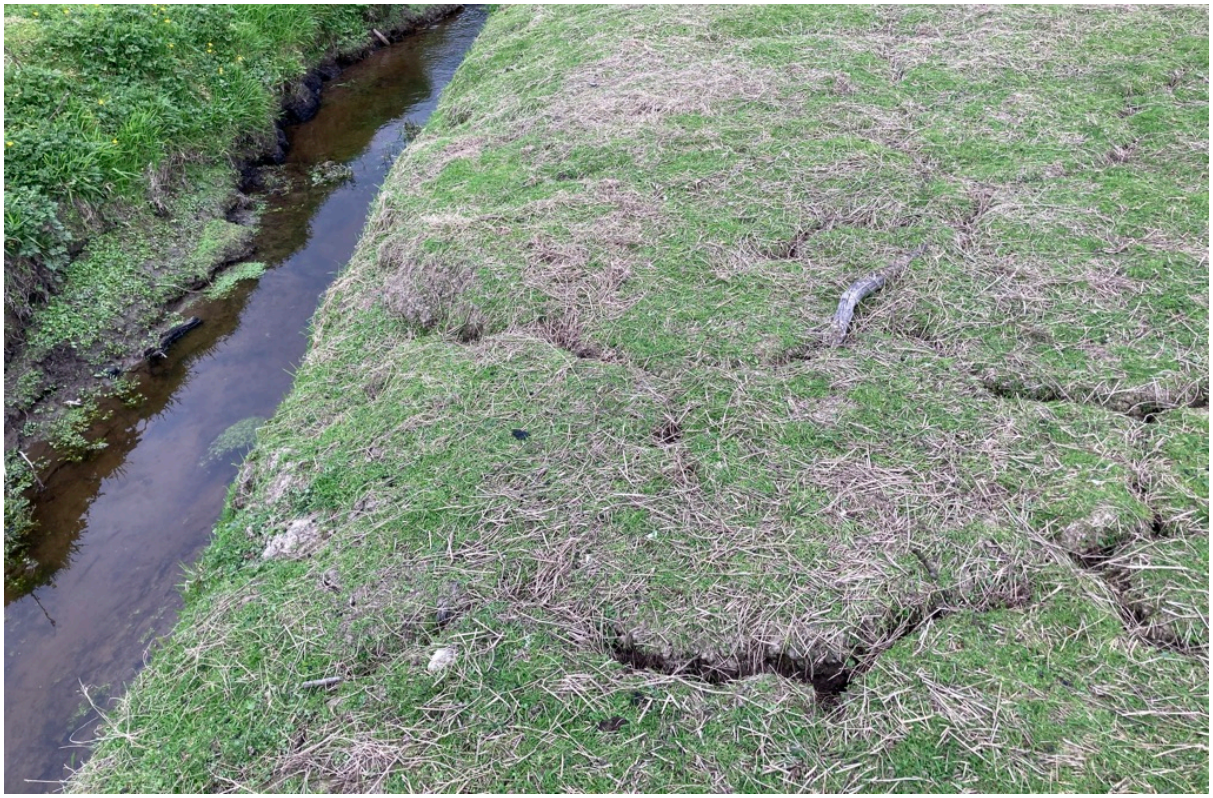
Kāpiti-Mana Forest and Bird

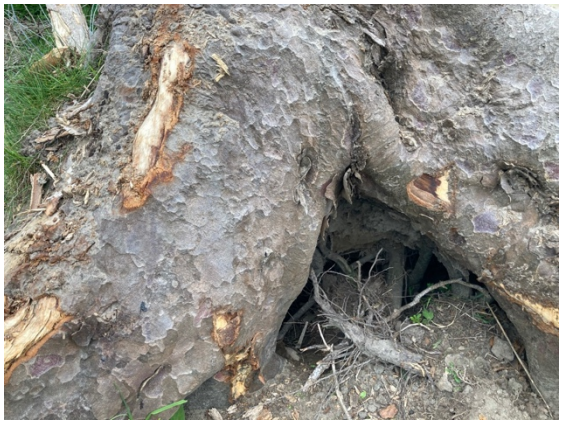
Newsletter October 2021

Chairs opinion. Thirty years of Blah Blah Blah



The drain above and the peat beside it, cracking as it dries and releasing carbon dioxide is a residential development site in Kāpiti.

