

Kāpiti-Mana Forest and Bird Newsletter

August 2024

Specific links between biodiversity loss and climate change

I have talked about the dual emergencies of climate change and biodiversity loss before in this column. I have even said that they are interconnected but I have never identified how. When I wrote a submission to the Ministry for the Environment, I wanted to make the connection to show that a group concerned with biodiversity had a valid reason to want climate warming stopped as soon as possible.

There were some situations I knew about such as the issue of plants and animals shifting towards the poles or higher in altitudes to remain in the temperature range that suited them. Those species which live on mountains have the unfortunate situation that mountains have a smaller area with altitude so their range decreases and of course eventually the mountain top is reached and there is nowhere to go. These species also cannot descend the mountain to go to a higher one as humans might in a similar situation. Some species have been isolated for so long from nearby mountains that they are becoming separate species. There is a related problem that warming climates allow the invasion of disease vectors, weeds and predators into previously inaccessible locations so some native species have disease, competition and predation to cope with as well.

And of course, there are weather events that may decrease the number of a species that does not have sufficient time to recover before another weather event arrives.

But off-hand I could not think of specific links between climate change and biodiversity loss. Then I came across this.

From Ministry for the Environment & Stats NZ (2023). [New Zealand's Environmental Reporting Series: Our atmosphere and climate 2023](#) (shortened by me).

- Red-billed gulls, yellow-eyed penguin and blue penguin populations decline with increasing sea surface temperature due to less food being available.
- Sooty shearwater and other shore birds have declining populations because changing ocean currents and rising sea levels have led to a loss of nesting sites.
- Molluscs, crustaceans and corals have difficulty growing and maintaining their calcium-based shells and skeletons due to ocean acidification.
- Stream invertebrate communities are shifting their range towards higher latitudes in response to climate and environmental changes - habitat shift.
- Kiwi, whio (blue duck) and North Island kōkako have limited ability to move into new cooler areas.
- Tuatara have less female offspring due to warmer weather.
- Rock wren are predated because invasive species can increase their altitudinal range due to warmer weather.
- Bull kelp became locally extinct in some locations due to the 2017-18 marine heatwave and a non-native kelp took its place at some locations.
- Crayfish and snapper declines due to warmer seas (and over fishing) allow kina barrens to form.
- Native forest birds and long-tailed bats decline because warmer temperatures promote more frequent mast years followed by greater numbers of predators.

- Canterbury mudfish and kiwi are affected by drought – mudfish by drying streams, and kiwi by harder ground which they cannot penetrate for food.
- Scree skink populations in the Canterbury high country decreased by 84% due to flooding.
- Breeding sites of inanga and bird nesting habitats on braided rivers have been negatively affected by flooding.
- Storms increased water turbidity of coastal waters reducing the fishing success for visual feeders such as shags, gannets and penguins.
- Our remaining wetlands (~10%) are becoming more susceptible to fire.

Our biodiversity was already under stress and that was primarily due to habitat loss. Now climate change is increasing that threat in many different ways and there is little we can do to alleviate it. The climate will continue to warm until we reduce our emissions to net zero. Only when we reduce emissions below zero - when we are producing less carbon than is being

Kāpiti-Mana Tī Kouka Award

Sharyn Gunn (right) received her Tī Kouka Award at our August public meeting. The Forest and Bird award was given to Sharyn for running the Kiwi Conservation Club (KCC) activities for the children of Upper Hutt, Lower Hutt, Wellington and Kāpiti-Mana branches for many years. She is seen here with F&B board member, Kate Littin (also chair of F&B Wellington branch) who presented the award..

Next Public Meeting: 16 October 2024 in Waikanae

Our next speaker will be Yolande Brophy from Te Rito Nursery about an innovative wetland restoration in Otaihanga.

We meet at 7:10pm for a cuppa at the Waikanae Community Centre, 28-32 Utauta Street, Waikanae. Proceedings begin at 7:30pm and are usually done before 9pm. The centre has good parking and is close to the railway station.

sequestered (in NZ) mainly by native ecosystems – will the temperature start to reduce.

