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Banding Banter

Herewith the 5th *BirDBanD*, featuring young banders and old snippets, news and updates of bird banding around New Zealand. Please feel free to circulate this widely... This is also an open invitation to submit your own banding banter for inclusion in the next newsletter. Previous newsletters can be downloaded from the bird banding webpages of <u>Department of</u> <u>Conservation</u> and <u>BirdsNZ</u>.

Happy campers

The Banding Office has moved yet again, but only a few metres. Our new corner is brightly signposted, and can be seen from clear across the other side of Level 2 in Conservation House.

An extra cabinet and a dedicated table for processing equipment and orders have made a huge difference – as you can see, we are now "happy campers"!



Bands and mist-nets – hold the fries

Download the latest <u>Price List</u> and <u>Order Form</u> from the Banding website <u>http://www.doc.govt.nz/our-work/bird-banding/</u>.

Please note that the Banding Office *will not be processing any orders* between 15 December and 15 January, so ensure that you <u>place any urgent orders</u> <u>before mid-December</u>.

In addition to stocking up on Darvic/Celluloid bands, we have sourced a different colour range of buttbands, made of polypropylene. We would like these

to be trialled on captive or non-native birds before recommending their wider use.



Where am I?

Hanging from a ceiling above an escalator... where was this picture taken, and what coloured bands does it have?

Please forward your photos of banded taxidermy birds – let's make a nationwide treasure-hunt!

Bird banding - outdated, or in vogue?

What does a banded black-billed gull have in common with a Model T Ford and a private jet? Unique registration numbers! Bird banding is at least as old as putting registration numbers on cars, and is used for much the same purpose. Old technology, yes – but by no means outdated! This individual alphanumeric identifier (a metal or plastic strip with letters and numbers) provides answers to questions such as "where from", "how old" and "how fast"?

New technologies complement but do not replace the ancient method of attaching unique numbered bands to birds. Bird banding is still regarded as an essential research tool for ornithologists internationally, whether studying threatened, pest, migratory or gamebird species.





Banding and resight data contribute to estimating population size and trends, recruitment survival and rates, species distributions and migration, and comparing long-term temporal and spatial trends. However, to analyse long-term datasets of individually-marked birds, you need to mark a lot of birds over a long time-period!

Some 200 million birds have



been banded worldwide in the past 80 years, equivalent to 2.5 million per year. Australian bird banding totals some 4.3 million (since 1953), whereas in New Zealand a total of 1.6 million birds have been banded (since 1948). Annual banding effort in Australia (at 50 000) is double that of New Zealand. It is interesting to note, however, that the *annual per capita banding effort* in New Zealand is about 2.5 times greater than in Australia (two people out of every 1000 band a bird in Australia every year, compared with 5 per 1000 in New Zealand).

The long-term datasets held by national banding schemes represent an invaluable resource for threatened species management, and each band reported contributes to building the bigger picture. Bird banding remains a valuable tool to inform conservation decisions, and can be used in conjunction with many new technologies to answer questions – provided the data are standardised, curated and accessible. *[Excerpt from the Banding Office presentation at the Australasian Ornithological Conference – Michelle Bradshaw]*

NZNBBS meets ABBBS – Michelle Bradshaw

One of the highlights this year was an all-too-brief visit to the Australian Bird and Bat Banding Scheme (ABBBS) in Canberra, finally meeting David Drynan and Naomi Clarke in person. What a privilege to glean insights from someone that has managed a Banding Scheme for ten times longer than I have. I now have renewed vigour (not that I ever lacked any) to continue improving the NZNBBS, focusing on standardising and collating banding data and pursuing a fitfor-purpose on-line database.