As I walked around the peat piles, looked at the pile of native tree trunks, Greta Thunberg's address to world leaders "Blah blah blah" came to mind.



It appears to me we are still doing the Blah blah blah for climate change.

Labour subsidised fuel efficient cars but said they will have a cup of tea over wetlands. Double cab utes are selling like hotcakes because they will soon have a non-fuel-efficient penalty on them. Kāpiti's leaders have no mitigation plans for climate change in

their long term plan. If you have home solar power, power companies pay you for power you export, about a quarter of what you pay for power you import from them, and then they sell your exported power to your neighbour for 4 times the price. Air NZ just cannot wait to get us all travelling the world again. The price of a tonne of carbon dioxide is $46.00. What else could you get a tonne of for $46.00?

The issue for me is that when we/they take these actions, the repercussions go on for years. The ICE double cab utes will be with us for 15 or more years. The peat will continue to emit. Sequestering wetlands will cease to sequester. New houses will use gas hot water and heating instead of electricity, the exhaust fumes from planes will fill the skies when we resume our holidays as soon as we get this nasty virus under control.

If we transition early, It will be an inconvenience, and less profit for some, and higher costs for all of us, but is there any other way out? If we don't transition early, we will have to commit ourselves to having to make rapid and deep cuts that will really hurt.

Until we do take measures, the environmental cost and the cost to those caught up in weather events; flooding, storms, droughts, extreme heat events, and the follow-on effects: fire, crop failures, slips, power outages, water shortages will continue for years and will not abate until we return to something like normal climate conditions. Of course, we cannot afford it. According to Credit Suisse, NZ is the fifth richest country in the world. We have the twelfth highest emissions per capita. So if we can't afford it then we should not expect poorer countries to do it for us. Imagine that.

NZ has the carbon trading scheme. Government can reduce the amount of greenhouse gas (GHG) that is allowed and the price goes up. Companies that produce a lot of GHG find it harder to survive. Those that find ways to do without GHG thrive. There are other methods to affect carbon but that is what NZ has got. I am a fan because those industries or companies that change are rewarded and those that don't, well…

Of course to have a real effect, a country needs to have every industry in the scheme, including farming, and we don't. And the cap needs to be tightened for encouragement, or as GHG emissions decrease.

It seems to me that the Carbon trading scheme would encourage fuel efficient cars, penalize double cabs, promote renewable power, support public transport, change farming, increase the price of air travel and have lots of other effects.

If it got good results, the cap could be loosened. If not, it could be tightened. Best of all, it would have an effect only where GHG was emitted and on the largest emitters first. The cost will flow down to the consumers, but it always does.

I have often been accused of being impatient, something I readily admit to. But in the case of climate change the government, Greater Wellington and KCDC have all said "Climate change is an emergency", so I want to know "How can you have an emergency with no urgency?"

Russell

An Extraordinary Birth Witnessed at Ngā Manu by Sahra Kress

As a midwife, I have witnessed amazingly diverse births over the last 18 years, ranging from births in the hinterlands of Papua New Guinea, in the slum hospital of Vanuatu, to grass huts in the Solomon Islands. I have attended births on the linen couches of gorgeous New Zealand homes, in house-trucks, ambulances, or with the urgency of lithotomy beds or operating tables. But the unique and exceptional circumstances of

