DUCKS UNLIMITED NEW ZEALAND INC. For Wetlands and Waterfowl



Landmark year for DUNZ Praise for scholarships Counting shovelers

Insight

I am writing this on election day, October 14, 2023.

I have only just received my *Flight* mag with its very bad news of how bureaucracy is stifling attempts to build wetlands.

How on earth did New Zealand get into this state and can a new government help to correct it? Perhaps I am getting old and very cynical, but I very much doubt it.

If we have a change of government, they have much more pressing problems to solve first.

How they do this without upsetting the voters who put them in and getting chucked out in three years' time with the job half done is another problem.

I am now retired and have sold my farm at Cheltenham near Feilding. It had several wetlands, some developed with funds from Ducks Unlimited NZ and one was actually created with Jim Campbell (DUNZ's Patron) helping on the bulldozer.

I am delighted not to have had to go through the bureaucratic nonsense that new wetlands have to undertake.

The only 'wetland' I have at present is a swimming pool, only a few metres from my house, near Palmerston North.

This has been enjoyed by several mallards during the nesting season although I am yet to see any ducklings emerge from under the hedges that surround the section and provide excellent nest sites.

Instead of joining everyone at Blue



Duck Station for the 2023 AGM, I was in outback Queensland, looking at cattle stations. The standard size seemed to be 660,000 acres and some families had three or more.

They had all had nine years of drought. We had to delay our progress northwards to let the water from the floods up there recede. This year was a very good one for the run holders!

All this water finishes in Lake Eyre after watering millions of acres on the way.

How do the pelicans on the east coast know this has happened, as they all flock to the lake when the water arrives.

Next morning. We have a change of government. I hope they can arrest the backward direction that we have been going in for six long years.

John Dermer DUNZ Director



A pair of mallards visit John Dermer's 'wetland', near Palmerston North.

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Cover: An Australasian shoveler in flight.See p8-9.Photo Imogen WarrenBack: Last year's Bird of the Century, anAustralasian crested grebe. See p14.Photo Bernard Spragg

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Editorial:

Contributions, including photographs and letters to the editor, are welcomed. Please send these to the editor before the next deadline, 18 May 2024, in time for the June/July issue.

The editor reserves the right to edit articles for content, length, grammar, style, and readability.

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Let's meet in Masterton in May

Ducks Unlimited NZ members will meet in Masterton in May to celebrate the organisation's jubilee at its annual meeting and conference.

It will be 49th AGM (the usual annual meeting was cancelled in 2021 due to Covid) but 50 years since DUNZ was established in 1974.

Conference events will follow a format similar to previous years, with attendees meeting on the Friday evening for an informal catch-up. The AGM, field trip, dinner and auction will be on the Saturday.

The meeting venue and accommodation is at the Copthorne Hotel & Resort Solway Park Wairarapa. Attendees will meet there on Friday evening, May 10.

The formal proceedings begin on Saturday, May 11, with the AGM followed by a field trip and lunch.

The field trip will visit Len French's



property at Whareama, east of Masterton, before heading south for lunch at Homewood Storeroom, a converted church south of Riversdale. See next page for story about the creation of Len's Lake Braemore.



Homewood Storeroom, south of Riversdale, where DUNZ will stop for lunch after the field trip on May 11.

Saturday's dinner and auction will be back at the hotel.

Other places of interest around Masterton include Pūkaha National Wildlife Centre at Mt Bruce and Henley Lake's network of tracks winding through 43 hectares of wetlands and native plantings.

An invitation to register for this special jubilee event will be sent out in March.

Students' tribute to Wairarapa Moana

Four students from Massachusetts who carried out research into sedimentation at Wairarapa Moana presented a video as part of their final presentation at Lake Domain on December 9.

Tara Bromfield, Michael Elmes, Andrew Cash, Thomas Pianka and Sarah Olson from Worcester Polytechnic Institute (WPI) were part of a mentoring programme hosted by the Wairarapa Moana Restoration Project.

Ian Gunn, Wairarapa Moana wetlands project coordinator, Greater Wellington Regional Council, and Ra Smith, of Ngāti Kahungunu ki Wairarapa, have been mentoring WPI students since 2015.

The video, which includes DUNZ President Ross Cottle and Director Jim Law, looks at how the lake has changed over many years through the eyes of those who have grown up alongside it and other stakeholders.

The 37-minute video, *Glistening Waters: The Stories of the Wairarapa Moana*, can be viewed at www.youtube.com/ watch?v=c9MtPkqYKXo or the DUNZ website: https://ducks.org.nz/wetlands/ wairio-project.



A screenshot from Glistening Waters: The Stories of the Wairarapa Moana.

World Wetlands Day

Wetlands and Human Wellbeing was the theme for World Wetlands Day 2024 on February 2.

This year's campaign spotlighted how interconnected wetlands and human life are — with people drawing sustenance, inspiration and resilience from these productive ecosystems.

The World Wetlands Day awareness campaign's theme set out to underscore how all aspects of human wellbeing are tied to the health of the world's wetlands, calling on everyone to value and steward wetlands – "Every wetland matters. Every effort counts."

The campaign was organised by the Secretariat of the Convention on Wetlands. Contracting parties of the convention have been celebrating World Wetlands Day since 1997.

February 2 marks the anniversary of the Convention on Wetlands, which was adopted as an international treaty in 1971.



Alternative View

Support farmers' dam efforts

ALAN EMERSON

republished from *Farmers Weekly* www.farmersweekly.co.nz

Len French is an innovative and wellrespected farmer from Whareama, East of Masterton. Len takes farming seriously. He can tell you his farm's carbon profile and any nutrient runoff. He adopts several measures to limit his runoff and uses Overseer.

He's also a patient farmer and he needed to be. Back in 2013, he purchased some additional flats. The soil was excellent and the temperatures benign but after two dry years, he figured that he needed to irrigate.

