

November/December – 2023



Season greetings to all Kuaka readers. Grab a cuppa, find a cosy corner then sit back to enjoy this edition of our newsletter, full to the brim with great articles and information – 15 pages for your reading pleasure.

This is our last newsletter for 2023, you can look forward to its return in February. Have a great Christmas and New Year and we look forward to catching up in a couple of months

SPEAKER

This month's speaker was Dr Daniel Thomas, palaeontologist and senior lecturer in Ecology and Zoology at Massey University in Albany. Much of his research focuses on describing and analysing fossil penguins. Daniel is especially interested in 3D digitisation, especially for the benefits the technology provides for evolutionary analysis, for enabling research collaborations, and for producing resources for teaching and outreach. Daniels research group studies modern and fossil bone to contribute new knowledge about the biology and origins of birds. They discover new species that explain the evolutionary history of penguins and reveal the deep time origins of taonga seabird species. Their investigations into the biology of penguins have led to the discovery of adaptations for foraging and visual communication.



The oldest fossil penguins (*Waimanu manneringi*) are found here in NZ, in Canterbury, and are 62 million years (mya) old. Daniel commented that 62 mya is just a number, but to put that into context – 66 mya is when the non-avian dinosaurs disappeared from the planet". Dated to a mere four million years after the dinosaur extinction event – a blink of the eye in geological time – these bones indicate that early protopenguins had already committed to life in water, although they may not have been very efficient divers.

The most recent common ancestor of all modern penguins is believed to have existed about 14 or 15 mya. That one ancestor spawned the six genera (types) of penguins we have today.

Tonight, Daniel gave a talk on bird fossils (not just penguins) found around the Ohawe-Waihi Beach area in southern Taranaki, part of the Tangahoe Formation, composed mostly of mudstones formed under the sea in the mid-Pliocene about 3 mya. He reminded us that 25% of the world's seabird species breed in NZ, and 10% of those are endemic - Daniel posed the question "when did NZ first become important for seabirds?"

Holotype skull of *Eudyptula wilsoni*. Museum of NZ/ Te Papa Tongarewa.

Photo by Jean-Claude Stahl.



Daniel's talk focussed on the seabird fossil species found in Taranaki, including:

Bony-toothed seabirds (now extinct)

Albatross – *Macronectes tinae* (Alistairs albatross) smaller than existing species and the first reported *Macronectes* fossil

Petrel – Procellaria altirostris (the deep-billed petrel. Similar in size to the Westland Petrel

Shearwater - Ardenna davealleni (Pom's shearwater) one of the largest species known

Penguin – one species, dawn crested penguin (*Eudyptes atatu*), similar in size to the Erect-Crested Penguin, another (*Eudyptula wilsonae*) about the same size as the Little Blue Penguin, but with a slightly narrower head

No Prions, Storm Petrels, Skuas or Gannets have been found to-date.

Temperatures in the mid-Pliocene were about 1-2 degrees warmer than today, the same conditions predicted for the near future, with implications for a warm-world fauna.



Artist's impression of the dawn crested penguin *Eudyptes atatu* in NZ, 3mya.

Reconstruction by Simone Giovanard

SIGHTINGS

- 1085 bar-tailed godwit at Matarangi Spit on 6/11, including 4RBRB, and 153 young birds
- A reef heron and 128 spotted shag on the Thames Coast 6/11
- Approx 150 pairs of black-billed gulls at the Ambury radio mast, and at least 12 VOC on nests
- Banded dotterel nest with 3 eggs at Port Waikato
- 450 godwit at Sandspit, Waiuku, including ZYV, banded at Pūkorokoro Miranda 02.04.17

PROGRAMME FOR 2024

Monthly Meetings: held on the second Tuesday of each month, at the Papakura Croquet Club, 1 Chapel Street Papakura. Meetings start at 7:30. Visitors welcome. \$3.00 donation to cover costs please

Jan	New Year BBQ	details TBA
Feb 14	First meeting for 2024	Group discussion on sightings and interesting birding tit bits
Mar 13	ТВА	

COROMANDEL HARBOUR FIELD TRIP

Five Sth Ak members were joined by three Waikato members on a boat trip around the outer Coromandel Harbour, to boost the atlas effort in two squares – AA73 and AB73. We cruised close to the shore in the Te Kouma and Manaia Harbours, and around most of the large and small islands. Habitat included rocky coastline, sandy beaches, mussel farms, farm, bush and open sea.

