Pūkorokoro Miranda News

Journal of the Pūkorokoro Miranda Naturalists' Trust

February 2023 Issue 127

International Liaison Officer

Hauraki Gulf

The Wildlife Act

Editorial

Interacting with visitors is one of the great pleasures of working at the Shorebird Centre. Of course, you do meet all sorts – from the fascinating and interesting, to the quaint, eccentric, and downright odd.

They arrive from throughout the country and from all over the planet, a medley of diversity and a variety of accents. Normally, at least 40% of our annual visitors are from overseas. Until the borders were closed. So, this summer saw a return to normal, or what passes for normal these days. But one thing stood out over this holiday season following the reopening of our borders. After several years of upheaval and restrictions people were reunited. Many extended family groups and friends dropped by. There was a distinct buzz to these visits, with happiness and laughter filling the Centre; the joy at being once again able to get out and about together.

Speaking of joy, for those people familiar with Pūkorokoro, what do you consider to be the soundtrack to the place? Is it the rustle of thousands of wings as the restless wader flocks circle overhead? Or the shrill pe-peeping of oystercatchers? Or perhaps the constant yapping of the Pied Stilts? For me it is the constant bubbly trill of the Skylark, featured on the cover of this issue. They are abundant and much remarked upon by visitors, especially those from the UK where the species is in sharp decline. While some introductions to this country have become pests, the Skylark is surely one of the more benign ones.

Elsewhere in this issue we report on a review of conservation legislation that is underway. This is certainly welcome, as much of it badly needs updating. This is especially true of the Wildlife Act, which is now 70 years old. New Zealand has changed a great deal in that time – socially, economically, and culturally, but the legislative framework has not. A more recent, but no less significant, piece of legislation is the 1987 Conservation Act, under which the Department of Conservation was established. There is a growing consensus that this too needs substantial review. Environment Defence Society policy director Raewyn Peart spoke about the state of the Hauraki Gulf at our Open Day in October, and we feature an account of her address. Kaitiaki Ranger Tansy Bliss reports on progress being made on the Robert Findlay Reserve, and David Lawrie gives an update of his role as PMNT International Liaison Officer. There is also another moth story.

Keith Woodley

From the Chair

There is nothing like the field course to remind me why we do what we do. The field course has been an annual part of my life for a long time now, a coming together of old friends and the making of new ones. We had to cancel it last year due to covid and I have to say that although the course is often exhausting and occasionally challenging, I missed it, it really does ground me in the place and inspire me to do better.

It's spending six days with people focused almost exclusively on the environment we are in, the animals and plants in it, with occasional sojourns up and down the flyway. There is a familiarity to the whole things – we run it in a certain order, we have many of the same tutors back year after year, and yet no matter how many times I hear some of the tutors they always have something new to say, new information presented in new ways. And the birds are always doing something similar to last year – the same – but different.

It's a bit like that coming back to being Chair – the same but different. My, how we've grown over the last few years – I was watching and even driving some of it but, while we are the same – we educate people about the importance of the coast, about birds, about ecology – we are different. The land management has come so far in the last few years, I'm only really coming to grips with how hard Ray and Ann Buckmaster have worked over the last four years, and now having Tansy and Hera working on the whenua has made such a difference. It feels like we have real momentum.

At the same time, largely due to Covid, we aren't as flyway looking as we once were (except when we can follow the satellite tagged godwits, a simply fabulous group of projects!). That's why it's so important that David Lawrie has told us about his work as our international liaison and,

Gillian Vaughan with course participant Bella Wilson banding a Shining Cuckoo KEITH WOODLEY

bringing me back to the field course, why it's so amazing to have David Melville appear and give us an update on the state of spartina control in the Yellow Sea (It is positive news!)

I'm excited about the next few years – roll on 2023!

Gillian Vaughan

Cover Photo: Skylark BEVAN WALKER

Shorebird Snippets

Bird Snippets

Of birds commonly seen through much of New Zealand at least two had never been recorded around the Centre. One is Tui, even though they are often seen along the terraces above the chenier plain. In the 1990s there was extensive flax plantings in two enclosures on the DOC land north of the Centre, as part of the native mistletoe restoration project. These along with the stand of flax along the back of Widgery Lake were considered a potential attraction for Tui. But not so far.

The other species was Pipiwharauroa Shining Cuckoo. Last year I heard one calling from amongst the vegetation above the beach south of the Godwit Hide. In late November one was heard very loudly from somewhere within the Centre Grounds. Then in mid-December I saw two among the mangroves north of Access Bay. With Riroriro Grey Warbler regularly present at Pūkorokoro, perhaps this is an indication that cuckoos may become a regular feature on our bird list.

White-winged Black Tern

A feature since Christmas last year was a White-winged Black Tern seen on the Stilt Ponds. Breeding from eastern Europe and Middle East to Manchuria, birds migrate to equatorial and temperate parts of Africa, Asia, and Australasia. A regular visitor to New Zealand, it has occasionally nested here, as recently as 2015. It is, however, not commonly seen at Pūkorokoro. The white-winged black tern is a typical marsh tern, favouring coastal lagoons and estuaries where they feed mainly in flight, dipping down to the water to catch surface insects. In New Zealand they can also be found on braided rivers, sometimes in association with Black-fronted Terns. The four New Zealand breeding records were all on South Island rivers. The Pūkorokoro bird was being seen regularly through January. Source: *www.nzbirdsonline.org.nz/species/white-winged-black-tern*

New spotting scope

We are very grateful to Ralph Gray for the donation of a Leica spotting scope. In the process of downsizing, he approached us seeking a good home for it. I assured him with some alacrity that we would be the perfect repository. Since December our kaitiaki rangers have been using it daily at the hides, reporting it to be excellent for general visitors. Stable and with superb optics, it is very easy to use. In return for his gesture, I presented Ralph with a copy of *In Pursuit of Champions*. It seems a mere token when measured against the extreme value of our new equipment.

Latest arrivals

A long standing, if sometimes erratic, tradition is that interesting birds show up during the field course. On the first morning of this year's event, Tansy found a Grey-tailed Tattler lurking among Wrybill at the Limeworks. Small numbers of this Siberian breeding species, perhaps up to 10 birds, occur in New Zealand each year. However, it is several years since one was last recorded at Pūkorokoro. Larger than Wrybill, the tattler in non-breeding plumage is uniformly grey on its upper parts and white on the underbody. Distinctive features are its long straight bill and dark eye stripe, and its yellow legs. The bird proved elusive for the remainder of the course with only one brief sighting on the last day.

More accommodating was the Far-eastern Curlew which has been here all season. It was seen during most visits to the hide. Some participants also got to see a Red-necked Stint – and so experienced the entire wader size spectrum, from the largest to one of the smallest. A Black-tailed Godwit was also seen briefly, though it eluded the course participants. Often seen by all, however, were our old friends the Pacific Golden Plovers with up to 67 recorded. A further highlight for the team was the Kotuku displaying itself just metres from the carpark gate.

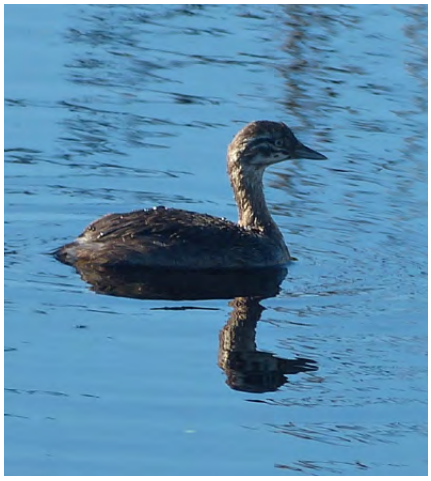
Several days later, during a visit to the godwit hide, a group from Nature Quest tours were startled by a dark bird erupting out of the southern end of the Stilt Ponds. It flew low towards the outer bay, past the group and brushing the head of one person with its wing. This turned out to be a Grey-faced Petrel, an extremely odd species to see in those circumstances. Presumably it had been blown in during the stormy weather.

White-winged Black Tern BIRGITA HANSEN

Red-necked Stint with Wrybill DENISE POYNER

Stilt ponds drainage

It is always good to see Dabchicks. These diminutive New Zealand grebes are fairly rare at Pūkorokoro. For a few days in July 2013 there was one on the stream at Taramaire. The next record was of one seen on the pools opposite the Centre in December 2016. For much of 2017 one, and occasionally two, frequented Widgery Lake and the pools across the road.



Young Dabchick on Widgery Lake KEITH WOODLEY

So, the two seen from the Stilt Hide in late November were noteworthy. In early January there were three.

But welcome though they are, their very presence was problematic. It just emphasised how the Stilt Ponds have stopped functioning properly for shorebirds. In holding too much water for longer periods, the area is unavailable to the godwits, knots and Wrybill that would normally flock there at high tide. The swans clearly love the place as do the copious waterfowl along with the Dabchicks. But it should really be covered in waders.

We are continuing to work through a consent process to clear the outlet to the Pūkorokoro Stream. That we need to do so rankles. It should really be more straight forward than this, for all we are seeking to do is retain the ponds in their normal state, so that they offer roosting habitat, especially during higher tides in the lunar cycle.

