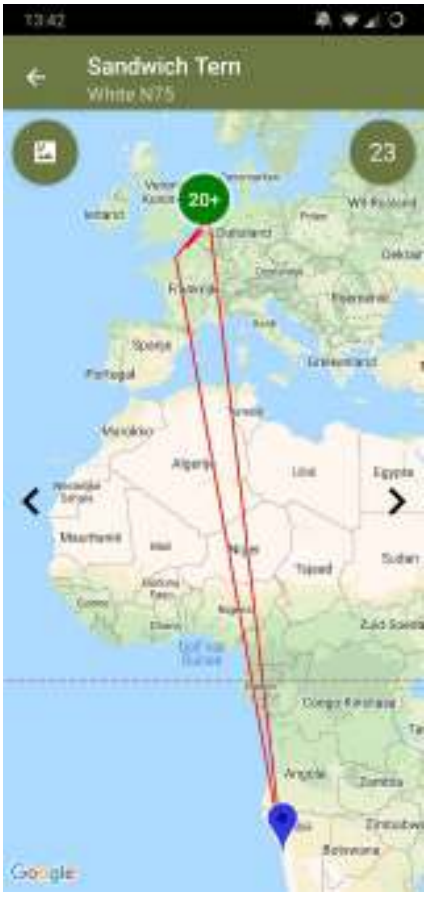
I love going out and try to find banded birds. It makes me feel good and it is a great way to contribute to science and nature conservation. But recording and reporting resighting data can be a time-consuming task. Early in 2016, I thought: "*There must be an app for that*". But there wasn't, so being an IT professional, I created the **BirdRing** app myself. Had I lived in New Zealand, I would probably have named the app BirdBand. ☺

BirdRing is a free mobile app to record resightings of birds with coloured or metal bands. The primary goal of BirdRing is to save time and make reporting extremely easy for both amateur bird watchers (citizen science) and professional researchers. Observers can use BirdRing as a digital notebook for all species and all banding schemes. You can use BirdRing offline, an internet connection is not required. The app will automatically store the coordinates, date and time of the observation and can email the resighting data in a standard Excel (csv) format to yourself, so you can process the data on your PC.

A big step further was to connect the app to existing band reporting websites. The app sends the resighting data directly to the website and displays the life history of the observed bird. Currently four major European banding websites are connected. When the New Zealand Bird Banding Database gets its online interface, I hope to work with the development team to connect the BirdRing app to the New Zealand Database as well.

BirdRing for Android currently has about 1000 frequent users in Europe, who give it a consistent 5 out of 5 star rating in the Google Play Store. In October 2018 I published BirdRing for iOS. BirdRing is intended to be used all over the world, so I hope you will try BirdRing yourself in New Zealand. I have included the New Zealand species list, provided by Michelle. Go to the https://birdring.nl/en/ website to read more about BirdRing and install the app on your device. If you have any questions or feedback, please send me an email: info@birdring.nl.





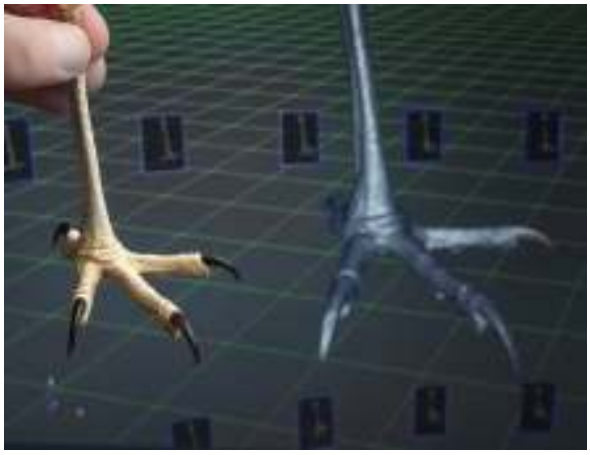
Responsibilities of Level 3 banders

Level 3 (expert/trainer) banders have the following privileges and responsibilities:

