



TANE'S TREE TRUST AGM AND FIELDTRIP

Our 2016 AGM was held at Ian Brennan's property, Cassie's Farm, on a glorious Waikato day. We started off with morning tea, followed by the AGM at 10am.

Our chairman Peter Berg announced the sad passing of our patron, Gordon Stephenson and also one of our previous trustees, Ian Campbell. Both men were greatly valued for their roles in Tāne's Tree Trust and will be sorely missed. Peter introduced our new trustee, Jon Dronfield. Jon runs Forever Beech in Reefton and is a welcome addition to the trust board. Peter also announced that Wiremu Puke, trustee and our iwi connection, had unfortunately retired from the trust board due to illness.

Photos: Michael Bergin



The 'Our Forest, Our Future' project was outlined. This initiative, funded by The Tindall Foundation, moves the work we have been doing on totara in the north onto a much firmer footing. The project allows us to set in place a well-researched basis for planting and managing native forest for multiple purposes including economic harvest. The programme allows for the setting up of trial native tree plantations as demonstration sites, the further development of Northland totara and the economic and biodiversity features of planted and managed native trees.

Ian Brennan then gave us a talk, explaining how he had moved from Scotland and a career in IT, to farming in the Waikato (a Scottish lass was involved ...)



We then spent a happy two hours exploring Ian and Trish's property. Ian has planted extensive shelterbelts and has 4ha of mass planting. This tour demonstrated the vision of Ian in setting up extensive shelter as well as a dense planting of native shelter planting and tree species. A spirited discussion was joined on methods of weed control with Ian advocating strongly for minimal preparation and manual releasing which appears to suit his site admirably.

This is truly a beautiful property, with a wealth of ongoing information to be gleaned from their trial planting and management methods. We must revisit this property in years to come to follow progress and gain the benefits of Ian's bold experiment.

We ended the tour with a delicious lunch and everyone was able to go home with a rimu sapling, courtesy of Warwick Silvester. We all agreed it was a great day. Thank you to Ian and Trish for hosting us and showing us your wonderful farm.

Ian has produced a superb YouTube video of the work he has been doing on his farm. View it at <https://www.youtube.com/watch?v=Ck173XYakY8>

PREDATOR-FREE NEW ZEALAND REALITY OR FANTASY?

Recent discussion on the possibility of New Zealand becoming predator free and the government's apparent commitment to such a scenario has given rise to much speculation on the prospect and a considerable amount of scepticism has been offered. The following is a portion of a paper written by Professor Kim King, arguably one of the best persons in the land to address this proposal.

Extraordinary danger calls for an extraordinary response, and over about the last 20 years there has been a massive increase in effort and funding dedicated to reducing the threat to kiwi. Today, says the current Recovery Plan, about 70 community groups actively protect kiwi over a combined area of 50,000 ha, in addition to the 70,000 ha managed by DOC. Yet, it continues, "...the fight for kiwi is far from won".

The problem is that predator control over such a large area is, with present technology, very difficult and expensive. Worse, when successful, it can precipitate consequences: removing stoats alone from their normal average density of 3/km² permits numbers of ship rats to increase to higher than their normal average of almost 400/km² – and even at their average density, ship rats have a proportionately greater chance of encountering a bird's nest than do stoats.

But removing rats unleashes plagues of mice, and mice at plague numbers can destroy large numbers of the ground invertebrates needed by kiwi; hedgehogs do the same even at normal density. Clearly, effective management must not just control, but actually *remove* the whole interconnected suite of small mammal predators. In the present state of our technology, to do this long term over even one area of 10,000 ha could be done only by magic, which in the materialistic world we live in, means it cannot be done.

Should we despair? No, for three reasons suggested by Arthur C. Clarke, the author best known for dozens of science fiction novels, including *2001: A Space Odyssey*. Clarke was not only a gifted writer, but also a rigorously realistic and perceptive, future-oriented scientist. He avoided taking cues from current trends in research and engineering, which eventually make many other writers in the SF genre sound outdated. Rather, Clarke presented ultra-advanced technologies limited only by fundamental science.