Savage yet perfectly executed – Kevin Stephens

linhim Dear Sir the following dings were recovered off a red billed pilod on July 10th II after by hawk in a michair conflict it was killed have worked tractors for about As 1 12 repears and worked up many hundreds acres of land in that picked have had a lot of time to study + observe the many lypes of boods which gollow machinery Syconing soil, but this is the first time have witnessed such a savage yet perfectly executed act. Nac been enuising at about 30011, the majority of the other birds had taken flight bar a few stragglers (of which the dead line was one) upon seeing the but off but not took others an they 100

quickly inough, the hawk just sumed to a speed which I estimate about gompt hilling the petrol about 30 ft off the ground, the pelgels neck was broken, quick by final I would be very interested to Anow returned rings after seeing such an used, and where the birds was ringed and what the coloured rings signify, Thanking yeu.

Colour bands: red / black / green Metal band: E-119292.

This female red-billed gull was banded by Jim Mills at Kaikoura Peninsula in 1976, 4.5 years before the mid-air conflict described by Mr Stephens in his letter to the Banding Office.

Reports from yesteryear

13th ANNUAL REPORT of the NEW ZEALAND BIRD BANDING SCHEME

For the Year Ending 31st March 1963

(Compiled by F. C. Kinsky, Officer in Charge, New Zealand Bird Banding Scheme)

INTRODUCTION

As ALREADY indicated in the last (12th) Annual Report, the Ornithological Society of New Zealand has, during this year, handed over its bird-banding scheme to the Dominion Museum in Wellington, which has taken over full responsibility as from 1 April, 1962.

LIGHT-MANTLED SOOTY ALBATROSS (Phoebetria palpebrata)

The first Light-mantled Sooty Albatross banded in New Zealand (Campbell Island) was retrapped and released again this year at the same place where it was banded 20 years earlier.

T.A.	o ad. "M"	26/11/42	Campbell Island, 52° 33' S169° 10' I	÷.,
	2 (4,75,75) (7,76) 222	24/10/62	loco 19-11-29	

Adventures of a bird band

Band R-33266, together with a wrap-around white Darvic band, was placed on a female Northern Royal Albatross in February 1974 on East Sister Island, Chatham Islands.

20 years later, the same bird was resighted by Chris Robertson on its nest with an egg.



Fast-forward another 23 years, and these bands were found on a brittle bone on a beach northwest of Whanganui, 816km from where the bird was last seen. How long did this albatross live for, how did it end up on the beach, and how long have these bands been buried for?

The finder posted the bands and accompanying letter to the address stamped on the band: "Dominion Museum, New Zealand", which was delivered to the National War Memorial. Ian Ward contacted Colin Miskelly at Te Papa Museum, who then contacted the Banding Office. Sandy collected the letter and enclosed bands from the War Memorial.

IN THE PAST FRON WHILE WHILLING MY BEACH WONTHS WE HAVE HAD A DOG DOWN OMATONIA SIE LOTOF WIND IN THE I FOUND THE REMAINS OF QUARTER, AND THIS HAS A BIRD, WINT THESE TWO CAUSED A LOT OF NEW RIMUS ON ONE LEG. WHEN I FIRST SOW EROSINON . TO THE LOWER THE TWO RINGS THEY WERE SHORE LINE . THE RINGS JUST ON ONE BOME , WHICH COULD HAVE BEECH TALKE FOR WAS IT BROKE AS So ap SOOM TIME ... SUDM IS I ACHED IT UP.

The metal band had "Send Dominion Museum, New Zealand" stamped on it, which was the institution that administered bird banding in New Zealand from 1962. In 1967, banding was brought under one national scheme administered by the New Zealand Wildlife Service. The Wildlife Service became the Department of Conservation in 1987 so now DOC runs the NZ National Bird Banding Scheme. Since the Dominion Museum no longer exists, your letter found its way to Pukeahu National War Memorial, The Great War Exhibition that is housed in the old Dominion Museum. They kindly forwarded your letter and bands to us.

Quote me

"One of the great advantages of bird banding is that – compared to many of the more recent technologies – it is cheap, easy to do, and it attracts a very large number of skilled volunteers, who both benefit from, and contribute to, the study and conservation of migratory birds. The potential benefits of involving 'ordinary' citizens in science and conservation projects has by now been recognized widely, and bird-banding projects are ideal avenues for the involvement of 'citizen scientists'."