He decided to build a dam and that was the start of a complex, expensive and often frustrating saga.

To build the dam he needed two consents: a resource consent and a building consent. In one small corner of the flat-bottomed valley that would be flooded, a slip had come down some years ago and blocked a small drain. This caused the water to back up and create what the council considered was a natural wetland.

Many experts agreed there was nothing significant in the wetland but the regional council still argued it was "significant".

Putting it in perspective, the proposed dam was 13 hectares in size and 10 metres deep. The wetland occupied less than a hectare. The wetland was in the Wellington region, which is apparently short of wetlands, so all wetlands were considered significant.

Despite being told he couldn't proceed, French didn't give up and found a way through the maze of regulations that the council seemed unaware of.

French got Federated Farmers involved, who helped him fight the new regulations. The council finally allowed French to offset the wetland by creating additional wetlands elsewhere. He had planned to do that anyway.

If the regional council had looked at the site in the middle of summer, they would have been unaware of any wetland. If any old drain can be considered a wetland, then all farmers will have major issues.

Another problem was that the local



Len French's wetland, Lake Braemore, the destination for DUNZ's annual field trip.

Whareama River was considered to have "special ecological value". The drain over which the main dam wall would be built was considered a tributary of the Whareama.

French was told that the proposed dam would "destroy the ecology" of the old, blocked drain.

The end result was that French had to fence three kilometres of stream and plant 7,000 natives.

There was an issue of a fish passage and that required expert input from a scientist in Whakatāne who had to fly down and consult, all at the farmer's expense. The solution was to have Novaflo pipes and spat ropes. This was despite the fact that fish couldn't get into the existing dam due to a natural barrier.

Finally, the modified plan was accepted by the council and it went out for public consultation. The locals welcomed it, as did iwi and the district council, but Forest & Bird objected.

French invited the local Wairarapa Forest & Bird representatives to view the proposal and they supported it. Head office didn't and couldn't even be bothered to visit the site. After several months of repeated approaches, it withdrew its objection with no explanation.

I'm pleased it did, but the process seemed ridiculous. We live in an area subject to drought and anyone neutralising the effects of drought should be supported.

Work started on the dam construction

in 2021. It is the result of five years of meticulous planning and huge dollops of cash.

The consent process cost more than \$350,000 before a sod had been turned, plus an additional \$280,000 for non-dam conservation work. The cost of the dam itself would be an extra \$1.5 million.

The dam will irrigate between 140ha to 200ha, with the farm continuing to run sheep and cattle. Small seeds and other options will be considered in future. The farmers are resolute that the dam will enhance the environment and not adversely affect it.

The Frenchs are hoping for a return on investment of 5% to 6% and there are additional returns for the community. There will be 3km of public walkway, plus boat ramps and native planting.

The local rugby ground, home of the mighty East Coast rugby team, will receive free irrigation.

What needs to happen from here is a complete change in mindset from the bureaucracy. Farmers need to be encouraged to put dams on their property. It should be an inexpensive and streamlined process to get all the consents and approvals.

Notice also needs to be taken of the local community and the facilities that a dam may provide.

Finally, we need more farmers like French, who are prepared to put their time and money where their mouth is and go out to create a dam.

We need more farmers with his commitment and a lot more dams.



Thanks to Wetland Care research scholarships funded by Ducks Unlimited NZ, our student researchers are finding the best ways to recreate a haven for waterfowl, reports **Victoria University of Wellington**.

Scholarships aid wetland restoration

Wetlands in

Aotearoa New Zealand are precious natural resources that provide a habitat for fish and birds and are viewed as taonga by Māori.

Even in purely financial terms, wetlands are valuable for their role in filtering nutrients from water, absorbing carbon, and controlling erosion and flooding.

Leading conservation group Ducks Unlimited NZ aims to save wetlands through protection, funding, technical aid, and education, so the flora and fauna of our most endangered ecosystem are a legacy we can pass down to future generations, the university says.

Part of DUNZ's education focus is sponsoring Wetland Care Research scholarships to support postgraduate students from any university who want to push the boundaries of what is known about wetland restoration and conservation.

Since the scholarship programme began in 2018, multiple students from the Centre for Biodiversity and Restoration Ecology (CBRE) have benefited from this funding to add to our knowledge about successful wetland restoration.

Ducks Unlimited NZ Director Jim Law has been personally involved in many wetland restoration projects around South Wairarapa. Jim is a retired company executive who spent 30 years working overseas before returning to New Zealand to fulfil a lifelong dream to create a large-scale sheep and beef farm.

On his Palliser Ridge property, dams have created a string of wetlands with regenerating native bush and nesting boxes for waterfowl. As well as beef and lamb, the award-winning farm now produces wool and honey and offers tourism experiences.

Jim is passionate about helping young people reach their full potential. During the 10 years he spent in Africa



Wairio Wetland, an ideal research subject for Wetland Care students.

he was distressed to see the thousands of children denied an education – a staggering failure both for the individuals and for the capability of the nation.

"There could have been an Einstein," he says.

"I have always believed that education is probably the best way to improve people's lives, both in providing for their needs and in creating personal fulfilment."

After receiving a commerce degree at Victoria University of Wellington and his chartered accountant qualifications, Jim had the opportunity to work in London, which he found a life-changing experience.

He and his wife Marilyn have sponsored three master's scholarships in ecology at the university as well as annual tertiary scholarships and book prizes at his local Pirinoa School.

Jim was made a member of the New Zealand Order of Merit for his extensive service to the community. Along with fellow members of DUNZ and the Wetland Care New Zealand Trust, he is an enthusiastic advocate for including postgraduate students in restoration projects.

The restoration of Wairio wetland next to Wairarapa Moana is an outstanding success story resulting from the combined efforts of DUNZ, DOC, Greater Wellington Regional Council and many community groups, as well as students from the CBRE.