Clarke formulated **three Laws of Prediction**, which are most apposite to the predator control problem.

1. When a distinguished but elderly scientist states that something is possible, he is almost certainly right. When he states that something is impossible, he is very probably wrong.
2. The only way of discovering the limits of the possible is to venture a little way past them into the impossible.
3. Any sufficiently advanced technology is indistinguishable from magic.

The effect of Clarke's first law is amply demonstrated by the history of rodent eradications in New Zealand. A symposium held in Wellington in 1976, attended by most working scientists of the time interested in rodent biology and protection of wildlife (not all of them elderly!), made an exhaustive review of what was then known about the effects of introduced predators in nature reserves, especially, but not only, rats on offshore islands. The conclusion of that 1976 meeting was "*an infamous statement of surrender*", that "...the possibility for complete extermination of New Zealand rodent populations by conventional control methods, even on islands, must be considered remote..." But recent history has shown that Clarke hit the nail on the head: when established scientists declare that something is impossible, there is a strong chance that they are wrong.

The result has been the ever-expanding list of successful eradications on larger and larger islands. It was true that large-island eradications were impossible in 1976, but the arrival of new tools such as Talon blocks brodifacoum and 1080 handled by visionary operators changed that conclusion. It may be true that effective multispecies predator control over the very large areas needed by kiwi cannot be done at present, but we should be cautious about concluding that it is impossible.

The effects of Clarke's third law will be seen in the future rather than in 1976 or in 1988. For any ordinary person without special training, advanced technology indistinguishable from magic already surrounds us in the modern world. I don't know how smart phones work – do you? – but luckily the world is not limited by what I can understand. The problem is, most such wonderful gadgets were developed after huge investment by deep-pocketed corporates. Some of them are incidentally applicable to, or modifiable for, conservation purposes.

Mass-produced, lightweight trail cameras have recently begun to offer a critically important conservation benefit as an economic way to monitor trap evasion by rats, or the productivity and fate of birds' nests, but their development was driven by demand from hunters. We need other forms of advanced technologies developed to meet *our* specific conservation aims, Clarke would be telling us that, if such magical technology is theoretically attainable, all we need to attain it is the political/social will, and lots of money.

Suppose Clarke is right for a third time and within, say, another 36 years we had developed that longed-for magical technology, unimaginable now in the same way that clearing Breaksea of Norway rats – and even more amazing, Campbell Island – was unimaginable to those at the 1976 meeting. Suppose further that this magical technology was economically practicable and without unacceptable side-effects, making it feasible to envisage large-scale eradication of small mammal pests on critical chunks of the mainland. Maybe even bigger things could follow.

- Summarised, with permission, from a paper by Dr Carolyn King, professor of biological sciences at the University of Waikato.

NEW ZEALAND TIMBERS NOT GOOD ENOUGH?

“Chic industrial meets warm wood” was the premise of an article published in the NZ Herald about the new ASB Waterfront Theatre, on the 25th July. To proponents of New Zealand forestry and timber this probably sounded like a promising start to a good news story. However, it certainly veers from this expectation as it describes the extensive use of imported timbers as a defining feature.

The architect Gordon Moller, refers to the theatre itself as a “cedar crucible” because it has so much timber cladding, and with American ash doors, walls, balustrades and panels. Their website states that it is intended for the building to attain a 5-Star Green Star rating. The fact that New Zealand timbers don't feature in this high profile building begs the question, “why not?” Were sustainably managed New Zealand native timbers, such as black, hard or silver beech even considered?

Moreover, what does the timber choice for this building express and reflect about the state of our relationship to our forests, to this land, to this place, our culture and our history?

Surely a disconcerting disengagement and disconnect on many different levels! This is particularly so, given the huge public interest in the planting and management of native forests for multiple benefits such as freshwater enhancement, ecological, carbon sequestration, recreational, landscape, cultural values and economic benefits.