Chenier sill at Waimea estuary courtesy of Nelson City Council

Saltmarsh at Nelson

A barrier made of rocks has been built in the Waimea Estuary to protect and enhance an area of saltmarsh – an ecosystem instrumental in helping mitigate and adapt to climate change. The barrier, known as a chenier sill, was erected along a section of the estuary's 65-kilometre margin by Nelson City Council.

The sill would "dampen wave action" to protect plantings and reduce shoreline erosion at the site, close to the mouth of the Orchard Stream in Stoke, the council said. It would also trap sediment, increasing the height of the estuary bed over time and changing the shape of the shoreline to make it more suitable for saltmarsh vegetation to grow.

Coastal vegetation has been found to sequester significant amounts of carbon, while also providing greater protection to low-lying coastal areas from sea level rise and storm surges, regulating coastal water quality, and providing vital habitat for estuarine species.

www.stuff.co.nz/environment/130570496/rocky-ridge-built-in-estuary-to-protect-and-restore-vital-ecosystem

EVENTS CALENDAR 2023

Sunday 12 March	Autumn Migration Day High tide 11.30am
Sunday 14 May 10am	PMNT AGM High tide 2.15pm
Friday – Sunday 7-9 July	Printmaking Course
Saturday 12 August	Potluck dinner/Working bee.
Friday – Sunday 22-24 September	Nature Journaling course
Sunday 22 October	Spring Migration Day High tide 1.15pm

The Summer Shore Guide role over the last two seasons has been partly funded from the Environment Initiatives Fund (EIF) of Waikato Regional Council. We are most grateful for their support.

Re-shaping relationships

Pūkorokoro Kaitiaki Rangers, Tansy Bliss and Hera Clarke, settle in.

It is morning in mid-January. A white Suzuki Jimny is parked in the carpark and three figures, two clad in aqua marine overalls and one in more muted tones are just visible amongst the flowering Fennel and waist deep Divided Sedge that surrounds the native planting at the Stilt Hide.

As the morning wears on, new shapes emerge – lightly dancing Salt Marsh Ribbonwood with delicate fresh green leaves lying flat against dark magenta stems; a tangle of Poehuehue clambers over itself, like a crumpled hair net sprung to life; sharp leaved flaxes thrust flowering stem skywards; Mingimingi epitomises the form of divaricating shrubs, stems more orange than brown and leaves more robust than its neighbouring Ribbonwood. Stout Knobby Club Rush compete for space with the Giant Umbrella Sedge bearing its dark cylindrical seed heads up into the wind for dispersal.

Chatter and laughter, also carried on the wind, ceases as the grubbing, cutting, weeding and mulching for the morning ends. Sweat is wiped from brows and loose shell and vegetation emptied from gum boots. (1)

With the help of overseas volunteer Sally Gellard, another small section of the Robert Findlay Reserve has been "showcased" in line with one of the reshaped objectives of the enhancement project. Objective: Show case native plantings around the hides and tracks to enhance the visitor experience, tell the saltmarsh succession story and increase biodiversity.

Walking back to the carpark, the kaitiaki rangers and volunteer take note of the latest arrivals in the 2022 planting area. Prickly Oxtongue now reaches above the Carrot Weed, their dimpled green leaves contrasting with the yellow Dandelion like flowers, a few tall stems of the Moth Mullein sport a dazzling array of orange-yellow flowers and Common Figwort lines the retreating margins of the Stilt Pond along with Broad Leaved Dock now heavy with seed, turning from green to a russet brown to a deep magenta. White Stonecrop is a burst of white starlike flowers at a lower level and King Island Melilot adds a blaze of yellow and green. Seed banks of Fennel have sprouted producing a dense swath of feathery delicate green with fresh Divided Sedge stems nestling close by. The Hares Tail Grass has all seeded and a taller Bearded Grass is coming to full ripeness, long soft furry seedheads gradually taking on a brown hue.

Three months ago, these names were unknown, but are now a common checklist of weeds the rangers sift through, deciding which to prioritise for removal and which to leave, providing shelter and shade for the native plantings in the summer ahead.

The objective "manage the planted areas of the Robert Findlay Reserve to support self-sustaining populations of native vegetation" reads as a daunting task.

To accomplish this objective a rethought, re-shaped and reformed relationship with weeds is necessary. The two most invasive weeds are Divided Sedge, *Carex divisa*, an introduced Tufted Sedge from Europe, Asia and North Africa; and Fennel, *Foeniculum vulgare*, native to the Mediterranean region. Both are highly invasive, rapidly spreading and difficult to control.

Carex divisa invades selective native and managed habitats in New Zealand including wet shores, marshy areas, brackish habitats, upstream riparian areas, lake margins, wet meadows, irrigation channels and pasture. It therefore thrives in the Robert Findlay Reserve, forming dense swarths, up to 1m thick, smothering native vegetation and altering the natural succession of the salt marsh and brackish coastal habitat.

1. Volunteer Sally Gellard stands proud amongst her cleared trees after a week of hard work on the Robert Findlay Reserve

2. Divided Sedge smothers native Saltmarsh Ribbonwood plantings only 18 months after being treated with chemicals.

Its seeds are spread by water and soil movement and vegetative spread is also rapid from strong woody rhizomes that can persist in saline environments. Once established it is almost impossible to dig out, and repeated applications of chemicals are needed to keep it at bay.

On the reserve, areas selected to be planted with natives but dominated by the Divided Sedge, were sprayed with glyphosate each November and March prior to the planting days in May and June. However, without repeated chemical treatments, the sedge resprouts and reinvades the newly planted areas. With its strong rhizomes pushing through the substrate, the native plants are soon encircled with fresh Divided Sedge stems, making any further chemical control impossible.

Within a year, the Divided Sedge can be back to its full strength and only those plants that have their heads above this rising tide of aggressive vegetation will survive. (2)

3. The long tap roots on the Fennel allow it to penetrate deep into the shell and survive the dry summers. It dies back over winter and sprouts again in spring adding further to its root system and resilience.

4. Fennel taking over the seaward shell ridges between the Godwit and Wrybill Hide.

5. Fennel re-establishing itself amongst the native plantings .

6. Piles of fennel lie with roots exposed after being dug out of the shell ridges.

Foeniculum vulgare, or Fennel, well known as the tall aromatic herb lining the track down to the hides, is another invasive weed, essential to control. It forms thick dense stands and with its prolific seeding and extensive tap and side roots stretching over 1m, it can transform a landscape in a couple of years. If we want our native plants to thrive, the Fennel has to go. (3)

Over the last three years, Fennel has been cut and repeatedly sprayed with Grazon wherever it re-emerged. Despite this, plants have taken hold on the shell ridges (5) and amongst the plantings adding thousands of seed to the soil and competing with the native plants. Now a consistent effort is needed to achieve another objective for the Robert Findlay Reserve: No seeding Fennel in the southern 4ha of the reserve.

To this end, it is being dug out and left with roots bared to the elements (6) to make sure they are totally dead before the whole plant can be used as a mulch around the existing plantings. Those not yet dug out but flowering, have been either beheaded or cut tightly at the base in areas where it is not possible to grub or pull out. Small areas have been spot-sprayed. This work will continue over the coming years and willing volunteers to assist in this tedious but rewarding task, will be most welcome.

The car park area itself is another area of interest for the Kaitiaki rangers. Parts of the old lime works have been exposed, the towering Mallow removed and ideas for redevelopment are underway. There is potential to make the carpark an attractive 'gateway' into the Robert Findlay Reserve with the addition of native plants linking adjacent saltmarsh habitats with those in the reserve. Interpretation panels would take visitors from the past to the present and help us all look towards the future.

Back at the Shorebird Centre, the battle with weeds takes a different turn. The rampant Pink Bindweed, *Calystegia sepium*, clambering over the Poehuehue along the fence line and smothering the Divided Sedge around Widgery Lake has claimed its own fame by being the host plant of the Convolvulus Hawk-moth caterpillar. (See article p12). A quick rethink about this weed is suddenly on the agenda. Strategic control of it in selected places will be a topic for discussion with Sue Frostick and the Wednesday Garden group when planning for the ongoing management of the Centre grounds.

Note: The convolvulus creeping across the shell ridges by the hides, is a native Shore Bindweed *Calystegia soldanella* and one we want to keep! (See p12 moth article)

But it is not all about weeds…

Hera has been the lead shorebird guide at the hides, greatly assisted by regular volunteers Ken Wedgewood, Spencer Drinkwater, Sue Townson, and Mary Perwick. New material to assist in shorebird identification has been added and, with the help of Adrian Riegen, various maintenance tasks have been completed. Children visiting the hides have been on the look out for friends of the Kuaka, Ngutuparore and Poaka colourfully hiding in the surrounding vegetation.

Both Tansy and Hera have been assisting with school groups, independent guiding upon request and doing their turn in the Centre shop when the need arises.