After the land was drained for development in the 1960s and 70s, bare

paddocks were all that remained of the once-thriving wetland paradise.

Now it is a flourishing ecosystem teeming with birdlife which the public can enjoy viewing from a series of walkways. As well as native ducks and black swans, rare royal spoonbills and the critically endangered Australasian bittern, or

matuku, are now breeding there.

The project, which is a blueprint for how to restore a wetland, was originally managed by DUNZ in a joint venture with the Department of Conservation. Wairarapa iwi Ngāti Kahungunu and Rangitāne are kaitiaki of the wetland.

Students from the CBRE led by Dr Stephen Hartley first became involved in 2011, joining the project to restore a kahikatea 'swamp forest' to the site.

They aimed to bring a scientific approach to testing and monitoring the different management techniques being trialled.

As restoration projects are costly, both in terms of money and the time spent by volunteers, it was important to gather data on the most cost-effective way to re-establish a wetland forest.

Master's students Bridget Johnson and Aprille Gillon evaluated which combinations of plant species and management techniques created the best chance of survival, including whether fast-growing 'nurse plants' helped to nurture the slower-growing kahikatea and totara.

Community volunteers planted more than 2000 trees in one day, including forest trees like totara, kahikatea, manuka, and tī kōuka (cabbage trees).

Bridget went on to study for a PhD in ecological restoration in Western Australia, while Aprille is working as a senior ecologist in the UK following five years with Greater Wellington's wetland management team.

Continued next page



from previous page

In 2018, Shannon Bentley, the first Wetland Care scholarship recipient, found that wetland restoration on farms could improve plant, soil and microbial characteristics.

Shannon joined the Wetlands for People and Place collaboration, involving a broader team of CBRE researchers supported by the Holdsworth Foundation, the Sir Hugh Kawharu Foundation and Wairarapa Moana Trust.

Scholarship recipient Olya Albot investigated the importance of coastal wetlands for carbon sequestration and wildlife and the impact of sea-level rise on these environments in 2022.

For fellow recipient Cameron Johnson, who investigated carbon sequestration rates of the trees planted in 2011, his research has led to a career in using carbon accounting as a centre point for ecological restoration.

Two students from CBRE have received Wetland Care scholarships for 2024 – Jessica Wagner and Pearl Ruston, see next page.

We are grateful to Ducks Unlimited NZ, the Holdsworth Charitable Trust, and other sponsors for supporting our

students and postdoctoral candidates to progress their research while making a meaningful contribution towards recovering our precious wetlands.

2024 first-round deadline

Applications for the first round of Wetland Care scholarship applications close on March 31. Apply online at https://ducks.org. nz/wetland-care/Scholarships/ scholarship-application, or send in the application form on p15.

Kahutara School's winning ways

MARY MASON

Kahutara School's conservation efforts last year are paying off, with the school winning two awards recently.

Kahutara School is the custodian of the Mangatete Wetland in Kahutara Rd, near Wairio Wetland, Lake Wairarapa.

In 2017, the school was invited by Fraser and Margaret Donald to develop an area of bare land into a wetland for the students' education.

Since then, Ducks Unlimited NZ has generously supported the initiative with grants for buying trees, shrubs and flaxes.

The wetland has proved to be a valuable learning asset for the school, with children learning conservation skills through planting and water testing, and, this year, they ran trap lines with great success in trapping rats and mice.

The Ruamahanga Restoration Trust has supported the trapping with a comprehensive trapping kit on loan to the school. This included traps, chew cards, tracking cards and tunnels, trail cam, salmon oil, etc. The trust also provides ongoing support.

Recently, the trust held a competition for Wairarapa schools to provide five photographs of students involved in conservation work at their schools.

Kahutara entered the competition and was very excited to win a prize of a night at the new education centre at Pūkaha National Wildlife Centre, Mt Bruce, with coach transport to and from school. A group of 13 children and three staff went on the excursion in November.

At Pūkaha, we were greeted with a powhiri and shown to our accommodation. What a fantastic



Kahutara School students with the Challenge Shield, and (right) at Pūkaha National Wildlife Centre, Mt Bruce.

asset the education centre is for the Wairarapa.

A commercial kitchen and a large dining/lounge area means large numbers can be accommodated.

A staff member was assigned to look after us and Kelly was a great host. She took us to see kiwi, tuatara and kōkako, and a highlight was the eel and kaka feeding.

After dinner, we were shown how to construct tracking tunnels and moth traps and these were placed in the gardens. The children enjoyed a dusk walk and dawn walk early the next morning.

The school also entered the Challenge Shield garden competition which is for all schools in Carterton and South Wairarapa, and was delighted to win.

A large part of our entry is the Mangatete Wetland which the judges were very interested in and took the



time to walk right around the area with the wetland team and were lucky enough to see a fresh rat in one of the traps.

The team was very excited to win the shield and the \$300 Garden Barn voucher, rewards for their amazing efforts.



DU funds two more research projects

Two more students have been granted funding from DUNZ through its Wetland Care scholarships. Both are studying at the Centre for Biodiversity and Restoration Ecology at Victoria University.

Jessica Wagner will assess the ability of three different scents and three different sounds to lure wild rats at Wairio Wetland.

She hopes to identify the most effective way to attract rats to traps to assist with the long-term goal of a predator-free New Zealand by 2050.

"My proposed research is to examine rat behaviour (*Rattus rattus and Rattus norvegicus*) in reference to acoustic lures and scent lures at Wairio Wetland, Stage 1, Wairarapa," Jessica says.

She will use scent lures and acoustic files from Manaaki Whenua Landcare Research, which has already conducted pen trials on rats using the same lures.

Camera traps and an automated radiotracking system will be used to observe rat behaviour and movement.