Cleminson, A. & Nebel, S. (2012) Bird Banding. Nature Education Knowledge 3(8):1

http://www.nature.com/scitable/knowledge/library/bird-banding-83032042

Getting the Lead Out - Clio Reid

Finally – it's kea's turn for Bird of the Year, and none too soon. There have been some serious developments for kea over the past few years, and their new-found status as top bird provides an excellent opportunity to highlight their plight.



Kea (*Nestor notabilis*) populations in the wild have declined to the point that they are now recognised by DOC as endangered, and their IUCN threat listing is currently under review. Kea face a host of threats, from stoats and possums to a taste for heavy metal. (Yes, you read that last bit correctly, but before you get that AC/DC song stuck in your head, that's not the kind of heavy metal I'm talking about.) Kea have a penchant for the material used in old roofing, ammunition, and wheel weights – lead metal (Pb). The main culprit appears to be old buildings with lead head nails and flashing.

Several studies (McLelland et al. 2010, Reid et al. 2012) have highlighted the severity of the problem. Lead poisoning was previously known as at least an occasional problem for kea, but these studies revealed that kea's exposure to lead was much more serious and widespread than that. In the 2012 study, blood test results were compared between wild kea from remote and populated areas. We classified "populated" areas as those where we considered kea were likely to have visited nearby human settlements, and "remote" areas as those where permanent

human settlements were absent for a radius of approximately 5 km, and where we considered kea were unlikely to have visited them. We found that kea from populated areas had significantly higher blood lead levels than those from remote areas. We also found that all kea tested had been exposed to lead (even those in remote areas), and that their blood lead levels ranged from very low (0.3 μ g/dl) to "Why isn't this bird dead?!?" – i.e., 343 μ g/dl, which is about 170 times as high as the maximum acceptable blood lead level for humans. Kea from populated areas had a much higher average blood lead level (35.3 μ g/dl) than those from remote areas (2.5 μ g/dl).

Lead is bad news. In birds it can cause acute poisoning, which can result in death, or chronic poisoning, which can cause damage to many systems in the body. These include the nervous, renal, gastrointestinal, reproductive, and immune systems. It can also interfere with the development of embryos, or even kill them, and affect the survival behaviours of chicks. The subclinical effects of lead (i.e., the insidious ones that don't show up) may affect kea behaviour and cognition, which is alarming for a species that relies heavily on both for their survival. Lead can be damaging even at very low levels, in fact it is now thought that there is no safe minimum threshold for lead exposure.

So it looks like the kea living in populated areas, or potentially anywhere they have access to old buildings made with lead materials, have a big problem. Lead was used as a building material until about the 1980s, so unfortunately there's a lot of it around. It should be noted that mortality from lead poisoning is of greatest concern in long-lived, slowbreeding species – particularly those with populations that are either naturally small or have been reduced by other factors. Unfortunately, kea fit this description all too well.



Both DOC and the Kea Conservation Trust have been working to remove lead from back-country buildings and built-up areas in or near kea habitat (such as high-country villages). Unfortunately, this is proving not to be an easy, straightforward process, and there are still many buildings out there in kea habitat bearing lead. Kea also risk exposure from hunter-killed carcasses (deer, tahr, etc.) that contain lead ammunition. Lead exposure is not a problem that will be solved immediately, but removing lead from kea habitat is certainly something that can be done to aid their conservation.

Here's to the kea – may they keep on rocking for years to come.

Further reading:

McLelland, J. M., Reid, C., McInnes, K., Roe, W. D., & Gartrell, B. D. (2010). Evidence of lead exposure in a freeranging population of kea (*Nestor notabilis*). *Journal of Wildlife Diseases, 46* (2), 532-540.

Reid, C., McInnes, K., McLelland, J. M., & Gartrell, B. D. (2012). Anthropogenic lead (Pb) exposure in populations of a wild parrot (kea *Nestor notabilis*). *New Zealand Journal of Ecology*, *36*(1), 56-63.

Submit kea recoveries or resightings to the Banding Office; also have a look at <u>https://keadatabase.nz/</u> set up by the Arthur's Pass Kea Team.