You can see from this that 1.5° C may allow a reasonable proportion of people to survive but many species will be lost. In New Zealand, if these first observations are a good representation, we could see the extinction or rarity of many native forest birds but especially North Island kōkako, whio (blue duck), kiwi, long-tailed bats, birds that nest in braided rivers, Canterbury mudfish, inanga; sea birds including red-billed gulls, sooty shearwater, yellow-eyed penguins, blue penguins; high country birds like rock wren, tuatara, some stream invertebrates, some molluscs, crustaceans and corals, bull kelp, crayfish, snapper, and scree skink – to name a few.

There are two further comments I would like to make. The world is on track to exceed the 1.5°C target and New Zealand's planned Second Emissions Reduction Plan is a sham that New Zealanders should feel ashamed of - so we are not playing our part.

Russell



Love Bittern/Matuku-hūrepo

Wendy Ambury was the speaker at our most recent public meeting (on August 21) and gave us a wonderful talk on matuku-hūrepo / Australian bittern, one of our amazing, cryptic, wetland birds.



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- Wendy has been housesitting in Paekākāriki and has used this opportunity to get to know the habitat around the Wellington region and to identify where bittern could/should/do thrive. With plenty of dune/wetlands, and even more areas that were there before development, the coastal areas of our rohe should be ideal. Being very cryptic (pretty impressive for a bird that can be 90cm tall), it is hard to know how many and where they are, so bitterns are currently listed one step from critically endangered but there isn't a huge amount of evidence to verify this. So Wendy and conservation scientists are

asking for volunteers to participate in the [Great Bittern Muster](#). This requires a minimum of an hour (30 minutes either side of sunset) at a defined location. Each site will hopefully have nine hours of monitoring over the muster. You can find out more and sign up by registering online at the Love Bittern website: <https://lovebittern.com/> where you can also learn more about bittern.

Some key take-outs of what bitterns need include: **Right mix of plants** - vast areas of dense emergent reeds or rushes, little or no trees, **Connected habitats** - connect habitats to the sea and to each other to create food corridors, **Access** - could the edges of drains or water bodies could be altered/rebattered to provide walk in access for bittern so they can find the optimal depth of water even as levels fluctuate. N.B. check with local councils to find out what's allowed, **Indicator species** - eels of all sizes and crake can be used as good indicator species that you're on the right track if you don't yet have bittern. Fernbirds are a good indication that predator control is working.

If you build it they will come...

Calendars & Diaries still for sale

Sales of the New Zealand Conservation Diaries and Calendars are our main branch fundraiser, and they are on sale now. It seems early, but for only \$18 a calendar, and \$25 a diary (both excellent quality with photos curated by Craig Potton) this is a great way to be prepared for upcoming birthdays and even Christmas. Our treasurer, Peter Kentish, is happy to deliver in our area

and can be contacted on 02102770520 or pk2003_595@hotmail.com (note there's an underscore between the 3 and 5 in his email address). He'll take cash, or you can pay directly into our branch bank account: 38-9020-0171967-00 Forest and Bird Kāpiti-Mana Branch (Ref: Your name and eg. 2C1D) but don't forget to let him know you've paid or he won't know where to deliver them to.

SPRING STARTS ON SUNDAY

Black-fronted Dotterel

First identified in NZ in 1958, this small plover (*Elseya melanops*) is about the size of a sparrow with longer legs, striking black mask and chest band, bright red beak and eye ring. It is thought to have self-introduced to New Zealand from Australia. It is a sweet, active little bird, usually found at estuaries (like Ohau, Otaki and Waikanae), or coastal ponds and lakes.



Photo credit © Helen Duncan

This one was photographed at the Marines' Wetland in Queen Elizabeth Park where I was doing a bird count and ran into bird photographer Helen Duncan. She agreed to share her photo which is a lot better than what I could achieve with my cellphone!

They eat worms, larvae and small crustaceans, evidently about 1 every 1.5 seconds, and are entertaining to watch. Breeding season is August - October so who knows, we might even get some chicks if this one can attract a mate. Their population is increasing in New Zealand (they are already abundant in Australia). Unfortunately this is not true for the New Zealand Dotterel nor for the Banded Dotterel which are also found in our area, but are likely to go regionally extinct due to human-related disturbance. Remember this when you're in their habitat.

Inspired by Sanderson Project Update

You may remember this project was supported by K-M F&B and 4 other local organisations. It started as 6 climate change projects but developed into 12 projects.

Project 1 Grow and plant 1000 tōtara in Kāpiti. We collected seedlings and they were grown to planting size by Te Rito Gardens over a two year period. Most were planted on the sand dune to the west of Whareroa Stream in QEP at 4 metre spacings. The project is complete.