- Ordering of metal and colour bands – please use the Banding Office Price List and Order Form [note: Level 3 certification is required for ordering bands or mist-nets]
- Ensuring that the standards and details of "best practice" outlined in the NZNBBS Bird Bander's Manual are adhered to
- Ensuring that all banding and capturing adheres to the conditions specified in the relevant Wildlife Act Authorisation Permit – the new order form will request that you provide a valid permit number
- Birds are to be captured and bands used only by the Level 3 bander that was issued the bands, or:
  - A certified Level 2 bander that may band independently but under the authority of the Level 3 bander
  - A Level 1 trainee bander that is under the *direct* supervision of the Level 3 bander
- Training and supervising Level 1 (trainee) Level 2 (competent) operators for capture and marking of birds; signing their Bander Training Logs
- Providing letters of endorsement for certification applications (if approached to provide an endorsement, you can send this directly to bandingoffice@doc.govt.nz; do not feel obliged to provide an endorsement if you cannot vouch for the competency of the applicant)
- Banding schedules (record of bands used) and recovery records are to be submitted to the NZNBBS for all issued bands, as well as an annual stock take of bands not used - see http://www.doc.govt.nz/our-work/bird-banding/how-to-submit-banding-data/
- Unused bird bands (and bands removed from birds) are not to be passed onto anyone else without the knowledge and permission of the NZNBBS

3D scanning of bird legs

The flock of bird puppets with 3D printed legs for use in bander training workshops will soon be growing! Cameron Berry of Z3D (https://www.z3d.nz/) has been scanning taxidermy specimens in preparation for these to be 3D printed. The process entails taking tens of photographs from various angles and rendering these into a digital three-dimensional representation.



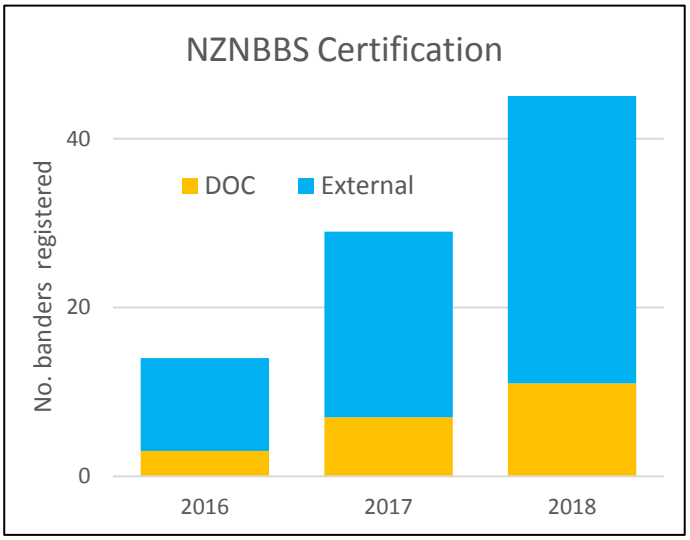
Quote me

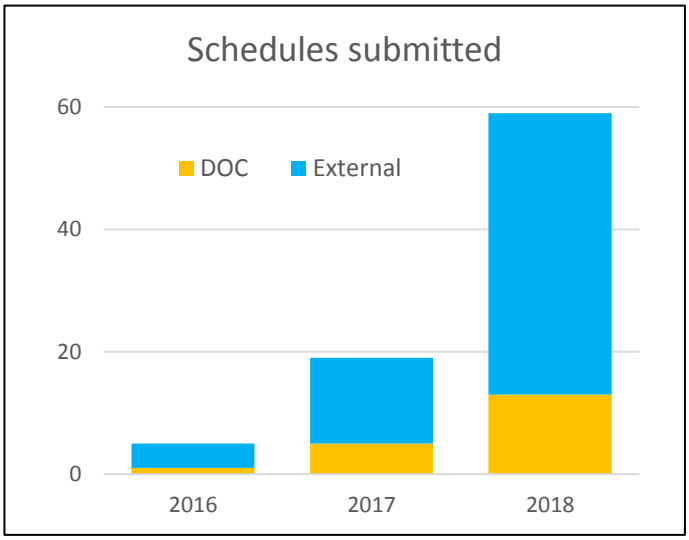
"You can know the name of a bird in all the languages of the world, but when you're finished, you'll know absolutely nothing whatever about the bird . . . So let's look at the bird and see what it's doing - that's what counts. I learned very early the difference between knowing the name of something and knowing something."

Richard P. Feynman

Progress!