Keith Driver, who has been the regular predator trapper for the last 5 years under the Living Water programme, has been giving the rangers a run down on the set up in the Robert Findlay Reserve, ready to handover the operation in June 2023. A small trapping programme is now established around the Shorebird Centre with a series of DOC 200's and snap rat traps in place. This is all recorded on TrapNZ and adds Pūkorokoro's efforts into the Predator Free 2050 data base.

The nursery is filling up with plants ready for the May-June 2023 planting and cuttings of Pohuehue, Karamu and Ngaio taken by Ray Buckmaster have been successfully transitioned to plants in pots. (7)

Help and encouragement with all the above tasks has come from both local and overseas volunteers. (8) This has provided a most welcome opportunity to build new relationships and is something to be further developed into the future. Sincere thanks go out to all our volunteers.

7. Tansy potting up Saltmarsh Ribbonwood for the 2023 planting, up in the nursery at the Miranda Orchard.

8. Weekend volunteers Sue Townsend and Sue Frostick kick off the weeding effort in the Reserve.

If you are interested in getting more involved, check out the Volunteers Page on our website for further information, or contact Chelsea 09 232 2781 or admin@shorebirds.org.nz.

All images Tansy Bliss.

Recent sightings at Pūkorokoro

International Migrants:
4,200 Bar-tailed Godwit
1 Black-tailed Godwit
1 Far-eastern Curlew
2 Whimbrel
c1,000 Red Knot
82 Pacific Golden Plover
16 Turnstone
1 Red-necked Stint
1 Curlew Sandpiper
4 Sharp-tailed Sandpiper
1 Grey-tailed Tattler
1 White-winged Black Tern

New Zealand species include:
1,960 Pied Oystercatchers
820 Pied Stilt
52 Banded Dotterel
4 New Zealand Dotterel
12 Royal Spoonbill

What's this all about?

Send your captions to: keith@shorebirds.org.nz and we'll include the best in the next issue.

International Liaison Officer

As readers of *In Pursuit of Champions* will know, David Lawrie has the longest association with PMNT of anyone. Active during the very formation of the Trust, subsequently Treasurer for 18 years and Chair for 11, his current role is International Liaison Officer. Here is his latest update.

David Lawrie receiving the PMNT Certificate in Cambodia, 2010

I thought it was about time that my role as the International Liaison Officer was described including what actions I have been taking over the past year.

The role was created at the time Gillian Vaughan replaced me as the chair of the Trust. During the handover of the papers I said to Gillian that I was not sure how I was going to fill my time. She immediately appointed me as the International Liaison Officer. This was to acknowledge the role that I was already fulfilling as the PMNT Representative on the East Asian-Australasian Flyway Partnership.

My role is completely separate from that fulfilled by Adrian Riegen who handles the banding and international connections that this work entails. My role is therefore largely administrative in dealing with the international connections that the Trust has or will develop.

East Asian-Australasian Flyway Partnership: (EAAFP)

In 2010 the Trust signed up to the EAAFP as an international non-government organisation. We qualify to fulfil that partnership role because of the work that we had undertaken in China and Korea. Prior to that, we had been involved with the Partnership's predecessor the East Asian – Australasian Shorebird Site Network, launched at Brisbane in 1996. Adrian Riegen and Keith Woodley represented the Trust at that meeting, where the Firth of Thames and Farewell Spit became the inaugural New Zealand sites in the Network. Since then PMNT was the only New Zealand group active in the Flyway. In 2011 the Chief Executive of the EAAFP and I travelled to Wellington to encourage the Director General of the Department of Conservation that New Zealand should also join. Subsequently the New Zealand Government became a partner.

The Partnership:

The partnership is an informal and voluntary initiative which was launched on 5 November 2006 and aims to protect migratory water birds, their habitat and the livelihoods of people depending upon them. The partnership is comprised of 39 partners including 18 national governments, six intergovernmental organisations, 13 international non-governmental organisations, one international organisation and one private enterprise.

Participants of MOP 7 Alaska, 2013

The partnership is intended to meet face-to-face every two years although the recent pandemic has disrupted this timetable. The Trust has been represented at six meetings of the partnership with the next meeting of partners (MOP) scheduled for Brisbane in March 2023. For further information check *www.eaaflyway.net.*

The partnership also has a number of sub-committees and working groups which deal with certain aspects of the running of this large organisation.

While I initially joined the shorebird working group because that is where my interests lie, in recent years I have become more heavily involved in the communication, education, participation and awareness (CEPA) working group. My participation in this group is not because of any particular personal skills but because of the good work that Trust members have done and are doing around raising awareness for our site, and internationally.

During the past 18 months this group has met on a monthly basis by zoom conference calls. The time zone creates some issues as the chairman lives in Alaska and other members are in England, throughout Asia and Australia and New Zealand. This CEPA group is submitting an action plan to the next MOP which will provide guidelines for Flyway members to use in raising awareness of the Flyway.

During 2022 it was intended that a meeting of partners (MOP) would be held. With the issues around Covid the physical meeting was postponed until March 2023. However, preliminary

discussions on some of the items that would be on the agenda at the meeting, a five day zoom conference was held in June. This gave the partners an opportunity to discuss and refine issues prior to presentation at the MOP in 2023.

Wetland Link International: (WLI)

The PMNT is also a member of Wetland Link International which is a global network of wetland education centres. The Trust joined in 2010 and at that time we were the only physical wetland centre in New Zealand, joining 350 members spread over six continents.

There are now a range of other wetland centres being established in New Zealand which will supplement the work at Pūkorokoro and strengthen wetland education.

WLI was established by the Wildfowl and Wetland Trust in 1991. The intention was to share best practice, provide support to other centres by using site education and awareness raising within wetlands.

WLI objectives include assisting in the development of new wetland education centres and their associated programmes, and to improve the effectiveness of operations at wetland centres through sharing, training and expertise exchange. Originally the Trust was included in the Oceania region which includes Australia and the Pacific Islands. However, following a series of zoom meetings during 2022 it was decided to combine Oceania and Asian regions which will give greater opportunities for sharing experiences and networking. This new region was confirmed at a conference in Indonesia in August 2022, but I was not able to attend. I have however been appointed to the committee which will oversee future activities in this region.

This organisation is a group which has many attributes that we could utilise to enhance our future activities. Check the website *www.wli.wwt.org.uk.*

If any members have suggestions for CEPA activities that the Trust could undertake at a local level or that we could promote at an international level do not hesitate to contact me.

David Lawrie
International Liaison Officer

Demise of the old cottage

The bright orange digger made short work of the cottage. In less than half an hour it presided over the wreckage of what had been my home for 23 years. This had been a disappearance in stages, and I had had a year to get used to the idea.

First came the 1.45am arrival, in November 2021, of the new house. I remain astonished it took just 90 minutes to move the building off the truck and onto temporary piles. It took a month for the new place to be positioned on its permanent foundations, to be braced sufficiently to meet regulations and for (that stage at least) to be signed off by the District Council.

From early January I began moving items into the new place. First the books then the bookcases. Then, a few weeks later when electricity and plumbing were connected, I took up residence. From the old cottage the view to the west had been of pasture and the foothills of the Hunuas. The view from the new place was dominated by the old cottage, abandoned.

Then came the first stage of demolition: removal of the outer cladding, which was confirmed to contain white asbestos. This was done by a specialised team in full PPE. That evening the cottage stood undressed, as the Mangatangi volunteer fire brigade arrived for a training exercise. They were not about to burn it down but did generate smoke. I watched as fire fighters in full respiratory gear searched the dark, smoky interior. It was deemed to be a valuable session.

The old cottage stripped of its cladding
KEITH WOODLEY

A few days later came the digger, and the cottage was consigned to oblivion. Burnable debris was transported to the Trust grazing block for disposal. In exchange, material was brought in to build up the ground surrounding the new residence. This was preparation for the deck that is due to be built in February. Our thanks to Bob Rigter for organising logistics and contributing considerable labour.

There then came an epilogue to the story. The existing fibreglass water tank had sat beside the old cottage for quite a few decades. It appeared to be in good shape so was connected to the new house. The perpetual rain of early January ensured it was full to bursting. Which it duly did, spectacularly, just as our neighbours Andrew and Jane Davis were driving past. Within minutes the tank had disgorged its entire 25,000 litres. So now, beside the new cottage, there sits a new tank.

Keith Woodley

Main image: Demise of the cottage KEITH WOODLEY

Dick Veitch

PMNT life member Dick Veitch was recognised in the New Year honours list, being made an Officer of the New Zealand Order of Merit for services to wildlife conservation. Dick had a long career in both the NZ Wildlife Service and with DOC following its formation in 1987. Since retiring in 1998, he continued to contribute to domestic and international programmes of species conservation.