Toddlers to greybeards - Michelle Bradshaw

The Banding Office has been involved in several outreach activities and banding camps, with participants ranging from toddlers to greybeards.

How (and why, you may ask) do you run a banding workshop for toddlers (2-5yo)? Well, the Kelburn Play Centre was planning an outing to Zealandia, and asked whether the Banding Office would show the kids what to look out for in terms of colour-banded birds. So Sandy and I bravely went along, armed with bird puppets, various bands, lots of coloured strips of cardboard and some sticky tape.

Katie the Kea (a hand-puppet) told a story and was banded, and each of the kids were then banded using their own choice of coloured cardboard. Even a two-



year-old can tell you that they are wearing "red over yellow", or "pink over blue", insisting that they only be referred to by this marvellous new name. Next was a slightly older group (5-12yo) of children that attended the <u>Zealandia Holiday Programme</u>. The coloured cardboard was pressed into service again, but this time the challenge was to record the left and right leg colour combinations of a bird puppet or fellow cardboard-banded friend.

New to the flock of bird-puppets in our bander training arsenal are pom-pom "birds" with pipe-cleaner legs. These proved great for kids to throw into a 3m mist-net (held up with broomsticks) and then carefully extract, weigh, measure and band. A huge thanks to Kari Beaven for



assisting – it is important that bander training (even if only on pom-pom puppets) be overseen by a Level 3 bander.

The <u>BirdsNZ</u> Youth Camp at <u>Miranda</u> brought yet another group of enthusiastic young (14-18yo) birders together over Labour Weekend, this time to receive one-on-one training from experts



(shout-out to Adrian Riegen, Annette Harvey, Tansy Bliss, Paul Cuming and Gillian Vaughan for training, Ian Southey for logistics, Keith Woodley for hosting, and Kristelle Wi for catering). A wide variety of species caught in different mist-netting conditions provided the participants with a broad exposure and excellent training opportunities.



The Northern New Zealand Seabird Trust organised a seabird banding course at Tawharanui mid-





November, attended by a range of novice to competent banders, all with a particular interest in seabirds.

The 3-D printed bird legs and puppets once again proved their worth to demonstrate and practice bird handling and banding techniques. Again, I would like to specifically thank the organisers (Chris Gaskin and James Ross) and the Level 3 trainers (John Stewart, Kevin Parker and Graeme Loh).

Removing a band using wire loops

Thanks to Oscar Thomas for demonstrating this technique of removing a band using wire loops and circlip pliers.



Bander number 500!

Roy Collin is the 500th bander registered with the



Bander registered with the Banding Scheme – his Bander ID is NZNBBS 0500. Here he is observing "Bander Number One" (NZNBBS 0001), Adrian Riegen, extract a silvereye from a mist-net.



Bless his little heart!

Mr Holgate from Mooloolaba, Queensland, found this juvenile gannet on Corroboree Beach, Fraser Island, in September 1997. It had been banded by VT Davis in February of that year at White Island, 2640 km away.

Dear Sir / Marana

whilst walking on corroborce Beach .. Fraser Is. in mid- September, I happphed across the body of a bird: a young bird . I suspect, who cum bed to publicuslooked as though he syd tion.

I walked his way a few times and was annazed that nothing had interfered with him. A Ranger later told use that the diagoes would'net interfere with him as they would not like a unpothful of feathers: their main diet is feh.

I digress; I decided to have a good look at the bird, with whom I had felt such sorrow. Also, I wanted to know the identity of some so whilst making notes. I discovered the ID and thought I must send it back to you. It also occurred to me to send you photos as well. This whole procedure tools some time, finding pliers, etc. toking photos and burying bird.

It took a little longer to use up film, but have it all is at east.

I still do not know the identity of the bird. My bird book does not seem to have it's Seeing the bird in the prone position did not help either. Bless his little heart.



Puzzled?

Word Ladder

The Word Ladder was invented by Lewis Carroll on Christmas Day in 1877.

Make your way up the ladder from "Eggs" to "Bird", by changing just one letter on each step to make a new word. Clues are given in blue.