We were lucky to have sunny weather and calm seas, and recorded 40 species on 40 checklists. Highlights included 3 reef heron and just over 1200 Australasian gannet, mostly on Gannet and Bush Islands. The only other seabirds seen were six little penguin, one Buller's shearwater and four fluttering shearwater. The 22 spotted shag were fewer than we had hoped for. A non-bird highlight was the sighting of several orca cruising near to a couple of the islands.



REQUESTS FOR INFORMATION

We have had several requests for information recently. If you can help, please email me (Sue) and I will pass on the information.

• Dr Gaia Dell'Ariccia is trying to map all shag colonies and roosts in the Auckland Council Region (see map), and would like to know of any other sites not already shown (I will check the bird atlas too)



- Dr Matt Rayner is tracking spotted shag, and is concerned about the threat that set nets pose to these birds on the Firth of Thames coast. One of 10 tagged birds has recently been found drowned and set nets are suspected. If you are travelling this coast and see any set nets, please report the date, time, location and number
- Dr Elizabeth Scordato is wanting to band welcome swallows for research and is looking for good mist netting locations



YOU HAVE TO LOVE THE PROTECTION THIS NEST HAS BEEN GIVEN

Go to the CREST Facebook page to watch the video



The CREST - Predator Free Franklin

Nov 14 · 🕙

Lola

Our first dotterel chick on Shellbank #4 on the southern manukau coast

Cuuuute ! - Thank Cam Boxall for making this video.





The fishing up Awhitu way is clearly pretty good as these photos by our Awhitu Correspondent show.



Circus approximans - Harrier or Hawk?



The genus *Circus* was introduced by the French naturalist Bernard Germain de Lacépède in 1799. Worldwide there are 16 harrier species in this genus.

The word *Circus* is derived from the Ancient Greek *kirkos*, referring to its circling flight (*kirkos*, "circle"). The type species has been designated as the western marsh harrier, *Circus aeruginosus*, from Europe and western Asia.

The common name 'harrier' is thought to have been derived either from *harrier* (a breed of dog), or by a corruption of *harrower* – to annoy. *Circus sp.* are noted for having an owl-like facemask.

Worldwide, harriers are thought to have diversified with the expansion of grasslands around 6 to 8 million years ago during the Late Micoene.

Circus approximans, the Australasian harrier (kahu, swamp harrier, marsh harrier, swamp hawk, harrier hawk), the largest of the 16 species of harrier (*Circus*), is widespread across Australasia, Fiji, Vanuatu, New Caledonia and as stragglers on some subantarctic islands. It was named in 1849; the type locality is Suva. Approximans means nearing, approaching, to draw near to – I have been unable to discover any more than that.



The kahu only became established in NZ within the last few hundred years, after lowland forests were extensively cleared by the first Polynesian settlers. It is absent from the fossil record prior to 700 odd years.

The Eyles's harrier (*Circus teauteensis*), a larger harrier species endemic to NZ, became extinct after human settlement. There is no evidence for widespread coexistence of kahu and Eyles's harriers in NZ. Apparently, despite their considerable differences, the two manu were still ecologically similar enough to competitively exclude one another, and only when the endemic Eyles's harrier became extinct could the kahu become established.

Māori believed kahu to be a messenger from the gods – smart, cheeky and discerning. The kahu appears in the story of Maui, wherein the colour of its plumage is the result of having been scorched by the fire of Mahuika which was being used to destroy Maui. An old saying runs as follows: *E hara hoki ia te kahu tau noa, e kore e rite ki te kahu pokere o te whenua*, and tells us that a visitor or temporary resident does not equal a permanent resident; the ever-roaming kahu is not the equal of the stay-at-home

Females are significantly larger than the males. In a study carried out in NZ, 54 males averaged 640 g and 66 females averaged 870g. Boasting extremely sharp vision, they can spot the slightest movement from vast distances. An opportunistic bird, they prefer to hunt live prey such as rabbits, hares, waterfowl, smaller birds, the occasional pūkeko, rats and mice. They eat carrion all year around, but they much prefer fresh and to hunt, only resorting to carrion or roadkill during the colder months when other food becomes scarcer. Roadkill is their last choice basically.