Dick Veitch explaining Greenfinch moult EILA LAWTON

The citation reads in part:

Mr Veitch initially helped save the Chatham Islands black robin and kākāpō from extinction and has worked on safeguarding other species' populations using islands as safe havens. He has helped increase the number of available pest-free islands by developing and deploying techniques to eradicate predators. This has included the successful eradication of cats from Herekopare and Te Hauturu-o-Toi islands and rats from the Hauraki Gulf islands of Tiritiri Matangi, Motukorea, Te Motu-a-Ihenga and Motukino. Since 2002 he has led the editing of three significant books on island invasive species management, containing papers from hundreds of contributors internationally. Most recently he co-edited 'Hauturu: the history, flora and fauna of Te Hauturu-o-Toi Little Barrier Island' (2019). He has volunteered with the South Auckland Branch of Birds New Zealand for 50 years. He has worked on the Eastern United States seaboard to monitor international wader populations.

As *In Pursuit of Champions* acknowledges, he played a significant role in the formation and early history of PMNT, being a firm advocate within the Wildlife Service for the Trust's interests. He also pioneered the first cannon netting of shorebirds in New Zealand, for which most equipment had to be built from scratch. This was the beginning of the programme to catch and tag migratory birds, that has become such a huge part of our profile. In 1999, when Bev Woolley convened the first Field Course, Dick played an essential role in helping shape and conduct the event, a role he continued for the first few years. The basic model they pioneered is still the core of the event to this day.

We offer our congratulations to Dick. A number of people I have spoken to all agree it is long overdue recognition of a unique contribution to New Zealand conservation.

Keith Woodley

Sally Gellard

Sally Gellard TANSY BLISS

Canadian visitor Sally Gellard reports how she made us an offer we could not refuse.

Circumstance and immense good luck brought me, a visitor from Canada, to Pūkorokoro Miranda Shorebird Centre in early January.

Stormy weather in the Coromandel convinced me to turn back and spend a second day exploring the salt shell marsh, learning about New Zealand shorebirds. A stop at the Kuaka/Godwit hide and a conversation with kaitiaki ranger, Tansy Bliss about the restoration project underway on the Findlay Reserve sparked my interest. I took a chance that my gardening/tree planting background might be useful so, given that I had a week to spare in NZ, I asked if I could be a volunteer weed-puller.

The following morning I joined kaitiaki rangers, Hera Clark and Tansy at the Stilt Hide and learned the arts of weeding, mulching and grubbing in this habitat. I enjoyed attacking the ferocious Fennel as well as liberating the previously planted native plants from the oportunistic 'weeds'. I spent a glorious week surrounded by sights and sounds new to me; sweet skylarks, raucous stilts and herons, roosting spoonbills and showy black swans. In addition, I had the chance to chat with passionate birders from around the globe, wondering what I was up to.

With my tiny involvement in this project, I am aware of the vision and the great amount of work already invested by PMNT to bring this beautiful, rare ecosystem back into balance. The huge piles of dead Fennel, cut, dug and pulled, is testament to the efforts so far. The work ahead is daunting but doable. I suggest that there is light at the end of the Fennel tunnel and I look forward to seeing photos of the area, taken over by native plants in a couple of years.

I only wish I could stay on to be part of the PMNT team, however my time is up and I need to fly back to my wintering grounds on Vancouver Island. Along the way I will keep an eye out for the Bar-tailed Godwits, ever thankful to have experienced their southern home.

I will always remember the New Zealanders passion to protect and restore this lovely land; and I am deeply grateful for the kindness and warmth you have all shown me.

Sally Gellard, Comox Valley, Vancouver Island

Convolvulus Hawk-moth

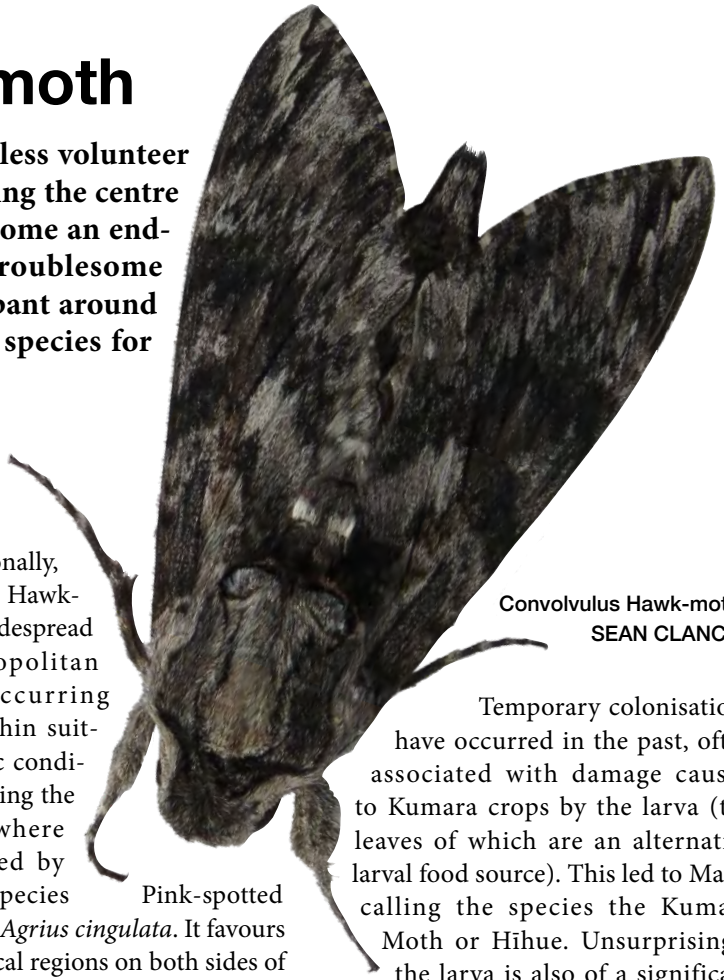
Since the Shorebird Centre was built, countless volunteer hours have gone into planting and maintaining the centre grounds. In recent years this has largely become an endless battle against weeds. A particularly troublesome one is convolvulous, which is currently rampant around Widgery Lake. Sean Clancy reports on one species for which it is anything but a weed.

The Convolvulus Hawk-moth *Agrius convolvuli* at Pūkorokoro

Of course, Pūkorokoro Shorebird Centre is known internationally as a haven for migrant and domestic shorebirds, attracting thousands of visitors every year to see the spectacle of these flocks roosting at close-range from the hides. A less well-known species for which PMSC holds the largest and only known established breeding population in New Zealand is the equally spectacular Convolvulus Hawk-moth.

The first time I operated light-traps at the Centre in late 2018 to survey and record nocturnal Lepidoptera it was a great surprise to find several Convolvulus Hawk-moths attracted to the Mercury Vapour-sourced trap. At that time, according to Dr Robert Hoare, it was a species generally regarded as a scarce immigrant to New Zealand from Australia that may temporarily colonise for short periods. Initially I assumed that I had chanced upon an arrival event, but Convolvulus Hawks continued to occur in numbers, sometimes in double figures, during each visit throughout the next two summers.

There remained the possibility that these records related to a short-term colonising population that would succumb during the winter period (as happens in more northerly parts of Europe). However, after an enforced two-season break from recording at PMSC due to Covid, it has become clear from continuing records in late 2022 and early 2023 that the Convolvulus Hawk-moth population at the site is not only surviving but thriving, probably in no small way due to the plentiful alien Convolvulus plants growing around the Widgery Lake and in the general vicinity. This is the primary larval foodplant the species gets its vernacular and scientific moniker from.



Convolvulus Hawk-moth
SEAN CLANCY

Internationally, Convolvulus Hawk-moth is a widespread and cosmopolitan species, occurring globally within suitable climatic conditions, excepting the Americas where it is replaced by its sibling species Pink-spotted Hawk-moth *Agrius cingulata*. It favours the subtropical regions on both sides of the Equator, migrating northwards in the Northern Hemisphere and southwards in the Southern Hemisphere, in a continual effort to extend the breeding territory of the species. As such, the apparent colonisation at Pūkorokoro is likely to be one of the most southerly outposts of this species currently known on the planet. It is probable that ongoing climatic change and the general warming trend has allowed Convolvulus Hawk-moth to gain this foothold, and further spread in New Zealand seems inevitable.

Temporary colonisations have occurred in the past, often associated with damage caused to Kumara crops by the larva (the leaves of which are an alternative larval food source). This led to Maori calling the species the Kumara Moth or Hīhue. Unsurprisingly the larva is also of a significant size when full-grown and almost certainly many end up satisfying the appetite of hungry Pukeko around the margins of Widgery Lake! They come in brown and green forms with a long caudal horn, typical of the hawk-moth family. There have been no confirmed larval records at Pūkorokoro, although a number of large green caterpillars reported by Keith Woodley washed up along the road following the tidal surge and floods of January 2018, were almost certainly this species.

Kaitiaki Ranger Tansy Bliss assisting with the moth trapping project SEAN CLANCY

However, currently it remains a rare insect in the country; friend and fellow light-trapper, Neville Hudson, who has been recording moths in and around Auckland for many years and has trapped widely elsewhere throughout the country has only ever recorded two examples. Away from PMSC, I have trapped widely across both main islands through three summers and only recorded one other, at the Okarito peninsula on the west coast of the South Island. This undoubtedly was a primary immigrant just arrived ahead of a storm front moving in from the north-west.

