

Advocacy and what we can do

On the felling of native trees: We went down to Canal Rd after the zoom meeting. It is a sad sight but the commitment of the protesters is admirable. I did not know much about it, nor did people in our discussion group. It is a little over an acre of land on a street corner planted about 1920 although some of the trees look older. Planted by a local woodwork teacher and privately owned. It has been sold recently on condition that the land is cleared of trees by the vendor. It is a sad mess. The woman we spoke to did not know what the purchaser has in mind but across the road is a cleared section of 1/2 the size with about 3 units being built on it. This person said there was no local church involved but was pleased that St Matthews showed an interest this morning. There are people sleeping in trees, there is some cooking on site. Last Wednesday diggers and excavator made a move on the property but they were blocked by people power including an elderly lady with her zimmer frame standing staunch.

In our first group there were various opinions. The need for housing was recognised but that this is more at the end of social need than luxury.

There were some suggestions

1. All developments involving tree removal should be mitigated by tree planting elsewhere - it was agreed this would be hard in the long term to monitor
2. Developers should be required to find ways to harmonise with the environment rather than clear away.
3. It generally agreed that the problem lies with both council and government. 10 years ago the Resource Management Act was changed to exclude protection of inner city trees. That 30% of inner city trees have been removed. This needs to be tightened up. There are, however some protected native trees.



One of the problems our group identified and struggled with today was **'what are the facts'?**

I was charged to get evidence regarding what 'animal husbandry practice' exist in live exports from NZ. Furthermore what legal restraints exist and what informed opinion was there from Veterinary science or professional practice

I found this interesting page <https://www.rnz.co.nz/news/country/425666/calls-for-improved-monitoring-or-total-ban-on-live-exports> from RNZ.

This summarises what we do and don't know. The Chief Veterinary Officer comments are pertinent, we don't have robust data or science on what life looks like aboard these boats as no one is monitoring. Note also the comment from the industry representative - a once in 25 year maritime disaster has triggered a whole different debate.

In terms of NZ law exporters must gain an Animal Welfare Export Certificate from MPI. This is certificate is underpinned by Legislation passed in 1999.

<https://www.mpi.govt.nz/exporting/animals/live-animals/requirement-documents-for-exporting-live-animals/animal-welfare-export-certificates/>)

This predates the live sheep export debacle of 2010 which finally came to end in February with revelation from MFAT correspondence that Murry Mc Cully lied to the nation

Advocacy must start with reliable information.

In the 2nd discussion on live animal exports we agreed that shipping of live animals is not good for the animals. But if we are not vegetarians, do we turn a blind eye to the cartage of animals to slaughter in our own country? We agreed there are degrees of wrongness, that we cannot be completely consistent. But, to be aware that there is considerable cruelty involved in farming animals and we need to be alert to this, e.g. battery hens, pigs in silos where they cannot move.

The shipping of animals has an added level of cruelty. Animals confined for 40ish days, no strolling the deck to stretch legs, coping with ship motion.

One person suggested shipment of fertilised eggs as the alternative.

Further reflection:

In answer to a question about farming efficiency in NZ, see below a website which is a bit dated but I think still holds true.

<https://www.tandfonline.com/doi/abs/10.1080/00480169.2009.58618>

The question was whether NZ farming (dairy in particular) is more efficient than in other countries. The answer to that is yes, as on the whole they are being grass fed without much crop growing for feed - silage and some imported palm product being exceptions for winter feeding. There has however been pressure on the environment from pollution of waterways and conversion of previously non-farmed land by irrigation - such as McKenzie Country.

Abstract

- *In 2007, greenhouse gas (GHG) emissions in New Zealand were 16% higher than in 1990.*
- *Agriculture accounts for 48% of GHG emissions in New Zealand, and 10–12% of emissions in most other 'developed' countries.*
- *Methane (CH₄) accounts for 35% of GHG emissions in New Zealand, mostly from ruminal fermentation. Nitrous oxide (N₂O) accounts for 17% of GHG emissions in New Zealand, mostly from urinary N, exacerbated by excessive application of nitrogenous fertiliser.*
- *GHG are often expressed as carbon dioxide equivalents (CO₂-e), and 1 kg CH₄ has a similar global-warming potential as 21 kg CO₂, whilst 1 kg N₂O has the same warming potential as 310 kg CO₂.*

- Methane is derived from H_2 produced during ruminal fermentation, and losses account for 6–7% of gross energy in feeds. This is about 9–10% of metabolisable energy intake.
- Methane production tends to be lower when legumes, rather than grasses, are fed, and emissions are greater (per kg dry matter intake; DMI) when mature grasses and silages are fed. There are small differences between individual animals in their CH_4 production (g/kg DMI) but there are few profitable options available for reducing CH_4 production in ruminants.
- Emissions of N_2O can be reduced by more strategic application of nitrogenous fertiliser, avoidance of waterlogged areas, and use of dicyandiamide in some cooler regions.
- GHG mitigation should be based on life-cycle analyses to ensure a reduction in one GHG does not increase another. Current and future strategies are unlikely to reduce GHG emissions by >20%.
- Food production is central to human survival, and should not be compromised to mitigate GHG emissions. Efforts should be directed toward increasing animal efficiency and reducing GHG emissions/unit edible food.

By far the biggest problem though is GHG emissions mainly in the form of methane production in the process of rumination. Methane production and irrigation needs are quite markedly reduced by regenerative farming, although we would need to accept slightly lower stock numbers.

Humans also produce methane. It is smaller than cows or sheep but I wonder how much it would increase if we all became vegetarian! Methane is a much more powerful GHG than carbon dioxide but breaks down in the atmosphere more quickly.

<https://thespinoff.co.nz/science/20-02-2020/bad-news-humans-are-producing-way-more-methane-than-we-thought/>

The issues are complex. With forests being cleared (Amazon) for beef and feed for cattle, the world's meat consumption is way out of kilter with what is sustainable.

Given that agriculture accounts for almost half of New Zealand's carbon emissions, and that methane is the main contributor, I think that reducing dairy herds is more important than trying to support our dairy industry indefinitely. But like the fossil fuel industry, it needs to be phased out gradually and replaced with regenerative agriculture, so that NZ can feed its population and retain exports from agriculture.

It is my understanding that regenerative farming is more labour-intensive than industrial dairying; in other words, it creates employment. As nations gradually turn away from relying heavily on meat and dairy for protein, NZ needs to be well placed to avoid stranded assets.

Just one point about methane: as you say, it is much more potent as a greenhouse gas but decays much more rapidly than carbon dioxide; however, methane decays to carbon dioxide, so overall each molecule of methane contributes more to radiative forcing (and climate change) than each molecule of carbon dioxide. The multiplier can be as low as 21 fold (as the article says) or as high as 100-fold, depending on the time frame that is considered.

What a workplace company is doing:

<https://www.unilever.com/news/news-and-features/Feature-article/2020/how-were-saving-food-from-going-to-waste.html>