Saturday 7 August 2021 I could never have expected.
It was a strikingly beautiful sunny afternoon. I was looking after my two nephews, 3 and 5 years old (whom I also delivered) and as usual we headed out into nature, our favourite thing to do together. We decided to go to Ngā Manu, largely because the three-year-old has been talking for months about the Tuatara at Ngā Manu who we saw twice “sitting in his puddle and sticking his tongue out!”
Somehow, my nephew just thought this was hysterical and it became a sort of joke each time he saw me.
Also, I wanted to go see what skinks and geckos they have at Ngā Manu because I have recently become extremely interested in lizards and their amazing ovoviviparous reproductive state (they give birth to live young) after becoming involved with the potential Lizard Sanctuary planned for the reserve at Queen Elizabeth Park. I was particularly fascinated by the question of whether lizards have placentas (they do, and quite a developmentally complex reproductive process).
When we arrived, I asked the front desk staffer about the lizards at Ngā Manu and explained my recent recruitment to the Lizard Sanctuary project. She confirmed that geckos were in the display cases just outside. We wandered over, and as the gorgeous afternoon light poured across the glass, it was easy to see the Green Barking Geckos sunning themselves in the warmth. I’ve had never seen them so close and enjoyed inspecting the detail of their beautiful emerald scales, their fine narrow tapering toes without pads, and their long powerful tails.
Under one of them, off to the side, I noted a strange extra feature. Just under the abdomen, at the juncture of the tail, there was this strange pinky/brown thing.. it looked a bit like a blob and my mind inadvertently thought “that looks like a placenta”. And the gecko was heaving. I watched in fascination, feeling that I was witnessing something altogether familiar.. could it be? That must be a membrane sack.. And there, just behind her, was the tinies, fragile little baby.

Absolutely delicate, covered in reddish mucus and very wet, about 2cm long, it looked to me. I rushed back to the front desk to ask the staffer whether she knew that they had a gecko delivering. She immediately called in Rhys and two others and- Jim and Dave and- the rangers all came, and we watched, marvelling as the tiny gecko baby uncurled its miniscule tongue, flicked its tiny needle-like tail. The baby had the same white facial markings as the mother around its mouth, and initially the mother had turned and seemed to sniff or nuzzle it a bit. Would there be a second baby still? They often deliver twins.
Over the next hour, visitors became alerted to this special event, and the rangers prepared a little creche for the baby, to help nurture it in its own environment. We left feeling utterly delighted, so privileged to have seen this special birth.

What an absolutely extraordinary thing to have witnessed.
Sahra Kress

Some interesting points from my research precipitated by this experience:

- Viviparity (giving birth to live young) applies to 99% of NZ lizard species.
- Pregnancies usually last about 3 months but are temperature dependent and may reach as long as 14 months in some geckos.
- Some NZ geckos can retain fully formed offspring in utero over winter and can start the ovulation process prior to the pregnancy ending.
- Each conceptus starts with a yolk mass complex. This develops into a placenta that forms from close apposition of the extraembryonic membranes to the uterine lining.
- In the wild, there are high rates of failure in embryonic development, resulting in high numbers of abortions and 'stillbirths', as well as over-gestated foetuses. These result from various (speculated) causes.
- Some geckos can live 30-50 years in the wild.
- The time for baby lizards to reach sexual maturity ranges from two years from birth to eight years for some larger species.
- NZ lizards can regrow their tails if severed.
- There is increasing evidence that certain species of NZ lizards show some form of parental care, or at least tolerance of their young. Some live in family groups in the wild.
- They have extremely low annual successful reproductive rates.

References:

Cree A., Hare K.M. (2016) Reproduction and Life History of New Zealand Lizards. In: Chapple D. (eds) New Zealand Lizards. Springer, Cham. https://doi.org/10.1007/978-3-319-41674-8_7

Winkel, D. van, Baling, M. & Hitchmough, R. Reptiles and amphibians of New Zealand: a field guide. (2019).

Department of Conservation: https://www.doc.govt.nz/nature/native-animals/reptiles-and-frogs/lizards/

The New Zealand Herpetological Society: https://www.reptiles.org.nz/

Please put in a submission on the latest document "Managing our wetlands"

A better name for this latest MfE document would be 'Devaluing our wetlands'. If you have low blood pressure, reading this is bound to improve it. I was so angry after I read it, I had to walk away for a few days before writing my response. Basically the proposal says 'our wetlands are precious taonga unless anyone else can use them'. This is why Forest and Bird has asked us to submit (by 27 October 2021)

The proposed changes will undoubtedly result in more wetlands being destroyed, and these are important for biodiversity, climate change, fresh water and mental health. Furthermore, New Zealand has already lost over 90% of its wetlands, and in our region we have less than 2% left.