Hawk moth SEAN CLANCY

The adult moth is a sizeable insect with a wingspan that can exceed 10 cm., the females generally being larger than the males. One of the most interesting features of the adult is the proboscis (or tongue) which is tightly curled beneath its head when not feeding, but can be over 8 cm in length when fully extended (longer than the moth's entire body) and is used to reach the nectar in the deep tubular flowers of plants such as Nicotiana or Convovuli, in front of which the moths can hover in a virtually stationary position when feeding, or even fly backwards when required.

So Pūkorokoro is currently the best place in New Zealand to see this nocturnal beast with any reliability, although coming when a friendly light-trapper is in residence will always increase your chances of success!

Sean Clancy

Book Review

A Quest For Waders by Rick & Elis Simpson

Published by: Wader Quest Publishing 2020

This is a book that would be of particular interest to all wader watchers around the world but also people who enjoy a good travel adventure yarn. The book is not readily available in New Zealand at this time but the Pūkorokoro Shorebird Centre are investigating options for a bulk supply.

The method I utilised to obtain my copy is worthy of one of the adventures that Rick and Elis describe throughout the book. I investigated a direct postage to New Zealand but found that this would more than double the cost. I therefore arranged that Rick would post it to a contact who lived in Britain and who was to attend a conference in Manilla in the Philippines. I then arranged for the New Zealand delegate to the same meeting to uplift the copy and bring it back to New Zealand where it spent two weeks in COVID quarantine on Waiheke Island before finally being delivered to my door.

This method of using local contacts is largely how Rick organised his adventures searching for waders around the world. The quest however, had a purpose and that was to raise awareness and money towards supporting efforts to save the Spoon-billed Sandpiper which was facing extinction.

The original intention was largely selfish to ensure that Rick and Elis saw a spoonbill sandpiper in the wild before it was extinct. However, the more they discussed this aim, a plan emerged to travel the world to observe as many wader species as possible within a 12 month period and at the same time raise awareness and funding, towards the Spoonie conservation efforts. Hence the Wader Quest charity was born and is still active.

This book follows the adventures that Rick and Elis undertook to achieve this aim. For those wondering, they saw 175 species, which is a good achievement in itself. However, it is more than a travel log because of Rick's delightful style of writing which makes it hard to put the book down as you are always left wondering whether there will be a successful outcome.

It is a worthy read for any birders and particularly those with an interest in waders. One thing I did learn from reading the book though, is if I ever get an opportunity to go birding with Rick and Elis I would always choose to follow Elis wherever she goes.

David Lawrie

Wader flock at Pukorokoro PMNT

Hauraki Gulf from Waharau SOPHIE FUTTER

The State of the Hauraki Gulf

At the Welcome to the Birds Day in October 2022, our guest speaker was Raewyn Peart, Policy Director for the Environmental Defence Society. Here is a summary of her talk on the state of the Hauraki Gulf.

The trouble with fish is that many of us only see them when they are dead. Their marine realm lies out of sight to most of us. Yet, as Raewyn Peart points out, there is an enormous variety of life beneath the surface of New Zealand waters: 1,400 marine fish species, 1,000 seaweed species, 1,100 species of jellyfish, anemones, and rocky corals, and 1,500 species of sponges. This compares to just 170 indigenous birds including 95 seabirds.

And those we know about are not doing well. Of species for which assessments have been made, the following are threatened with extinction or are at risk:

Marine invertebrates	95%
Seabirds	92%
Shorebirds	82%
Marine mammals	67%
Seaweeds	41%
Chimaeras, sharks, rays	15%

There is a gaping hole in the 'protection' of seabirds and marine mammals, reflected in recent media headlines: 'Shock as more than 50 dolphins caught in Bay of Plenty fishing nets.' 'Large numbers of seabirds killed as commercial bycatch largely unchanged.'

But when it comes to fish there is more than a gaping hole, for they do not even have that level of protection. There is no threat assessment for them and no protection under the Wildlife Act (apart from a handful of listed species). Just 98 marine species, out of 17,000, are managed under the quota management system, while impacts on other species are effectively unmanaged.

In parts of the Hauraki Gulf the situation is dire. Scallop beds have now been closed after 'destructive' fishing saw population numbers plummet. According to a NIWA report, scallop biomass in the Gulf had dropped from 776 tonnes in 2012 to an estimated 52 tonnes. In early 2022 Ngāti Manuhiri laid down a rāhui on scallops in the northern gulf.

The Gulf's fish stocks are also in decline, with crayfish 'functionally extinct'. Fishermen landing at Tairua were filmed with 'thousands' of Pink Maomao in their bins. The situation was even worse than expected, NZ Sport Fishing Council president Bob Gutsell said. According to Nick Shears on TVNZ's programme 'Troubled Waters', 'Kina numbers have got out of control, in the same way that possums have been allowed to get out of control on the land. They've grazed down a lot of the kelp forest. Currently we estimate that at a place like Hauturu-Little Barrier Island about 50% of the shallow reef is in kina barren. That's like taking half the forest off the top of the island.'

And if all that were not enough, climate change fuelled marine heatwaves over recent years continue to impact ecosystems including causing mass bleaching of sponges. And there can be no doubt who is responsible for another insidious pressure on marine biodiversity: the alarming volume of microplastics found in fish. MSc student Anita Lewis took sediment and shellfish samples from 180 km of the coast between Tauranga Harbour to Opotiki. She found that Tuatua, Cockles and Wedge Shells were full of tiny plastic particles that ranged in size from 5mm in diameter down to 150 microns, which are not visible to the naked eye.

So, what do we need to do to address this calamitous situation?

First, Raewyn points out, we need to appreciate that the future will not be the same as the past. We need to protect the 'homes' of our marine species, that is their habitats, by creating more marine protected areas, halting fishing methods that physically destroy seabed habitat, and reducing sedimentation.

Work is already under way to do this through the Sea Change Tai Timu Tai Pari Marine Spatial Plan. This was a collaborative plan initiated by the Hauraki Gulf Forum and others and jointly led by mana whenua, councils, and central government agencies. Stakeholders, including PMNT and mana whenua representatives, jointly developed the Sea Change Plan. Finalised and delivered to the government in 2016, it is a road map for turning around Gulf degradation. However, implementation has been exceedingly slow, although things are now starting to happen. A large part of the delay can be attributed to vested interests opposing change.

Kina barrens RAEWYN PEART

Maomao RAEWYN PEART

Snapper RAEWYN PEART

The government's response to the Plan proposes a network of marine protected areas to be implemented via a Hauraki Gulf Marine Protection Bill. These Highly Protected Areas are a new model of marine protection, a departure from existing marine reserves. Biodiversity objectives are to be developed in partnership with mana whenua, with provision for customary practices in accordance with those objectives. Active restoration and research are provided for, with regular monitoring against the biodiversity objectives.

Seafloor protection areas will exclude all activities which harm the seafloor, such as dredging, dumping, sand mining and damaging fishing methods. However, other fishing will be allowed.

These measures will have minimal impact on fishers. Only 1% (530 tonnes) of finfish, and 3% (4.47 tonnes) of crayfish will be affected. There was recently a 120-tonne reduction in crayfish quota due to stock collapse.

They will also have small impacts on recreational fishers with only 5.7% of the current snapper catch affected. This catch has seen a decline of around 27% due to other factors. In fact, there is likely to be overall benefits to fishers. Existing marine reserves are known to boost numbers of snapper and other fish outside their borders.

However, there are some serious omissions from the proposed legislation. Sea Change called for:

- By 2020 the withdrawal of bottom trawling and Danish seining from areas identified as being 'High' priority based on ecological importance.
- By 2023, the withdrawal of bottom trawling and Danish seining from areas identified as being of 'Medium' priority based on ecological importance.
- By 2025, the withdrawal of bottom trawling and Danish seining from the entire Hauraki Gulf Marine Park
- By 2018 ban the use of scallop dredges in areas less than 20m deep with the Hauraki Gulf Marine Park.
- By 2025, prohibit the use of scallop dredges within the entire Hauraki Gulf Marine Park

These are not in draft Hauraki Gulf Fisheries Plan. Trawling and Danish seining are to remain in 'trawl corridors' which may be extensive. Recreational, but not commercial, dredging is to be excluded.

A further issue negatively impacting the Gulf is sediment flows. Raewyn graphically illustrated this with images from the Long Bay-Okura Marine Reserve, where sediment was flowing from the adjacent land development. Such impacts are supposedly 'managed' under the Resource Management Act. 'How is this allowed to happen when council monitoring has shown the developer operates within its resource consent. Auckland Council says the pollution can't be stopped – it can only be managed under the RMA, which prompted one councilor to query the state of systems, both legal and technological, that are supposed to stop pollution.'

The Natural and Built Environment Bill currently before parliament is to replace RMA.

It sets mandatory environmental limits and targets. These need to be rigorous and deal with sedimentation issues including forestry impacts.

The second part of the RMA reforms is the Spatial Planning Bill which sets framework for spatially managing protection and development.

This is a critical time to show support as these proposals undergo public consultation.