Each spring the mating dance of the kahu is "incredibly dramatic". The aerial courtship, often called "sky dancing", involves plunging u-shaped dives around each other and distinctive loud calls. The male offers a loud "kee-a", and maybe even a whistle, to which the female, if keen, responds with a "kee-o".

Ground nesters, kahu prefer to build nests in swamps and wetlands to lessen access by predators but will also nest in long grass and crop paddocks.

As kahu age they lighten in colour, changing from a rich chocolate brown as a juvenile to a mix of white and light tan. The eye colour changes from dark to yellow.

Vehicle strikes are the biggest threat to kahu in New Zealand. These birds have "killer vision" – so focused on their prey they often don't see cars until it's too late.

Kahu were once treated as vermin, suspected of stealing baby lambs, but were given partial protection status in 1986. However, landowners were still permitted to kill birds threatening their domestic birds and animals specifically "cattle, sheep, horses, mules, asses, dogs, cats, pigs or goats". But if a kahu is stalking your alpaca or pet guinea pig, you can't shoot them without a special permit from DOC.





Game decided to target harriers in 2014, and now they've almost got no protection. Perhaps DOC supported the law change because they cull them over areas where the black-billed gulls are. It makes it easier for them

to run their culling programmes."

It is illegal to take any feathers from a hawk killed on the road. The fine for killing kahu, other than in accordance with the law, is \$5000 or \$10,000 for a body corporate.

So, what's the answer to the question in the heading: *Circus approximans* - Harrier or Hawk?

Well, according to Audubon.org "harriers are very distinctive hawks, long winged and long tailed, usually seen quartering over the ground in open country".

Falconry was once called "hawking" and any bird used for falconry could be referred to as a hawk.

To confuse things further, worldwide, authors can use "hawk" generally for any small to medium bird of prey that is not an eagle! The common names of some birds include the term "hawk", reflecting traditional usage rather than taxonomy. For example, an osprey becomes a "fish hawk" or a peregrine falcon becomes a "duck hawk".

Based on all the above we can confidently say that, for better or worse, harrier, kahu, swamp harrier, marsh harrier, swamp hawk, harrier hawk they are all correct and all refer to our friend Circus approximans.

Sources include: iNaturalist; Wikipedia; Stuff; Audubon.org; NZETC; NZ Birds online

Images from NZBirdsonline

ITS 75 YEARS SINCE TAKAHAE WERE REDISCOVERED IN THE MURCHSION MOUNTAINS OF FIORDLAND



Dr Geoffrey Orbell (left) holds a takahe, with the help of Neil McCrostie. In Nov 1948, Orbell found takahe in the Murchision Mountains. The species had been presumed extinct, but Orbell was convinced he had heard a strange bird call while hunting in the area. He later tracked and located three of the manu. Orbell died in 2007, aged 98.

SO MANY WAYS TO HELP OUR BIRDS



The Birds New Zealand Research Fund is funding new research on our endemic parakeets to help inform evidence-based conservation management. You can join us right now for \$80 a year and for students it's just \$40 a year:





You can join Birds New Zealand right now for just \$1.50 a week. It costs \$80 a year, and for students it's just \$40 a year: www.birdsnz.org.nz/membership/join-now/

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A COUPLE OF INTERESTING ARTICLES FROM THE AUSTRALASIAN SEABIRD GROUP



HIGH-PATH AVIAN FLU SPREADS TO ANTARCTIC REGION

Over recent months, reports have been coming in of Avian Influenza spreading to the Southern Hemisphere and coming ashore in beach washed birds at Bird Island / South Georgia (Brown skua) and the Falklands (Southern fulmar).