Rats will be live trapped and handled to remove and put on radio tracking collars. Isoflurane will be used to render the rat unconscious and the collar removed or added. The rats will be kill trapped when the trials conclude.

Jessica will use the radio tracking system that Ellen Carlyon, a previous Wetland Care scholarship recipient, established, and will follow the protocol that Ellen followed.

"My trial 1 goal is to see if rats in the wetland approach acoustic lures more than scent lures, and if the ranking of attractiveness for scents and sounds is the same in the pens as in the field," Jessica says.

"As we look to eradicate rats from New Zealand by 2050, it is abundantly clear that new pest control technology is required to achieve this goal. Traditional pest control methods are successful at controlling populations but not eradicating them.

"This is because certain individuals have traits (such as wariness) that prevent them from being caught/ poisoned. The main goal of my research is to test how effective an acoustic lure could be at attracting rats to traps, and which sounds are most enticing.

"An acoustic lure is a new approach to pest control that could be revolutionary and help achieve the predator-free 2050 goal."



Jessica Wagner



Pearl Ruston

Both the automated radio tracking system (established by Ellen Carlyon) and acoustic lures are innovative technologies.

"I don't think these two types of technologies have even been used together in New Zealand research," Jessica says.

Her supervisor is Dr Stephen Hartley and she aims to conclude her research by September 2024.

Pearl Rushton is researching how ecological restoration affects the

partitioning of nitrogen among plant and soil pools in restored, unrestored and remnant wetlands, and whether restored wetlands can absorb and retain excess nitrogen, and thus restore natural nitrogen recycling processes.

Her research involves collecting soil and vegetation (leaf, stem and root) samples for nitrogen isotope and mineral analysis. These measures will allow for a comprehensive assessment of the nitrogen cycle, addressing a critical research gap.

"An innovative aspect of my research is the examination of nitrogen dynamics within three distinct ecological states," Pearl says.

"This pioneering approach challenges the prevailing convention in wetland research, which predominantly focuses on a single ecological state.

"Notably, it addresses a substantial research gap ... which hinders our ability to formulate precise wetland restoration strategies geared towards optimising nitrogen removal capabilities.

"By dissecting nitrogen budgets across various wetland ecosystem states through the assessment of soil and vegetation 'pools', we can construct these budgets and gain invaluable insights into the intricate flow of nitrogen within these ecosystems.

"The innovation of this project is further enhanced by incorporating isotope analysis, a technique that quantifies the rate of nitrogen cycling within wetlands, adding another layer of depth to our understanding of nitrogen dynamics," she says.

Pearl's supervisors are Dr Julie Deslippe and Dr Sarah Herbert.

Whio 'vulnerable'

Whio populations are vulnerable to decline, says the Department of Conservation.

"Through recent surveying we have identified that whio populations continue to be vulnerable to decline, with last summer's extreme weather events impacting both the birds and efforts to monitor their population at several key protection sites."

The number of whio pairs in monitored areas has declined from 694 in 2022 to 587 in 2023, in part due to the impact of severe weather events like ex-Cyclone Gabrielle in places like the Ruahine.

DOC says the results of recent surveys are a mixed bag.

"Some populations were highly impacted by weather events. Flooding dumps excess silt in rivers, which kills off the insects whio feed on.

"In a couple of cases, our teams couldn't even safely access the area to do the surveys.

The survey results reinforce the need for ongoing protection of the birds, DOC says.



Shovelers counted once

JOHN DYER

As a means of monitoring the population health of the Australasian shoveler duck, (aka spoonie or kuruwhengi), Fish & Game, with the generous assistance of much-valued volunteers, does a co-ordinated annual count over two days in early August.

At this time of year, the waterfowl season has passed and shovelers are starting to gather in pre-breeding flocks from late July.

I have personally counted more than 2000 spoonies grouped together on just one lake, (worryingly, it was the very polluted Lake Waikare or 'Fanta Lake' in the Waikato).

Last year was the 24th year of the shoveler counts, and 12,272 were counted at 256 survey sites nationwide. The 2023 count was a 34 per cent increase on the previous year.

Trend counts such as this one are not to be confused with a total count, which would be impractical in scale.

Instead, observers count the same sites each year to determine if the 'trend' has gone up or down compared with the past couple of years and also over the whole of the survey period.

These reports are funnelled through to Matthew McDougall of Eastern Fish & Game region. From the very beginning, he has coordinated the work, collected, analysed and summarised the results.

As well as shoveler numbers, observers are also looking at the sex ratio and the result has been consistently around 1.59 males to each female. Since they hatch out roughly 50:50, something has clearly changed since then.

Most likely it is that the females have to take all the risks in terms of nesting, incubating and brood rearing, which make them much more vulnerable to predation.

Shovelers also tend to nest late in the season, well after other New Zealand species, and so many swamps are drying out and are more predator accessible by then.

However, the female is much more cryptically coloured, so there may be an observer detectability issue leading to undercounting them, especially when birds are in partial cover where the much more brightly coloured males stand out.



A pair of shovelers at Lake Huritini.

Photo Will Abel

For this reason, good optics such as quality binoculars and spotting scopes are essential. But as far away as India, the UK and North America, this same sex ratio disparity exists with the similar northern shoveler species, a close relative to our native bird, (the northern shoveler is rarely seen in New Zealand).

One response to this disparity is to encourage hunters to 'go for blue', because our surplus shoveler males usually have blue heads. Both Southland and Otago Fish & Game regions have taken this approach in the 2023 gamebird season and other regions may follow.

Shovelers are extremely mobile birds and within just a few days of banding, some birds have been found at the other end of the country.

The females tend to be faithful to their nesting sites and these same wide-ranging birds can sometimes be caught the following spring just metres away from a previous nesting site.

Catching a shoveler is difficult at best and has to be carefully timed when ducklings are just old enough to keep a band on their legs, but not so old that they can fly off when chased into cotton (not nylon) nets.

