# day 1.....ta

Dee Turner's property below the volcanic



## Tours

One of the difficult decisions that have to be made at permaculture convergences is which of the tours to attend. You know that by going off in one direction you will miss a lot of interesting places and by going in another direction the same thing will happen.

So it was at APC11.

The Taranaki tour, however, took us to sites urban and rural, offering a blend of how aroups and individuals approach the use of permaculture on these islands and how the design system fits into their lives and sometimes their livelihoods. That, it turned out, is in quite a diversity of ways.

TARANAKI... its high, conical cone dominates this place in the same way that Mt Wellington dominates Hobart. Wherever you are in the Taranaki there it is—its extinct volcanic cone poking high into the sky or disappearing into cloud.

The mountain dominated the sky on the first morning of the post-APT Taranaki tour as we navigated the narrow winding road to Dee Turner's property. Around a corner, over a hill and there it was—a house of New Zealand timber largely completed and the first house on the site a little downslope, conspicuous for the solar panels on its roof. Adjacent on the rise above the dam a small shack or, as they are called here, a 'bach'.

# The farm

It's only four hectares in area, but Korito Organics, as Dee's property is called, is a mixed small farm, certified organic, and makes use of the biodynamic farming system.

At 420m altitude, the farm gets the full force of Taranaki's fierce winds and Dee and husband have planted shelterbelts of a hardy local tree with oval, glossy leaves capable of withstanding the local weather. As on other properties we would visit, defence from wind was a prime concern.

The property demonstrates the classic permaculture zoned landuse model with landuses placed in relation to the home according to frequency of access for monitoring and harvest as modified by soil, landform and external factors such as direction and strength of wind.

The new house has a vegetable garden made up of a number of circular, galvanised iron planters and several rectangular growing beds. Here, herbs and vegetables for the household are grown in a space the size of average NZ garden, something that Dee will use in



modeling home food production to her students with urban lots. Dee plans to expand the garden with WWOOFer help (WWOOFER-Willing Workers on Organic Farms).

Adjacent on the edge of a small slope is the Wormerator compositing toilet and greywater tanks. After processing, greywater will be gravity fed to plantings to be established on the level clearing below.

Over in front of the first house to be built the vegetable and herb garden has narrow access paths known as 'keyhole' paths because that is what they look like. Their purpose is to provide access to plants otherwise out of reach from the sides of the garden.

Simple pleasures have not escaped the owners. On a platform cut into the slope below the garden bed is a social space with central fireplace and, close by, a hot tub. Here, a couple old enamel bathtubs have been placed over a small fireplace that is fed fuelwood from the side. And, here, you can imagine the inhabitants zoning out in the steaming hot water while all about is cold and frosty.

The path to the first house passes through an mixed orchard of temperate climate fruits. The trees are still small, exhibiting only a few years's growth. When Dee had the area for the house leveled she had a berm raised to the side to protect the orchard from cold, strong winds, creating a sheltered microclimate.

### Energy

Both houses feature solar hot water systems and the first house has a photovoltaic array on the roof for supply electricity. This os supplemented by a microhydro turbine some distance away in a creek flowing through a neighbour's property, the system being installed by local turbine manufacturer, Michael Lawly, whose property we would visit that afternoon.

Winter heating comes from a slow combustion stove and gas supplies energy for cooking.

### A productive dam

Eels moved into the dam only three hours after it was filled, Dee told us. How they knew there was a new body of water about and where they came from remains unknown.

Lined with volcanic clay with the berm reinforced by the stabilising roots of New Zealand flax, a clumping plant with long, stiff, pointed leaves that can be used for weaving, the dam fills the bottom of a gully and was once home to ducks although there are none present now—their small house remains unoccupied. Their departure, said Dee, was marked by the return of the watercress. Dee and her husband are building their house of a hardy New Zealand timber.

In the foreground is the vegetable garden that feeds the household. Beyond the land falls and here the couple have made yards for the animals with fodder trees lower downslope.

Upslope of the dam is the small shack, during the tours of the Taranaki district a temporary home to Australian permaculture educator, April Sampson-Kelly and her husband. Opposite is a nursery protected by shadecloth and a large greenhouse inside of which are beans, tomato and friar cap chili. Taking the dare, a few of us took a wary bite but found it rather mild, though I admit to avoiding the seeds. Sheltering both the greenhouse and the dam is a hedge of hardy native trees.

Moving towards the house, we passed a living work in progress. Dee has established a variety of willow she plans to pleach to form a living wall that will create an enclosed space within the circle.

# Animals part of permaculture systems

In Dee's permaculture zone three roam a number of Wiltshire sheep. The males, said Dee, are for food and and the females will be kept for breeding. A hardy animal, the Wiltshire is not prone to fly strike. A cow in the adjoining paddock may at some time join its animal neighbours on the dinner table.

Dee has planted supplementary feed of fodder trees at the bottom of the paddock tagasaste (also known as tree lucerne), poplar, willow.

# **Engineers in the hills**

Michael Lawly is an engineer and his rural property is an engineering enterprise where he and his co-workers at Eco Innovation produce microhydroelectric and wind turbines. You see three of the turbines spinning rapidly in the wind as you enter the property and you hear their whine when you get out of the minibus.