- Submissions on Hauraki Gulf Protection Bill early this year
- Submissions on Hauraki Gulf Fisheries Plan now
- Submissions on new resource management Bills are closed but there is still an opportunity to let politicians know what you think

There is a need to counter the inevitable opposition from those who don't want to change.

But is this enough? Should we also protect fish like we do birds? The Government is reviewing the Wildlife Act so there is an opportunity to extend protection to marine life. Raewyn indicated this could be achieved by:

- Protecting *all* marine species as a starting point.
- Only allowing harvesting when we know enough to properly manage it
- If a stock collapses requiring it to go back under protection
- And requiring adequate enforcement to ensure the rules are complied with.

In her conclusion, Raewyn pointed to the need to stop seabirds and marine mammals being killed during fishing and posed some pertinent questions:

- Why aren't we aiming for zero bycatch?
- Should bycatch continue to be legal?
- Should fishers have a duty of care to avoid it?
- Should incidents incur fines?
- Should repeated instances result in cancellation of fishing permits or similar?

Following the examples of Te Urewera and the Whanganui River, she also questioned whether we should go further and give fish legal rights (legal personhood) thereby

- Enabling fish communities to sue if their habitats are destroyed
- Reflecting te ao Māori where humans are part of a wide community of species
- Acknowledging human responsibilities to marine life.

Conservation legislation in New Zealand is under review. This includes reform of the Wildlife Act 1953 which, as **Keith Woodley reports**, is somewhat overdue.

The Wildlife Act

Juvenile godwit KEITH WOODLEY. Catching and banding protected birds requires a permit, according to the Wildlife Act.

1953 was an eventful year. Ed Hillary and Tenzing Norgay reached the summit of Everest, immediately prior to the coronation of Queen Elizabeth II. There was a worker uprising in East Germany. Dwight Eisenhower was sworn in as 34th president of the United States, Stalin, Hank Williams, and Dylan Thomas died, and Xi Jinping was born. The US and North Korea signed an armistice to end the Korean war. British physicist Francis Crick and American biologist James Watson discovered the double-helix structure of human DNA. The first transistor radio was developed

In New Zealand, Godfrey Bowen managed 456 full-wool ewes in nine hours to set a world sheep-shearing record. The Queen arrived for a royal tour, the day before the Tangiwai railway disaster. Vice-President Richard Nixon became the most senior United States leader to have visited New Zealand. Auckland became the first city in New Zealand to introduce parking meters. And the New Zealand parliament passed the Wildlife Act.

Seventy years on the Act is really showing its age. But so is more recent legislation such as the 1987 Conservation Act. In fact, there is a whole raft of legislation that has become increasingly problematic to conservation managers. In a 2019 discussion document on proposals for a biodiversity strategy for Aotearoa New Zealand, the Department of Conservation described the legislative framework for conservation as "overlapping, contradictory, contested, ineffective", "slow" and "outdated", and the legislative regimes as being "not able to adapt well to the current and future pressures they need to respond to".

The Wildlife Act 1953 (the Act) is the core species-focused piece of legislation in Aotearoa New Zealand. It deals with the protection and control of wild animals and birds (including indigenous and introduced species) and the management of game. The Act determines which species are classed as wildlife and regulates many human interactions with these species. Wildlife, as defined in the Act, includes both native and introduced species of mammals, birds, reptiles, and amphibians. There are also some marine species (such as corals, sharks, and fish) that are declared to be 'animals' for the purposes of the Act.

The level of protection afforded to a specific species can vary. The default setting is absolute protection, with variations to this set out within schedules to the Act. The Act creates a tiered system with different levels of protection for different species. Most wildlife is absolutely protected, which means that it may not be hunted, killed, harassed, or possessed without specific authorisation, and may not be sold. Some species are partially protected (protected but not absolutely). These species are listed in Schedules 1–4 of the Act. They may be hunted or killed in certain circumstances. In addition, species in Schedule 5 are not protected. (see above)

The Act asserts that the Crown owns all wildlife, except unprotected species, including their feathers, bones, eggs etc. It provides for game bird hunting,

Schedules to the Wildlife Act include:

Schedule 1: lists wildlife that are declared game (e.g. pheasant, quail, black swan, pūkeko, partridge and more controversially shoveler, paradise shelduck (putangitangi) and the critically endangered grey duck (parera)). Fish and Game regional councils set the conditions, notifications, and seasons for hunting these species under Part 2 of the Act.

Schedule 2: lists partially protected wildlife (e.g., silvereye, little owl and brown skua). These animals may be hunted or killed by occupiers of land where they cause injury or damage to land and property (section 5).

Schedule 3: lists wildlife that can be hunted or killed subject to conditions (e.g. pheasant, quail, mallard duck, but also species such as sooty shearwater and weka in certain locations).

Schedule 5: lists wildlife that is not protected (e.g. possum, cats, ferrets, hedgehogs, rats, wallaby, blackbird etc)

Schedule 6: lists animals declared to be "wild animals" under the Wild Animal Control Act (e.g. deer, chamois, goat, tahr and pigs).

Schedule 7 and 7A: list invertebrates and marine species declared to be animals for purposes of protection.

www.eds.org.nz/resources/documents/reports/conserving-nature-conservation-reform-issues-paper/

which is managed by Fish and Game councils. Game birds include 13 species listed in Schedule 1 of the Act. The Councils produce a notice each year setting out the season and associated conditions that hunters must comply with. The Act also provides for the establishment and management of wildlife sanctuaries, wildlife refuges, and wildlife management reserves.

The Act was very much a product of its time. According to Hansard, most of the Parliamentary debate on the Wildlife Bill was centred around how 'game' species were to be managed and protected. It was described as 'An Act to consolidate and amend the law relating to the protection and control of wild animals and birds, the regulation of game shooting seasons, and the constitution and powers of acclimatisation societies.' The societies called for more powers to ensure people paid their hunting licences, and that farmers could not profit from providing access. A more highly regulated system would generate income for the societies.

In 2021 The Environmental Defence Society published Conserving Nature; a conservation reform issues paper. Funded by the Department of Conservation the report examines the entire conservation system. This includes the key statutes, policy and planning documents, and the system of granting concessions.

Aotearoa New Zealand is a world leader in threatened species management, and applies substantial effort to conservation, yet our biodiversity continues to decline. The Department of Conservation, in its 2019 report to the United Nations Convention on Biological Diversity, states 4,000 species are threatened or at risk of extinction.

The EDS reports that 'political and legal inertia, delays in implementing protection, conflict between stakeholders, limited coordination amongst agencies and lengthy legal procedures are exacerbating the already complex management of species'. As one study concluded, if we are to address this continued decline 'the next 30 years of conservation (will) require new tools.

EDS interviewed a wide range of people who have engaged with the system including those from Conservation Boards, the Conservation Authority, the Game Animal Council, Fish and Game councils, iwi/hapū, environmental NGOs and local councils, as well as academics and broader stakeholders. Of all the conservation legislation currently in place, the Wildlife Act was almost universally identified by interviewees as the most problematic, the least fit for purpose and the most difficult to integrate within a modern conservation management approach.

Recent court decisions have underlined deficiencies in the Act. For example, in 2019 the Supreme Court overturned a Court of Appeal decision relating to shark cage diving on Rakiura Stewart Island, and whether it constituted disturbance of wildlife. The lack of clarity in the case arose largely due to a mismatch of wording between two sections of the Act, as 'frequent amendment of the Act has caused it to lose some coherence'. DOC has noted that the court's definition of 'disturbing' will have wider implications for the types of activities that can and cannot be authorised under the Act. *www.courtsofnz.govt.nz/assets/cases/2019/mrse.pdf*

So, a review of all conservation legislation is to be welcomed. Although it will not be straight forward.

According to the EDS report: 'Almost all the key areas of conflict in conservation management revolve around the problem of values. And these issues are political issues. All the legislation and policies in place were developed at a time when we had quite different values as a nation. They were developed at a time when there was a focus on incentivising land use for primary

CONSERVATION ACT 1987

Legislation governing the conservation sector includes Marine Reserves Act 1971, Marine Mammals Protection Act 1978, Biosecurity Act 1993, Reserves Act 1977, and National Parks Act 1980. But the most significant one is the Conservation Act 1987, which established a series of institutions (DOC, the Conservation Authority, Conservation Boards and Fish and Game councils) and central planning mechanisms (Conservation General Policy, Conservation Management Strategies and Conservation Management Plans) that operate within the conservation framework. It also sets out a regime for the regulation of activities within conservation land and waters including the grant of concessions.

The Act's definitions emphasise "preservation and protection" and maintaining "intrinsic values" rather than sustainable use (although the definitions of both preservation and protection are qualified by the term, "so far as is practicable"). The definitions also apply more broadly than to just biota and include geological features and landscapes as well as historic places (such as archaeological sites and historic buildings and structures). The importance of people being able to appreciate natural and historic areas, and enjoy them recreationally, is recognised as is the interest of future generations.