The Banding Officer is pleased to report a significant increase not only in the number of banders registered with the NZNBBS, but also in the number of schedules submitted over the past three years.





Chris Smuts-Kennedy 19.4.47 – 21.11.18 – Robin Smuts-Kennedy

Chris spent most of his childhood with his parents and two sisters in a small bach in Paekakariki. He was always a lover of nature and joined the Wildlife Service in 1966 remaining with them until he started a nursery business in Whangarei with first wife Shirley. He shifted to Auckland and a job at Arataki Regional Park in the Waitakeres around 1981. I met him at a lecture series '*The history and future of NZ native forests*' at Auckland University in 1982 and we married in 1987. We then shifted to Mimiwhangata Coastal Park for 2 years then Little Barrier Island in 1990 where we stayed 5 years. Chris got a job with Hamilton DoC after that leaving to become a full commercial beekeeper. He loved bees, even getting 50 stings whilst capturing a swarm didn't deter him and he built up a good business as Manuka honey was getting high prices. But then came the Maungatautari project and he became their first Ecologist where he stayed until retiring at 65.


Chris with Maggie on Little Barrier

Of course, he didn't stop working, people kept ringing with jobs for him plus he volunteered on Maungatautari, went to Vanuatu with Forest & Bird and to Rarotanga helping Ed Saul. He also managed our 100 sq ft vegetable garden and planted up our half acre in Cambridge with trees to attract birds which was very successful. We have bellbirds, tui, kereru and kaka visiting regularly. He gave dozens of talks to local organisations, Trees for birds, Kakapo, conservation, his final talk was the after-dinner speech at the Wildlife Service Reunion '*Hakawai Redemption: a view from the Holocene*'. Chris wrote well, one of his illustrious ancestors was John Evelyn the tree lover and diarist and Chris was planning a book. He was a generous, knowledgeable man with no ego, a person who shared his knowledge and kept on learning. We buried him in the eco plot at Leamington Cemetery. We could hear a pheasant, kingfisher and shining cuckoo calling as we filled in the grave.

Royal liaison officer – Alfred W. Johnson

Casilla 327,
Santiago . Chile,
23rd April 1973.

RECEIVED
-4 MAY 1973
DEPT. INTERNAL AFFAIRS

To the Secretary for Internal Affairs,
Private Bag,
Wellington, New Zealand.

Attention Banding Officer,

Dear Sir,

This is to advise that I am sending you by registered mail the ring corresponding to the 32nd specimen of banded Royal Albatrosses recovered along the Chilean coasts.

The bird was killed in November 1972 by being knocked over the head by a fisherman (Pedro Hernandez) as it joined with others to take part in the spoils as he raised his night nets off Santa Maria island in the golf of Arauco in Lat. 37.5 " S. just south of the town of Concepcion.

The fisherman stated that these "bobos blancos" often came when the nets were lifted and that they killed them only when they noticed that they had rings, adding that they generally kept these for a while as souvenirs and then threw them away.

In this case a birdwatcher by the name of Solar Moreno met the fisherman, saw the ring and sent it to me. He also wrote an article on New Zealand in a local paper and sent a copy to your ambassador here in Santiago; the latter found it interesting, had it translated and sent to New Zealand. Hence the Royal Albatross becomes a liaison officer between the two countries !

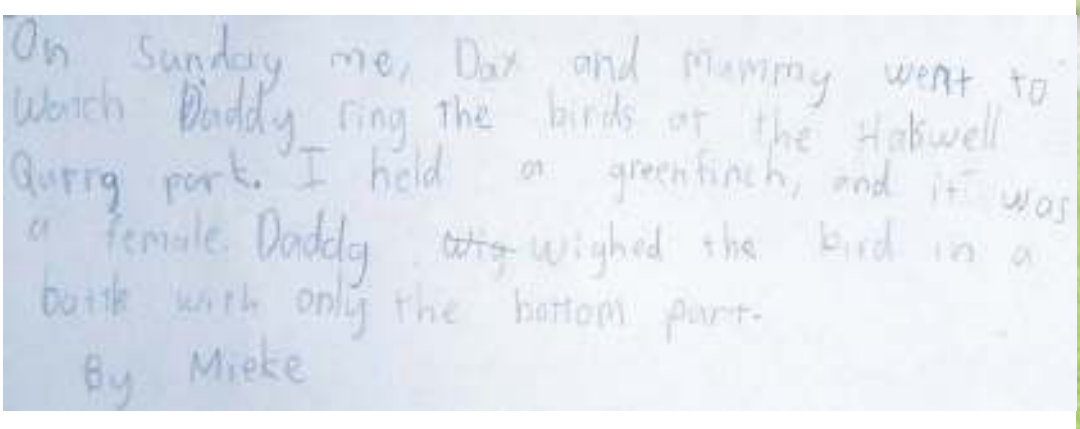
In due course I shall naturally be interested in hearing when and where the particular specimen was ringed. I presume on Campbell Island.