Project 2 Weed and plant Waikākāriki Wetland (between old SH1 and the railway just south of Paekākāriki, design, build and install a plaque celebrating Captain Val Sanderson and organise and run a F&B/Paekākāriki event as part of the F&B centennial celebrations with the track through the wetland named Sanderson Way. This project was successfully completed.



Project 3 Plant a five hectare area with pioneer species. The site, size, contractor and method all changed. The new contractor planted seeds in divots over 2.2ha of QEP. This project is still running outside of the overall project timeline of 3 years.

It is not very successful so far, but the contractor (Red tree) has given a guarantee of 5000 plants per ha and 12 species. The project will not end until 2026.



Project 4 This involved riparian planting on private land in Emerald Glen. MOUs were signed with landowners to somewhat secure plantings. Plants were bought and planted. All are doing well. One owner has a significant stream passing through their property as well as wetlands. We increased our contribution to this owner and a reasonable sized wetland and riparian planting have resulted. All waters flow into QEP improving water quality. This project is now complete.



Project 5 This project (rewetting the peat wetlands of QEP) has yet not been successful and I will update you on it next month.

Project 6 Whareroa Guardians wanted to plant a 1 hectare wetland in Whareroa Farm Reserve. Plants were bought from Te Rito and planted and the area is beginning to look like a wetland. The project is complete

Project 7 We were so pleased with project 1 that we ordered a second lot of 1000 tōtara one year later. They were delivered in June this year and are all planted - mainly in QEP.

Project 8 We decide that planting akeake between the tōtara of project 1 would shelter the slower growing tōtara. We collected seed, had it grown on by Awapuni nursery and received 900 seedlings 1 year later. They are all planted and the project is complete.

Project 9 Whareroa Guardians identified a smaller wetland that they wished to plant out. We agreed and that project is now complete.

Project 10 We had got used to planting an extra 1000 plants each year and knew that 1000 kahikatea would not go far in QEP, so we collected seedlings and they are being grown by Te Rito Gardens. They will be planted in the winter of 2025.

Project 11 We decided on a third lot of 1000 tōtara. They are also being grown at Te Rito and they will be planted 2026.

Project 12 The wetlands of QEP are recovering after farming ceased but the normal range of wetland plants don't exist there. To really restore those wetlands, we needed to identify peat-loving wetland plants, collect or buy them, grow greater quantities and plant them in the wetlands. For this we allocated a small amount of money remaining in the overall project. This project is going well but will be ongoing.

To sum up, we have completed seven projects successfully, (1, 2, 4, 6, 7, 8 & 9), three will be completed by 2026, (3,10 & 11), one is ongoing (12) and I will tell you about project 5 next month.

Listen in...

Predator Control 101- Tips & Tricks

On 12 August, on RNZ, Jesse Mulligan did a great interview with Cam Speedy of Predator Free NZ who offered some sound advice and good tips. You can listen here: Jesse Mulligan interview with Cam Speedy. Lots of practical trapping advice.

Listen in on Radio New Zealand (27 min):

<https://www.rnz.co.nz/national/programmes/afternoons/audio/2018950805/expert-feature-predator-control-101>

Get involved

The Great Matuku Muster

Help count Bitterns to conserve them. Register ideally before 12 September <https://lovebittern.com/2024/06/06/the-matuku-muster/>

When completing the volunteer form, you can suggest a likely place to monitor bitterns if you want to, or Wendy will coordinate volunteers to the prime spots to monitor.

Branch Publicity Officer

Kāpiti-Mana F&B needs a publicity officer to help us improve our presence – get in touch if you can help. Details below.

Join our Committee

Current committee members are at capacity. We could do so much more if we had more people to share the load. Can you help?

Index of F&B K-M Articles

You can search the recent articles here: <https://www.forestandbird.org.nz/resources/index-articles-kapiti-mana-newsletters>

Re Attracting Birds

A few people have asked why sugar (not honey) water for the birds. Sugar water more closely mimics nectar, and honey the honey encourages more microbes, and not all of them are good for birds (you might kill them). Which reminds me, it's very important to keep your bird feeders and bird bath clean too, to stop disease.

Joy Glasson contributed this photo of tauhou enjoying a block of dripping – every beakful.



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Your feedback on this newsletter would be most welcome as would contributions to future newsletter.