In contrast, some high profile buildings, such as the Supreme Court building in Wellington, have taken their opportunity to make a principled statement on ethics and lead the way by using native timber (silver-beech) from sustainably managed forests. Such choices reflect an understanding of how the economic activities and consumption that occurs within our cities can influence and shape our rural landscapes. Whereas the use of imported timber species does not encourage any native tree planting here.

Sources of sustainably managed beech are already commercially available and, in the near future, sources of regenerated tōtara, and longer-term, timber from extensive new planted native forests will hopefully also enhance our built environments – and our rural ones. However, the role of the market in determining such matters is critical. In this light, consumer choice of timber does have an ethical dimension and responsibility. Unfortunately, on this matter, it appears that there is still a long conversation to be had.

Ian Barton & Paul Quinlan



Northland Totara Working Group & Tāne's Tree Trust:

TOTARA FIELD-DAY

23rd November 2016

Who:

Everyone interested in tōtara and land-management
eg. landowners, farm-foresters, land management
agencies/consultants, environmentalists, timber industry
– anyone.

Where:

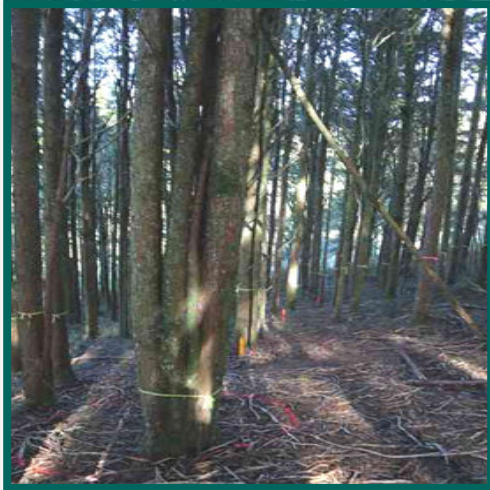
Rehford Farms Ltd. 1792 Mangakahia Road,
(approx. 3km north of Titoki and about 35mins drive
from Whangarei).

When:

10:30am - 2pm, Wednesday the 23rd November 2016

Contact: Paul Quinlan for more details:
pdq@pqla.co.nz or ph. (09) 405 0052

PROJECT UPDATES: The Northland Tōtara and Riparian Management Project



Reconnecting Northland fund this Northland Tōtara Working Group project which involves the integration of native timber production, indigenous biodiversity enhancement and riparian management on a dairy farm. A field day is planned on this property for the 23rd November.

Now halfway through this three year project, the first re-measurement and analysis of all trial areas, one year after their establishment, has been completed.

Early results indicate support for what has been observed elsewhere (but not previously quantified) - that management of naturally regenerating tōtara forest on farmland for timber production, could also be associated with increased native biodiversity and development of understory vegetation cover. This is thought to be a result of increased light levels reaching the understory and reduced competition as a result of thinning the tōtara forest. This may also be associated with riparian management on the farm that has included fencing to prevent stock access.

Full analysis of the benefits of managing tōtara-dominant forest along waterways on farmland will follow the two year re-measurement of all plots at the end of 2017. This will also include a three year record of water quality/stream health monitoring.



Vegetation trial plots compare the understory development between areas of naturally regenerated tōtara forest where no silvicultural management has occurred (e.g. top photo), and areas where thinning has been carried out (e.g. bottom photo). **N.B.** – live-stock grazing has been excluded from both areas.

For more information on this project, contact the Project Manager: Paul Quinlan; pdq@pqla.co.nz

SUBSCRIPTIONS:

If you have received an invoice with this newsletter, we haven't yet received your payment for the 2016-2017 year.

Please contact Mel or Keri in the office, office@tanestrees.org.nz if you have any questions or wish to find out payment options. If you have not received an invoice, then your membership is up-to-date.

DONATIONS: A note from the treasurer

All members should be aware that all donations, but not subscriptions, are eligible for a 33.33% tax rebate on your income tax. We will be able to send you a certificate of donation for you to submit to IRD with your tax return.

Please remember us in your bequests.

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