Interestingly, the more nature-focused term, 'nature conservation', which recognises "intrinsic values" and directs "specific regard" to "indigenous" flora and fauna is only employed twice in the Conservation Act: in relation to the functions of the Conservation Authority and selection criteria for members of Conservation Boards. This means that the term is of minimal relevance to the work of DOC and that the Conservation Authority operates under a more nature-based and indigenous-focused conservation lens than the Department.

Rather strangely for conservation legislation, the things to be preserved, protected, and maintained are termed "resources" implying that their value is in their use. At the time the Act was passed, conservationists raised concerns about the reference to resources and omission of direct reference to the protection of flora and fauna in the core definition of conservation. Some of our interviewees echoed this view. During our interviews we found that the underlying principles of the Conservation Act, and the extent to which protection of conservation land should take priority over its economic use, remains contested. Interviewees expressed a diverse range of perspectives on what the purpose of the Conservation Act should be. For example, we were told by some that the current regime is too focused on protection, particularly when it applies to a diverse array of conservation land types and values. Instead, DOC should be empowered to apply a "broader lens" to enable greater consideration of the "social, cultural and economic context and outcomes". But others felt that the focus of the system needed to be more strongly on "preservation", and that despite recognition of intrinsic values by the Act, these were too often compromised to enable activities such as tourism.

Deidre Koolen-Bourke and Raewyn Peart. Conserving Nature: Conservation Reform Issues Paper. 2021. Environmental Defence Society.

production. But as values change, we need to move and assist to incentivise those changes.'

Little mention was made of the need to protect indigenous species, other than to note that historically the "primary objective" under the Animals Protection and Game Bird Act 1921 had been the protection of game birds, but that there was growing public opinion over the 'importance of the protection of native bird life'.

The principal advocate for increased protection of native species during this era was Forest and Bird. Hansard records some of Forest and Bird's reservations about the legislation, including the treatment of different species within the schedules to the Act, in particular the lowered protection accorded some native species (under schedule 5) and higher degree of protection accorded introduced species. They were disappointed that the offences section in the legislation grouped together the hunting or killing of 'absolutely protected wildlife or any game' to provide the same penalty, thereby making no distinction between the unauthorised killing of rare native species and common game.

Management of threatened species is another area where concerns have been raised. Under its Threat Classification System, DOC assesses the threat status of taxa, using a set of criteria to rank each from Nationally Critical and Nationally Endangered to Nationally Vulnerable and Recovering. These then inform policy and the setting of management priorities. However, the EDS report notes that these classifications are 'non-statutory and are not referred to in primary conservation legislation. Neither is the threat classification system incorporated into the Conservation General Policy which simply refers to threatened indigenous species in a general sense and states that management objectives 'should' be incorporated into Conservation Management Strategies and conservation management plans 'where necessary.'

'New Zealand remains significantly out of step with international practice for threatened species protection in having no dedicated threatened species legislation. Although species are classified according to their threat level, there is no formal listing process, and no statute that elevates the protection needs of listed species. There is also no legal requirement to develop a management or recovery plan for threatened species (or their habitat) or for ongoing monitoring. In turn, there has been little funding provision to enable these processes to occur.'

For her PhD thesis in 2014, PMNT member Dr Pip Wallace investigated the state of New Zealand birds and analysed the response of New Zealand law to the agents of decline. A particular focus was the degree of care that is applied to protecting birds through the law and related planning instruments. She found that 'although at times strongly beneficial, …the arrangements made by the law are wanting.' Deficiencies could be separated into three classes: the problem of standard, the problem of consistency and integration, and the problem of implementation.

'These problems constrain the protective force of the law. Fragmentation and lack of a strong and consistent protective standard limit protection of birds against competing social, economic, and cultural factors. The law requires revision. Species protection calls for particular attention.' Her research demonstrates how the Wildlife Act standard of absolute protection of birds, is in many ways compromised by 'statutory exception, statutory defences, lack of clarity as to the definition of hunting and killing and habitat modification, lack of clarity surrounding incidental take, lack of implementation (particularly of authorisation of take pursuant to section 53), being outdated and an associated lack of process, being overshadowed by the RMA, a weak regulatory community and being partnered by policy and plans which do not provide consistent and strongly protective policy guidance.

Greater strategic planning and integration is required, particularly regarding human development. Interrelationships between the statutes, including that between the Wildlife Act 1953 and the RMA 1991, require addressing. Inadequate implementation of existing law compounds these matters, and the research identifies a range of aspects where gains for species could be made. It concludes with a series of recommendations directed at the identified problems.

Pip Wallace presents a clear vision of what needs to happen.

'A choice to strengthen the law to protect birds undoubtedly means loss of some opportunity to humans. In recognising this problem, the recommendations suggest the use of exceptions set to a high threshold. In addition, they urge stronger planning methods reliant upon robust evidence bases, capable of capturing cumulative effects throughout the range of birds, to enable landscape level planning for co-existence. Where these are unavailable, the law should resort to strong, precautious, and protective standards in the interim.'

The review process: What happens next?

According to DOC a 'first principles' approach is being taken. 'This means that we are not looking at quick fixes to improve the Act but are instead focusing on the fundamental problems. Once we know what the big picture problems are, and the aspirations New Zealanders have for our species, we can then work out how to address them. The review will be progressed over the next 12 months. During this time, we will be looking at:

- The challenges people are experiencing with the Act
- What outcomes we want our species legislation to deliver
- How we get from where we are now, to where we want to go.

In 2023 we will report back to the Minister about what we have heard and provide advice about the review on aspirations for the future and recommendations on the next steps.'

To assist the process a Strategic Oversight Group has been established to provide conservation knowledge and advice. The 12 members bring diverse skills and expertise in te ao Māori, conservation, law, environmental policy, tourism, science, game animal management and governance.

Members of the Strategic Oversight Group were nominated by conservation boards, the Tourism Industry Association, Fish and Game, the Game Animal Council, and the Environmental Defence Society. Members are not representing their organisations but have been appointed based on their individual skills and expertise.

www.doc.govt.nz/about-us/our-role/legislation/conservation-law-reform/review-of-the-wildlife-act-1953/

GODWIT TIMES

with Emma Salmon

Tēnā koutou

Welcome back to the Godwit Times!

Wow! What a crazy summer so far. Hopefully, you managed to get out and enjoy the sun. I certainly enjoyed eating all those juicy worms.

We've learnt a lot about different shorebirds that fly to Pūkorokoro, but what about the other critters that live in the mudflats?

Have a go at the maze below and help me find a marine bristle worm to eat. They are my favourite! Did you know that these worms have survived five mass extinctions! Wow!

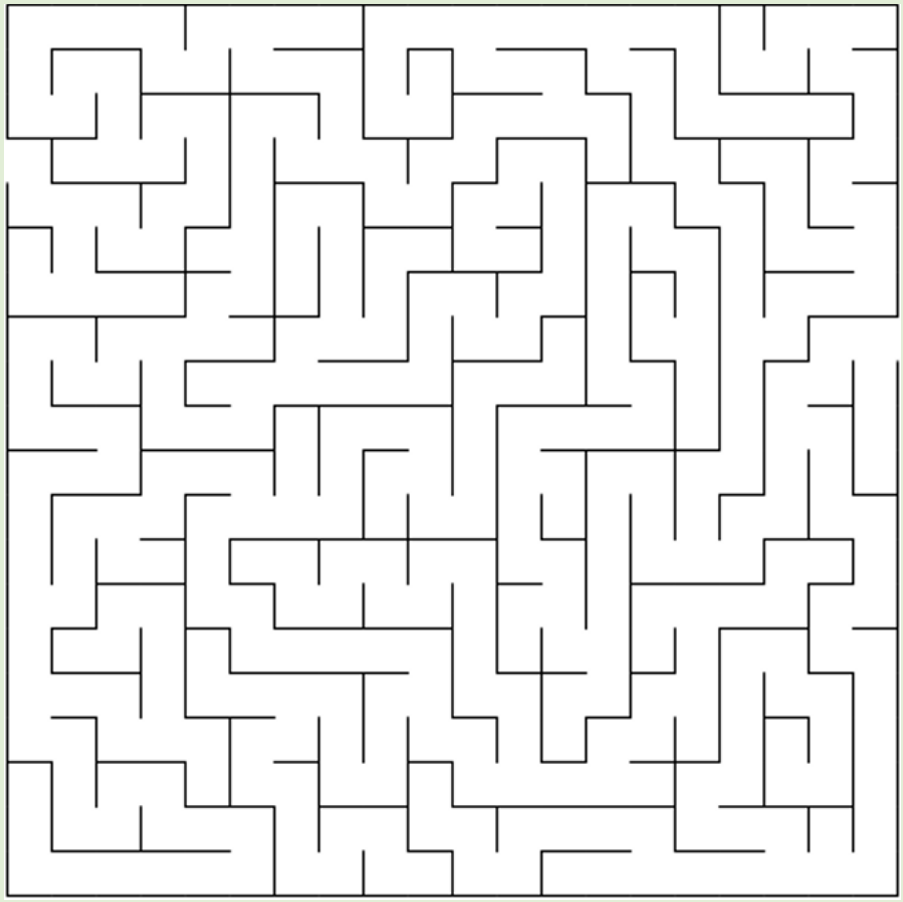
Don't forget if you have been on any birding adventures or have a cool story/artwork about birds, just send Godfrey an email godfreygodwit@shorebirds.org.nz

See you at Pūkorokoro!