They also tend to moult and become temporarily flightless in the same place and this behaviour too has been used to catch relatively large numbers in the past.

Shovelers don't go into mallard traps because they don't

Main photo Geoff McKay CC By 2.0 Deed



really eat grain. Instead, they sift fine seeds and small planktonic animals out of the water using the lamellae (the comb-like structures) on both sides of their bill.

Some success has also been had catching moulting adult shoveler ducklings hiding in carex bushes often some distance from water using an extremely soft-mouthed dog to deliver them unharmed every time to the bander.

In his excellent book, *Keeping Faith with Fin and Feather*, Roger Sutton describes this technique well, but he notes that it was only possible due to one exceptional Labrador, Meg.

Now, during the annual shoveler count, the observers include any grey teals seen. In 2023, the ratio of shoveler to grey teal was 12,272 to 11,603.

However, in this observer's humble opinion, if we specifically want to count grey teals, then we shouldn't be doing it when many of these much earlier nesters are already on eggs.

It's also the case that grey teals select quite different habitat to shovelers. They're often found in numbers at other sites that simply aren't counted.

Shovelers seek out fertile lowland wetlands and also sheltered estuaries. Interestingly, very early accounts of this species describe it as being almost unknown in places where it is now much more common.



Meg capturing a moulting shoveler for banding.



A close-up of a shoveler's bill.

Some people have tried to suggest that we have an Australian shoveler subspecies arriving in New Zealand and these can be separated by their chest colour from our local birds.

However, the experts tell us that, actually, like mallards, the shoveler male goes through a summer eclipse plumage and variations seen in the field can be put down to the progressive stages of this moult, and also to juvenile birds colouring up within the population.

Shovelers in New Zealand have always been legal gamebirds as long as there have been declared gamebird seasons in this country. The annual national monitoring count of this native species is an important measure to ensure this harvest is fully sustainable into the future.

It probably helps that shovelers are one of the first species to go to sea when shooting starts. However, after the legal shooting hours have past and darkness has descended, a quiet observer will often hear the male's distinctive 'took-took' call as they drop back into their favoured freshwater wetlands overnight.

Much more rarely heard is the female's quiet quack. This is a special little gamebird and long may they thrive in New Zealand.

9

Book Review

A colourful past and bright future

This large-format, beautifully illustrated book tells the story of a special place where two rivers converge in a remote part of New Zealand.

In the words of Dan Steele, owner of Blue Duck Station and DUNZ's Vice-President, it's "a rich, historical, scenic and mystical area that is close to the heart of so many and it gets under your skin when you see it".

Blue Duck Station, bordered by the Whanganui National Park and sitting at the confluence of the Whanganui and Retaruke rivers, is where Dan and his family have established a popular eco-tourism business, a world-class restaurant, a destination for hunters, and a successful blueprint to show farming and conservation can work together.

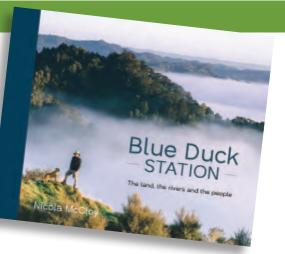
"It's here for us to live our best lives in harmony with Mother Nature, no matter what she throws at us," Dan says.

The book covers a lot of territory in its 256 pages – from the history of those who have lived in the area – the tangata whenua, the first European settlers and returned soldiers, and later farming families, who came to eke out a living on the land – described in 1887 as "just a tract of deep gullies and high razorback ridges, and nearly all covered with bush".

We learn how the hill country farm has evolved into a bustling eco-tourism destination where visitors can go on horse treks or bush safaris, hunt, travel up the Whanganui by jet boat or kayak, and enjoy a fine dining experience "at the top of the world", prepared by a chef

GIVEAWAY

Flight magazine has a copy of *Blue Duck Station: The land, the rivers and the people* to give away to one lucky reader. To be in the draw, email flightdunz@gmail.com with BLUE DUCK STATION in the subject line, and your name and address in the body of the email. The draw closes on March 19 and the book will be posted to the winner. **Blue Duck Station: The land, the rivers and the people** Author: Nicola McCloy Publisher: Bateman Books RRP: \$69.99





Tamatea's cave on the Whanganui River.

who has worked in Michelin-starred restaurants.

The book is packed full of lively anecdotes – some hilarious as Dan is a natural raconteur –about the good sorts and rogues who have left their mark on the region.

Three people who arrived for a visit have stayed and become fixtures, earning chapters of their own.

The first is Steve Carr, who arrived for a year in 1985 and is now an integral part of Blue Duck Station. Steve says: "I don't know what it was about this place but I ended up staying."

Mel Rickards, who came on a tourist bus in 2016 and is now operations manager, is the first point of contact for many visitors and a liaison officer for Search and Rescue.

Originally from rural Cheshire, UK, Mel says she isn't sure if her parents understand how remote Duck Duck Station is: "They can still walk to the pub, which is something we definitely can't do."

A third chapter is devoted to Jack Cashmore, who first visited as a 19-year-old in 2010. In 2018, he returned to Blue Duck, "my home from home", and realised his dream of building his own fine dining restaurant in collaboration with Dan.

The Chef's Table at the Top of the World opened in January 2021 and offers a degustation menu – "generally 10 courses" for up to 10 guests, most of whom arrive up the hill via ATV after a tour of the station.

Dan's family are at Blue Duck Station for the long haul – "Blue [the eldest of Dan and Sandy's four children] is 12 and he already tells me what he's going to do when he takes over the farm," Dan says in the book.

Blue Duck Station: The land, the rivers and the people would not be complete without a chapter on the wildlife that Dan is so passionate about – the whio/ blue duck, pekapeka/bats, tuna/eels, kiwi and other birds.