The proposed new rules allow mining nearby which could impact wetlands through runoff, or damage them when access is put through. It should certainly not be allowed (especially for fossil fuels!). The document significantly weakens the definition of a wetland (partly by redefining pasture as 50% pasture grass **or associated pasture species** including buttercups - doesn't everyone know buttercups grow in wetlands? If you're trying to navigate a wetland and keep your feet dry it is disastrous to stand on a clump of buttercups, you will inevitably have wet feet ! The document also allows the use of wetlands as some dump sites - I'm not sure what compatibility there is between saving a wetland by infilling it with dumped material. In all, the new rules are far too permissive. One potential improvement is that the document clarifies the rules around weed control in and the restoration of wetlands which were also inhibited in the original proposal but overall it seems like the government is giving in to business bullies by suggesting the proposed changes, and we will see many more disappear.

If you value our wetlands, please submit today.

Pene Burton Bell

Grazing Queen Elizabeth Park

Things may have moved on since the last newsletter, I think. There have been information in a Kāpiti newspaper that you may have seen, saying GW are not going to graze all of the 208 hectares and the proposal will not covers wetlands.

We asked you to write submissions based on GW's "Have your say" website which shows the grazing area covering the peat wetlands and covering an area of 208 hectares.

GW has to consult before it can sign a lease and of course, it may be that the total public response is "Don't graze". You might expect that GW would then not graze. You would certainly expect GW to wait until submissions were considered. But GW advertised for grazers before submissions closed.

We are confused. We hope this is democracy at work and we hope for a good outcome.

The peat wetlands are a significant issue for us on both an environmental and a human basis. I was playing with Tane's Trees calculator to see the comparison between stopping emissions from the peat and sequestering green house gas (GHG) by planting trees. I cannot guarantee the figures but this is what was revealed:

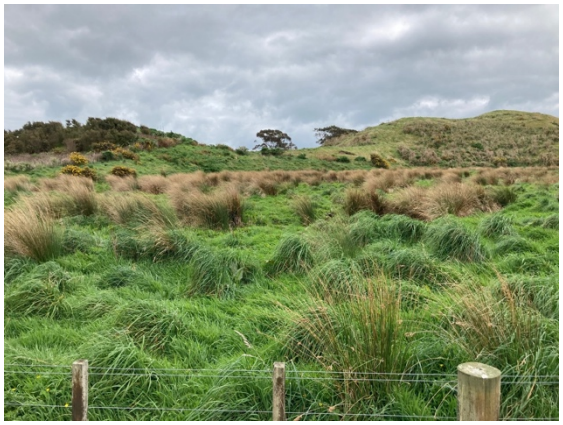
One hectare of peat gives off about 29 tonnes of GHG per year if it is drained as it is in QEP at the moment.
If I planted 1000 plants (25% trees and 75% shrubs) and let them grow for 12 years, about 29 tonnes would be sequestered.
But I would have to plant pioneer species first then longer lived trees a few years later, so it might take a few years longer. Also some would not survive so I have to plant more than 1000. And of course that would only deal with one year of GHG from one hectare.

The southern peat areas of QEP are about 65 hectares so about 65*29 ≈1800 tonnes of GHG is released every year. To re-absorb the amount of carbon released in one year, 65000 trees would need to grow for 12 years. That's the break-even point.

Then next year I would have to plant another 65,000 plants to sequester the second year's emissions. Actually a few less because the first 65,000 would keep on sequestering carbon.

And so on, every year the peat is left unwetted.

You can see how rewetting the peat is a much more effective strategy. If we do that, the GHG is not released in the first place.



This is one of the fields grazed in the past recovering. Note the wetland plants. This field, alongside Whareroa Stream, is included in the grazing proposal.

Russell

Public Meeting Plans

Sadly we were forced to cancel our September Meeting, but we have rebooked our speaker for November 24th (with Christmas cheer to boot. Here's hoping…!

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