Both the British Antarctic Survey as well as the Falkland Island Government issued according public notices, you can follow at:

https://www.bas.ac.uk/media-post/first-confirmed-cases-of-avian-influenza-in-the-antarctic-region/ https://www.facebook.com/100064291495689/posts/pfbid08DxcA2kUtWaro2am7daUCLhdcnjcjPMC4eA WbAsgZrxJhiJiEZy8QjFWurvia7E4I/? app=fbl

As of this month, the Agreement on the Conservation of Albatrosses and Petrels (ACAP) has released the Guidelines for working with albatrosses and petrels during the high pathogenicity avian influenza (HPAI) H5N1 panzootic. The guidelines have been produced by ACAP's Intersessional Group on High Pathogenicity Avian Influenza H5N1. The group is being led by Patricia Serafini from Brazil, a PhD candidate and veterinarian currently on leave from Brazil's environment department.

While there are many other possible causes of wild bird illness and mortalities, **it is important that individuals or groups who may observe or handle wild birds are aware of HPAI, to ensure an appropriate reporting and investigation is undertaken and to ensure risks to themselves and other animals are minimised**.

What to do if dead or sick wild birds are observed:

 \cdot DO NOT handle or remove sick or dead wild birds or mammals unless instructed to do so by government authorities.

· REPORT any unusual sickness or mass mortality events in wild birds to DOC

 \cdot RECORD what you see, the species and estimated numbers sick and/or dead, the location (GPS reading), and take photos or videos.

BEST PRACTICES FOR USING DRONES IN SEABIRD MONITORING AND RESEARCH EDNEY, A.J., HART, T., JESSOPP, M.J., BANKS, A., CLARKE, L.E., CUGNIÈRE, L., ELLIOT, K.H., JUAREZ MARTINEZ, I., KILCOYNE, A., MURPHY, M., NAGER, R.G., RATCLIFFE, N., THOMPSON, D.L., WARD, R.M. & WOOD, M.J. 2023. Best practices for using drones in seabird monitoring and research. Marine Ornithology 51: 265 – 280

Over the past decade, drones have become increasingly popular in environmental biology and have been used to study wildlife on all continents. Drones have become of global importance for surveying breeding seabirds by providing opportunities to transform monitoring techniques and allow new research on some of the most threatened birds. However, such fast-changing and increasingly available technology presents challenges to regulators responding to requests to carry out surveys and to researchers ensuring their work follows best practice and meets legal and ethical standards. Following a workshop convened at the 14th International Seabird Group Conference and a subsequent literature search, we collate information from over 100 studies and present a framework to ensure drone-seabird surveys are safe, effective, and within the law.

The framework comprises eight steps: (1) Objectives and Feasibility; (2) Technology and Training; (3) Site Assessment and Permission; (4) Disturbance Mitigation; (5) Pre-deployment Checks; (6) Flying; (7) Data Handling and Analysis; and (8) Reporting. The audience is wide-ranging with sections having relevance for different users, including prospective and experienced drone-seabird pilots, landowners, and licensors.

Regulations vary between countries and are frequently changing, but common principles exist. Taking-off, landing, and conducting in-flight changes in altitude and speed at \geq 50 m from the study area, and flying at \geq 50 m above ground-nesting seabirds/horizontal distance from vertical colonies, should have limited disturbance impact on many seabird species; however, surveys should stop if disturbance occurs. Compared to automated methods, manual or semi-automated image analyses are, at present, more suitable for infrequent drone surveys and surveys of relatively small colonies.

When deciding if drone-seabird surveys are an appropriate monitoring method long-term, the cost, risks, and results obtained should be compared to traditional field monitoring where possible. Accurate and timely reporting of surveys is essential to developing adaptive guidelines for this increasingly common technology.



Figure: Summary of the conditions that should be met when flying drones to survey breeding seabirds, including pre-flight checks, methods to minimise wildlife disturbance, and possible flight pattern.



PUGMARKS AND CARBON FOOTPRINTS

On Amazon and in bookstores



We couldn't finish without including a photo of the "Bird of the Century" (Both these photos from Mike C)





Have a great Christmas everyone and we will do it all again next year.

Wendy and Sue

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