"In terms of what we offer, we've got an abundance of wildlife, scenery, history and stories and we want to share all of those things in the most enjoyable way possible," he says.

The book was officially launched on December 6 at a function at the Whanganui Riverboat Museum.



It began 50 years ago

From the outset, DUNZ was clearly focused on conservation matters, as the organisation's first newsletter in August 1974 (abridged) shows.

Here we are with our very first newsletter and, due to your generosity and support, Ducks Unlimited (N.Z.) Inc is now an established fact.

Sure, we have a long way to go before we can take a breather - but we are now "off the ground" and we have every confidence in the future.

By now, you will have all received our initial brochure and we hope you are satisfied with its presentation - as a matter of interest this particular brochure took over seven months and countless hours of hard work (on a part time basis) to produce, and we have already distributed 2,500 around the country.

ON THE HOME FRONT

Director, Harry Lickers, has - under our partial sponsorship - been working at Lake Whangapapa (a large lake in the Waikato) carrying out a Hunter Survey on the local Black Swan population and, at the same time, is taking a census of all waterfowl frequenting the Lake.

OPERATION GRETEL

Operation Gretel will be our first major project DU officials are at present negotiating with Waikato landowners for the use of their property for the experimentation of Grey Teal nest boxes.

The Object

To raise the N.Z. population of Grey Teal from the present estimated 20,000 birds to 100,000 plus during the next ten years.

The Reason

Such an undertaking would ensure the safety of this creature for posterity - and the knowledge and experience gained would be put to good purpose with other species in the future.

The Know-How

DU (NZ) believes the prime reason for the static expansion rate of Grey Teal in this country is the shortage of nesting sites. In Australia, there is an abundance of old, dead hollow gum trees, and these are used extensively by the Teal after the rains have flooded an area.

DU (NZ) plan to build several prototype nest boxes during the next three years and, after an evaluation period, we will proceed with the construction of several hundred more of the most suitable type.

Grey Teal are nervous creatures and, for this reason, DU have selected two sites in the Waikato and Wellington areas where they can have the solitude they require.

After the evaluation period, other sites around the country will be chosen on their merit.

The Cost

Based on 1974 figures, the estimated cost of this project will be \$42,000.

FROM ABROAD

What has been happening in the field? Through the generosity of C.P. Air (Auckland office) we have been able to send Director, Dudley Bell, to Canada where he is working under the auspices of Ducks Unlimited Canada for a period of five months.

SNIPPETS FROM DUDLEY BELL'S REPORTS

Regina, Saskatchewan - Canada

DU Canada appoint what they term "Keemen" - these are members who wish to become actively involved in the workings of DU and they take on the responsibility of reporting to headquarters

on the following matters: - rainfall

in a particular

- area
- swamp levels
- damage sustained to any of the finished du projects

TO

- nest box counting and maintenance
- the finding of wild nests and the reporting of hatching success etc

DUCKS UNUMITED (N.Z.) INCORPORATED

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along with various other helpful matters. In Manitoba, the Canada geese nest at the rate of almost two pair to the acre on an experimental nesting plot.

Old tractor or similar tyres, laid about, are proving to be ideal nesting sites for geese (food for thought down Canterbury way) After inspecting a number of weirs and damcontrolled lakes, Dudley suggests it would be feasible to control Lake Whangapae at a level that would prevent pollution.

WHO'S WHO AT DU

Many people are asking "just who is who at DU? - so we detail below the Board of Directors. President Ian Pirani, Company Manager, Waikato Vice President Paul Pirani, Company Manager, Wellington

Directors Dudley Bell, Wildlife Officer, Waikato; Neil Hayes, Company Director, Wellington; Henry Lickers, Student, Waikato; Trevor Voss, Farmer, Taranaki.

GENERAL

Membership

Membership is progressing steadily - to date 45, comprising 2 life members, 30 active and 13 non-active. Subscribed from the following areas - Auckland 22; Wellington 14; Tauranga 3; Australia 2; Wanganui, Nelson, Hastings, Otago 1 each.

All efforts by present members to solicit new members will be appreciated - please advise us the names of those interested and we will forward a brochure.

Keemen

Do you wish to become a Keeman for DU in your area? These will be chosen from interested persons and the position will be an honorary one (see Snippets from Dudley Bell). Keemen will be asked to provide 'key' information on such matters as incoming waterfowl, general breeding conditions and outgoing waterfowl movements in and around their wetland region, and provide headquarters with an overall picture.

FOR YOUR INFORMATION

DO YOU KNOW:

- that of the 37 birds in danger of extinction, 11 ARE NEW ZEALAND BIRDS! This is a shocking situation. One of these birds is the Brown Teal. The main reason is that their habitat is slowly, but surely, being reduced by the drainage of wetlands.
- At long last, the Wildlife Service has commenced on a project to hand-rear the Brown Teal for liberation into the wild. Recently some hand-reared birds have been liberated into specially selected areas and first indications are that they are doing well.
- That members of the Wildfowlers Association of Great Britain and Ireland have hand-reared over 200,000 waterfowl in the last ten years.

DU Canada turns 85 Changes ahead



The ceremony hosted by Parks Canada to commemorate the founding of DUC as an Event of National Historic Significance. The log cabin in the background was relocated to Oak Hammond Marsh around 2000. It was DUC's original base at Big Grass Marsh, see photo below. Top photo: Jeope Wolfe. Photos: ©DUC

DUNZ's 'big brother' Ducks Unlimited Canada turned 85 last year.

DUC's origin story began with a small group of hunter-conservationists with strong connections to the land, reports DUC's magazine *Conservator*.

They recognised that because wetlands were drying up, populations of waterfowl and other wildlife were suffering.

"So they set out to save threatened wetlands on the drought-ravaged prairies. Their first undertaking was to restore Big Grass Marsh in the heart of Manitoba's duck-rearing region."