Ngā mihi,

Godfrey

Can you help me find my food?



Pūkorokoro Miranda Naturalists' Trust

The Shorebird Centre

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RD 3 Pokeno 2473
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admin@shorebirds.org.nz
www.shorebirds.org.nz
www.facebook.com/MirandaShorebirdCentre

Manager: **Keith Woodley**

Centre Assistant: **Chelsea Ralls**

Pūkorokoro Miranda Naturalists' Trust Council

Chair: **Gillian Vaughan**

Deputy Chair and Banding Convenor: **Adrian Riegen**
riegen@xtra.co.nz
09 814 9741

Secretary: **Trish Wells**
Trishwells1@gmail.com
027 268 8057

Treasurer: **Kevin Vaughan**
kandjvaughan@gmail.com
09 817 9262

Council members: **Ann and Ray Buckmaster, Wendy Hare, Trudy Lane, David Lawrie, Bruce Postill, Bob Rigter**.

Magazine

Pūkorokoro Miranda Naturalists' Trust publishes Pūkorokoro Miranda News four times a year, in print and digital editions, to keep members in touch and provide news of events at the Shorebird Centre, the Hauraki Gulf and the East Asian-Australasian Flyway. No material may be reproduced without permission.

Editor: **Keith Woodley**
keith@shorebirds.org.nz, 09 232 2781
Layout and production: **Bernie Cornford**

See the birds

Situated on the Firth of Thames between Kaiaua and the Miranda Hot Pools, the Pūkorokoro Miranda Shorebird Centre provides a base for birders right where the birds are. The best time to see the birds is two to three hours either side of high tide, especially around new and full moons. The Pūkorokoro Miranda high tide is 30 minutes before the Auckland (Waitematā) tide. Drop in to investigate, or come and stay a night or two.

Budget accommodation

The Shorebird Centre has bunkrooms for hire and two self-contained units: Bunks cost $20 per night for members and $35 for non-members.

Self-contained units are $90 for members and $135 for non-members. For further information contact the Shorebird Centre.

Become a member

Membership of the Trust costs $50 a year for individuals, $60 for families and $75 for those living overseas.

As well as supporting the work of the Trust, members get four issues of PMNT News a year, discounts on accommodation, invitations to events and the opportunity to join in decision making through the annual meeting.

You can join at the Centre, pay via our webpage (www.shorebirds.org.nz), by direct credit to bank account 02-0290-0056853-00 or call the Centre with your credit card details. Contact admin@shorebirds.org.nz for further information.

Bequests

Remember the Pūkorokoro Miranda Naturalists' Trust in your will and assist its vital work for migratory shorebirds. For further information contact the Shorebird Centre.

Become a Volunteer

There's always a need for volunteers to do a variety of jobs including helping in the shop, guiding school groups, meeting visitors at the hide, working in the Centre garden, joining in the restoration project at the Findlay Reserve, helping with the Shorebird Census and lots more. If you're interested chat with the team at the Centre to see what will best suit you.

PMNT's work is made possible by the generous support of our sponsors

FOUNDATION NORTH
Te Kaitiaki Pūtea ō Tāmaki ō Tai Tokerau

Waikato Regional Council
Te Kaunihera ā Rohe o Waikato

Trust Waikato
Te Puna o Waikato

Department of Conservation
Te Papa Atawhai

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Te Kāhui Mātai Manu o Aotearoa

Ron & Edna Greenwood Environmental Trust

Living Water

Fonterra Dairy for life

Department of Conservation
Te Papa Atawhai

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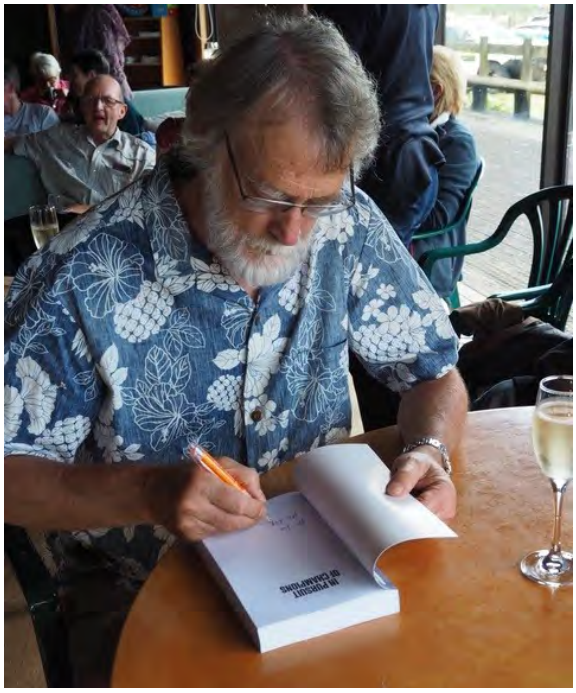
In Pursuit of Champions

Assembling the diverse material that became *In Pursuit of Champions* was a complex task. The history of PMNT, its work and its people, the operation of the Shorebird Centre and its events and programmes, as well as our extensive involvement with the East Asian-Australasian Flyway are all part of the story. There are also elements of memoir, accounts of my long tenure as Centre Manager. Following the book's launch in November there have been steady sales. It is gratifying to report that it has been very well received, particularly welcome being positive comments from long-time PMNT people. For it is their story as much as anything else.

"Compelling reading…. and a most accurate summary of the PMNT and the Flyway.'

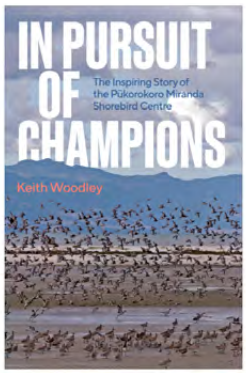
'All the early people…. will be or would have been well pleased.'

'I very much enjoyed reading your book because you had made it such an easy read; and so much was familiar!'

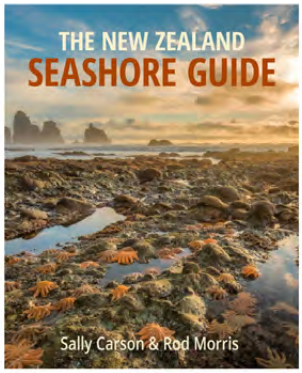


Keith Woodley– In Pursuit of Champions book signing

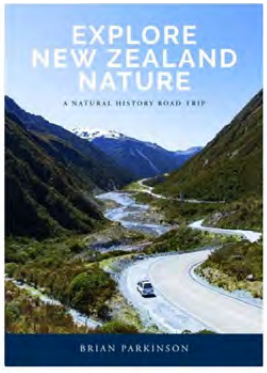
Great Reads from the Shorebird Centre Shop



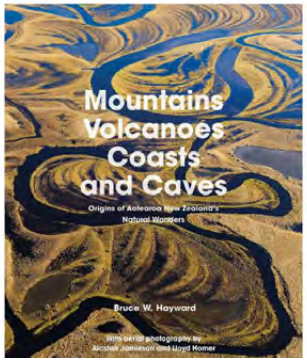
In Pursuit of Champions
Keith Woodley – $40
www.shop.shorebirds.org.nz/shop/in-pursuit-of-champions/



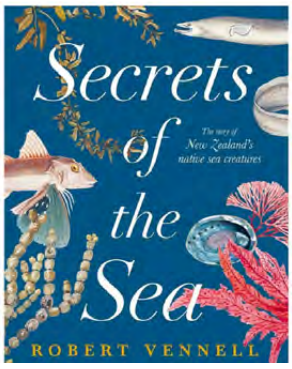
The New Zealand Seashore Guide
Sally Carson & Rod Morris – $49.90
www.shop.shorebirds.org.nz/shop/the-new-zealand-seashore/



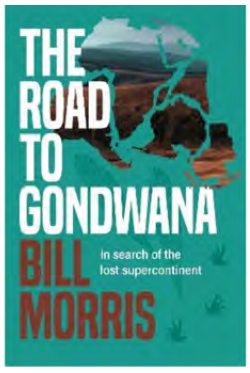
Explore New Zealand Nature
Brian Parkinson – $34.90
www.shop.shorebirds.org.nz/shop/explore-new-zealand-nature/



Mountains Volcanos Coasts and Caves – ***Bruce W. Hayward*** – $69.90
www.shop.shorebirds.org.nz/shop/mountains-volcanoes-coasts-and-caves/



Secrets of the Sea
Robert Vennell – $55
www.shop.shorebirds.org.nz/shop/secrets-of-the-sea/



The Road to Gondwana
Bill Morris – $39.90
www.shop.shorebirds.org.nz/shop/the-road-to-gondwana/

If you can't make it to the Shorebird Centre shop. Visit our amazing online shop at www.shop.shorebirds.org.nz/
Send an email to shop@shorebirds.org.nz. Ring 09 232 2781 and chat to the friendly team
We'll be happy to help

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