Yours sincerely,

Alfred W. Johnson.

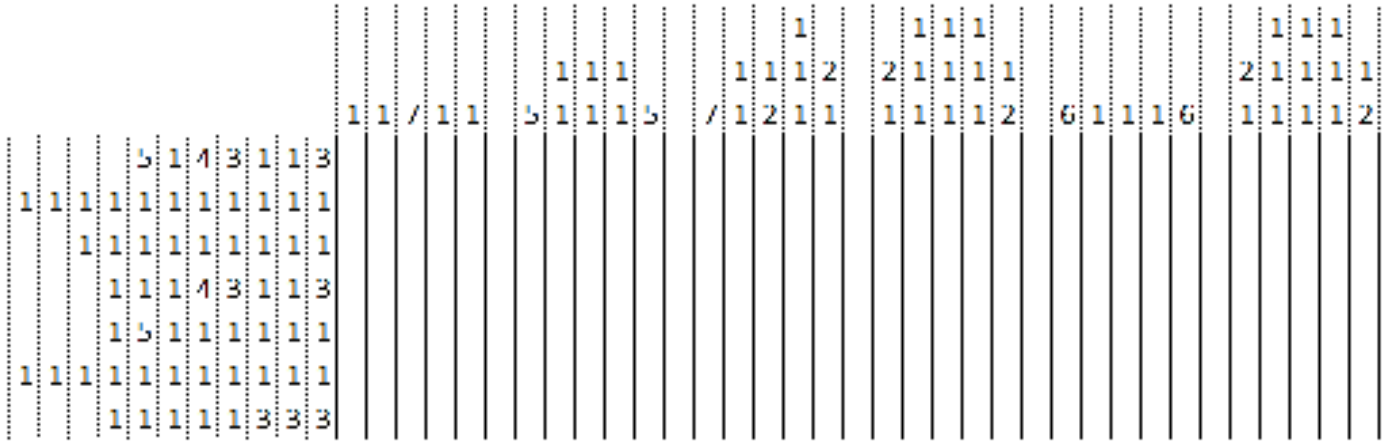
The article describes the similarities between Chile and New Zealand, neighbouring countries across the Pacific. Chile had just opened a new air route to Australia, flying close to Campbell Island, home of the Albatross that frequently visit Chile. The Chilean airline flies the same route that the albatrosses have flown for millennia. There is a description of how the band was found and that it was attached to a 'white albatross' killed by a fisherman near Santa Maria island off the coast of central Chile. It also describes the albatross species and their distribution in NZ and Chile.

I held a greenfinch – Mieke Nel



The Griddler Puzzle

The series of numbers at the top and left of the grid indicate the lengths of the shaded segments in each row (from left to right) and in each column (from top to bottom). There must be at least one unshaded square between each of the shaded segments. By determining which squares are shaded and which are not, you create a picture. Hint: start with the 7 in the top row. Since the grid is 7 squares tall, the whole column will be filled in.



Answer: The puzzle of two letters

Were you also perplexed about the two strange letters published in our previous edition of *BirDBanD*? It turns out there was a cryptic message about King Shags!

Here is the **first letter**:

Kiwi in night's gloom. Sightings highlight active gannets. Not unknown: metal bands enhance research studies. Always report errors. DOC ensures children learn interesting new information: Nature's Guardians!

King shag…

And here is the **second letter**:

Strange owls were always over head. Obscure pied grebe adeptly escaped. Ibis can undoubtedly identify certain edibles. Silvereyes undeterred; endangered penguins swagger as stilts jump oddly by.

Twelve birds…