A small cabin at Big Grass Marsh became an emblem of DUC's early wetland conservation work. Today, that original structure has been relocated to Oak Hammock Marsh, home of DUC's national office.

A ceremony was held there in October to mark the Canadian Government's recognition of the founding of DUC in 1938 as an event of National Historical Significance.

DUC represents more than 12,000 DUC habitat projects across Canada.



Changes ahead for freshwater regulations

The National Policy Statement for Freshwater Management 2020 (NPS-FM) will be replaced, says Agriculture Minister Todd McClay, Environment Minister Penny Simmonds and Associate Environment Minister Andrew Hoggard.

Work on the NPS-FM replacement would start immediately, they said in December.

"This process is expected to take between 18 to 24 months and will include a robust and full consultation process with all stakeholders including iwi and the public."

"To avoid unnecessary costs and compliance duplication for councils, Cabinet has decided to remove the requirement for councils to implement freshwater plans by the end of 2024.

"The Natural Built Environment and Spatial Planning Repeal Bill will include provisions to give councils an extra three years, until 31 December 2027, to notify their freshwater plan changes."

This will give them time to replace and implement the new NPS-FM and means no unnecessary costs in relation to the NPS-FM 2020.

Earlier, Fish & Game produced a manifesto which included five requests for the new Government. These are:

- Support to enable Fish & Game to keep doing its work by maintaining the organisation's mandate when reforming conservation laws
- Strong and effective measures to protect New Zealand's rivers and lakes from pollution, water overallocation and further degradation
- Strong protection for wetlands maintaining and enhancing existing wetlands and backing landowners to create new wetlands for the benefit of all New Zealanders
- Work with communities, sectors, and iwi to collaboratively develop solutions for the benefit of our communities and treasured freshwater
- Enable New Zealanders to continue to get out in nature, enjoy hunting and fishing heritage, including ensuring access to the natural environment, and sports fish and game, alongside indigenous species in our ecosystems.

Bittern by the matuku-hurepo bug

'Boom-chains' from Australasian bittern have a vocabulary all of their own, reports DOC communication and media adviser **Krysia Nowak**.

We hear the booms as soon as we arrive.

Deep, resounding booms carrying across part of the Te Mātāpuna wetland, south of Lake Taupō. A bit like the sound you make when you blow across the top of a glass bottle.

These booms are the reason we are here. Usually silent stalkers in swamps, male matuku-hūrepo/Australasian bittern make an exception around breeding season in spring.

Believed to be an attempt to attract females, male bittern can spend hours at dawn and dusk producing this eerie sound.

We want them to succeed. Our native Australasian bittern are critically endangered due to habitat loss, predation and disturbance.

Central Plateau Department of Conservation staff are monitoring these wetlands with the help of Project Tongariro volunteers.

Four of us are here tonight, sitting warm and comfortable, observing the stunning sunset across a sea of raupō/ bullrush. It's cushy for fieldwork, at least until the mosquitos arrive.

First, we hear three faint booms some distance away. Then behind us, a new bird, a little closer, two booms. They're probably birds competing with each other.

A new bird draws in a gasping breath in preparation, producing a massive four booms with a laboured gasp between. We have a new 'boom-chain' champion.

It's called a boom-chain – a call sequence male bitterns bust out on the regular during spring evenings. Usually, the same bird will consistently give off the same number each time they call.

We listen. The booms become more regular as the male birds continue what seems to be a competition.

Pencils scratch against our clipboards as we write the time, number of calls, bearing, and approximate distance of the birds.





Our boom-chain champion sounds very close. We can't hear the wheezing inbreath of the other males.

One of our number stands up excitedly.

"I can see it!"

"I can see two!"

Suddenly we're all standing. Peering across the raupō in the gloom of dusk at two slightly darker patches perched atop the rushes. We share the binoculars around.

Watching closely, one of the bittern seems extremely interested each time one of the boom-chains is heard. 'Up periscope' is our description.

The bittern flies, closely followed by the other. A suspicion blooms. Have we been watching a male and a female?

Bittern are hide-and-seek legends, usually blending seamlessly into their surroundings, so I can only describe the excitement we felt at this point to be unintelligible glee.

Knowledge is power, the more we know, the better we can protect these taonga.

Currently, we're only monitoring males. The females are largely silent, presumably listening for their ideal mate.

In coming years, the Department of Conservation staff here hope to use a

A photographic guide to matuku hūrepo/ Australasian bittern.

> Photo: Colin O'Donnell, DOC (sketch by K Nowak)

And recording the timing, location and number of calls in Te Mātāpuna wetlands. *Photo: Krysia Nowak, DOC*

thermal imaging drone to detect the females on the nest, but until then we're limited by what we can hear. We don't know how many of these males pair up with a female or remain bachelors.

We do know numbers of males have been pretty consistent around here for the past few years.

The extensive wetland probably supports plenty of ideal prey species like fish, frogs and invertebrates. Bittern soundlessly hunt these, striking with their stabby beak (non-technical term).

You may have guessed by now I have a little bit of a soft spot for these statuesque birds. I was almost in tears when our team had to pick one up from the road once, hit by a car. It's not their fault we build roads through wetlands... if we leave them wetlands at all.

Roads, wetland loss, introduced predators, even pet cats and dogs, it's a dangerous world for our booming bittern.

So, what can the public do for these endangered birds?

- 1. Be a responsible pet owner at home and out and about.
- 2. Trap introduced predators like stoats and rats; even a backyard trap helps.
- 3. Drive slowly around wetlands and flooded drains take the opportunity to spot a bittern, rather than potentially hit one.



Waterfowl rules in Bird of the Century

Cries of foul play rang out as Forest & Bird's Bird of the Century was announced late last year.

The annual Bird of the Year competition was renamed last year to celebrate Forest & Bird's 100th year and when British comedian and talkshow host John Oliver discovered a loophole that allowed votes from overseas, he took on the unofficial role of campaign manager for the Australasian crested grebe or püteketeke.

His no-holds-barred campaign included placing billboards in Paris, Mumbai, Tokyo and London, promotion on his show *Last Week Tonight* and an appearance dressed as a grebe on *The Tonight Show with Jimmy Fallon*. A plane with a pūteketeke campaign banner also flew over the beaches of Rio de Janeiro in Brazil.

Unsurprisingly, when the results of the competition were announced in November, the crested grebe had won by a landslide.

The announcement was two days late as Forest & Bird grappled with the many thousands of votes and several cases of "mass voter fraud".

Thousands of fraudulent votes had to be



VOTETHISBIRD.COM

A screenshot from John Oliver's *Last Week Tonight* show during his campaign for the pūteketeke.

weeded out, including 40,000 votes cast by a single person for the tawaki piki toka, eastern rockhopper penguin.

One enthusiastic person in

Pennsylvania put in 3403 votes for the pūteketeke – equating to one every three seconds – and was disqualified.

The record number of votes this year, more than 350,000 from 195 countries, surpassed the previous record of 56,733.

Pūteketeke live mainly on small subalpine lakes in Canterbury and Otago, on lakes in Fiordland and Westland and lowland lakes in Canterbury.

In winter some crested grebes move to coastal wetlands, especially Lake Forsyth (Wairewa) on Banks Peninsula and nearby Lake Ellesmere (Te Waihora), where they have recently begun breeding.

A positive spinoff to the interference by overseas interests was a flood of donations associated with the campaign. These were "several times higher" than previous years.

"The support that we've seen from both overseas and here in New Zealand has been fantastic," a Forest & Bird spokesperson said.

"The overseas donations, given New Zealand's exchange rates, are certainly working in our favour."

Scientists investigate rising sea levels

Dunedin scientists are closely monitoring Te Nohoaka o Tukiauau wetland, formerly Sinclair Wetlands, which could be one of the first in New Zealand to experience changes from rising sea levels.

The wetland, south of Dunedin, is connected to the Pacific Ocean by the Taieri River and the scientists want to find out how much salt water is starting to mix with the freshwater.

"This is a really significant wetland, it's probably one of the first wetlands in New Zealand that will experience the changes of sea level rise," Department of Conservation freshwater technical adviser Chris Kavazos told Newshub.

The rising sea level could eventually turn the freshwater to salt water.

"We've got two loggers here, one that measures salinity and one that measures water height," he said.

"By deploying these loggers and



Photo ©Shellie Evans CC BY-NC-ND 2.0 Deed

building a big data set, we will be able to estimate and predict the futures of the tidal characteristics as sea level change comes up and how those important distributions will shift upstream."

It's crucial for understanding spawning habitats.

"Pre-Europeans, this was a massive mahinga kai source, eels, all kinds of galaxiids," senior ranger Oliver Dawson said.

"As the wetlands change to a saltwater environment we need somewhere for the whitebait, eels and other mahinga kai to go to."

"We're estimating that by the year 2100, the sea will be about 80cm higher than it is today," Chris said.

There is planting along the stopbanks to prepare. But how the wildlife prepares or adapts will only be known over time.

"The inanga can't handle that much salinity but it could be they slowly evolve to handle that salinity as well. It's a hard one, you're trying to predict climate change and it's very hard to predict," Oliver said.



wetland Care

Wetland Care Scholarship



Interested in studying wetland birds or wetland restoration? A Wetland Care Scholarship could be for you!

BACKGROUND/PURPOSE

Wetland Care Research Scholarships are Ducks Unlimited-sponsored scholarships applicable to any student currently enrolled or affiliated with a New Zealand university.

Funds are aimed at encouraging and supporting students who wish to push the boundaries of what is known about wetland restoration and conservation.

Up to \$20,000 is available annually to cover up to four separate scholarships of \$5000 each.

Funds can be used to support student living costs or cover the costs of equipment purchase, logistics and consumables.

CRITERIA

Applications will be accepted from students/researchers affiliated with universities interested in making a difference through wetland conservation.

Funding is aimed at student projects designed to facilitate better management of New Zealand wetlands or their environment. The student project must be based in New Zealand or be of direct benefit to New Zealand based on current wetland conservation issues.

Preference will be given to applications that demonstrate some of the following criteria:

- projects of direct benefit to New Zealand based on current wetland conservation issues
- innovative thinking that pushes the boundaries of what is known about New Zealand wetland conservation
- research on native threatened wetland bird species
- research with clear objectives and measurable outcomes
- research with a strong wetland management and conservation applications.

VALUE

Wetland Care will award up to four scholarships of \$5000 each in two funding rounds a year, with applications closing on March 31 and September 30. Funds will be paid in one lump sum to successful candidates upon commencement or completion of milestones agreed at the time the scholarship is awarded.

INTERESTED? WANT TO KNOW MORE?

Please email scholarships@ wetlandcare.org.nz with your questions.

Terms and conditions, plus an online application form, are on the Ducks Unlimited NZ website, www.ducks.org.nz.



Ducks Unlimited NZ Membership Form

YES, I wish to join Ducks Unlimited as a member OR I wish to renew my membership						
Name						
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Phone			DUCKS UNLIMITED NEW ZEALAND INC.			
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E-mail						
All subscriptions include GST.						
Junior (under 16) \$10	Life (one payment) \$3000	Note: Bronze, silver and gold sponsorships include the membership fee of \$60 and the		■振回		
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Family \$70	Silver Sponsor \$160	balance is r	eceived as			
Business \$110	Gold Sponsor \$310	a donation, which is tax deductible.				
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We deliver and advocate for effective wetland restoration, development, research and education; and support the preservation of threatened waterfowl and the ethical and sustainable use of wetlands.