You also notice the large dam, the two-level timber house and the microhydro works on the creek—all backed by the sight of Taranaki's not-so-distant cone. It was the works on the creek that Michael took us to first.

He explained that the large waterwheel on the stream, among the overhanging branches of riverbank trees, is no longer in use, however the five hydro turbines are. Pelton wheels spun and water gushed as he brought several of them up to power to demonstrate some of the renewable energy technologies he produces in the workshop near his house.

Next we walked over to a large array of photovoltaic (PV) panels that track the sun through the day. Michael thinks it's now simpler to add a few additional panels than to have a tracking array as the cost and engineering of the tracking system is avoided. The are more PV panels on the roof of the house.

Ten years ago, Michael said, photovoltaics cost around \$10/ watt. The efficiency of PV technology has improved so much, he said, that it now costs around \$1/watt. Energy produced in this way is becoming cheaper to produce energy than to conserve. This is a place with energy to spare.

Along the walkway by the dam we come to an array of three solar hot water systems of the evacuated tube type, a combined hot water storage of 600 litres. These are Chinese



systems that Michael bulk buys by the container load. They are cheap and displace few New Zealand jobs, as much of the manufacturing is carried out by industrial robots, the employment being in installation.

PV arrays and plentiful hot water wasn't all there was to see by the dam. As well as a couple open kayaks, a peculiar raft was tied up by the shore. A rectangular platform held afloat by plastic drums fastened below, the interesting feature was the bathtub at centre. This, explained Michael, was for the guests staying at the hostel he has built on site, a two level timber structure. They use the plentiful supply of hot water from the solar heater array to fill the bathtub then paddle put onto the dam to drift in happy contemplation of the constellations above, until the water loses its heat and the coolth of evening starts to be felt.

The rest of the tour consisted of a somewhat technical discussion in the workshop followed by afternoon tea on the covered patio beside the house, above the dam.

Fiona and I spent the next two nights in the hostel.

Guests on the first evening found it necessary to fire up the slow combustion stove but the following night was mild enough not to need it.

What a pleasure to awaken on the second day and to walk outside to see Taranaki's flanks lit pink by the rising sun.



Above: Microhydro turbines turn the waters of the creek into electrical energy.

Below: The hot tub raft for drifting in watery warmth on the dam.



# APC11 TOUR DAY 2-TARANAKI



FLUFFY HEADED, long legged, small bodied, bulky-bodied, black, white, red, grey, mottled... never, ever, have I seen so many strange chooks in one place.

And that was just the chooks... there were ducks too, all in their own configuration of size and feather... and down in the lower paddock a large mob or heard (or is it a 'gaggle'?) of large grey geese in their multitude... and the Canterbury Blue, the European Wild and other pigs... and the large black and white cattle... goats... and a small black and white, furry, mottled pig which, when I wasn't looking at lunch, ate my bread. Oh, and lunch—not all that long ago it was on the claw in this same yard, clucking happily. It was food metres here, not food miles.

We were at Avonstour, a farm of rare breed animals... a gene bank of rare DNA sequences expressed as walking, bleating, clucking, mooing living animals... rare breeds of animals being preserved not in some zoo but as commercially viable conservation... preservation through use so that those gene sequences could continue their evolution over here in the rolling hills on the western side of the North Island.

# Day two starts

Avonstour Rare Breed Farm wasn't our first stop on the second day of the post-APC11 Taranaki tour. It was stop number two.

We had spent the morning downtown in New Plymouth, the main city on the North Island's west coast which, including its hinterland, is home to nearly 70,000 here at 39 degrees south latitude.

Led by a local guide who is also an artist, a Maori man versed in the Maori and European history of the area, we had followed a small stream into the suburbs, trekking through the narrow band of forest that is the Hauraki Walkway.

Morning tea was at the home of a permaculture practitioner within sound of her chooks and within sight of her food garden. She told us how something like ten or so households in the immediate area had got together to form their own food co-op, to look at car sharing and to plant a community orchard. Avonstour Rare Breed Farm Below... April Sampson-Kelly makes friends

with a mottled, monochrome pig.

Middle: Lunch and a talk.

Lower: One of the many rare breeds of fowl.







This is self-initiated, self-managing community enterprise and we had our morning tea just after passing the young community orchard installed in the walkway and maintained by local people. It's still a cluster of very young tees but, standing there looking at it, you could easily imagine it growing over the years into a valuable, and edible, community asset.

Sated with tea and chocolatecake goodies and the conversation of good company, we walked on and soon came to something as hidden as it was unexpected.

# A valley of a very special kind

We walked along the street before rejoining the walkway. On we went... not all that far really... until we seemed to be entering a somewhat wilder section of track.

We followed the track around a curve to enter a valley, the long grass (fortunatley free of snakes, which are entirely absent in New Zealand) and treed slopes rising steeply on one side and the valley falling to its lower reaches amid a thicket of, dense, dark trees a few tens of metres away on the other side. This was a small valley but not all that small walking its length was a good eight or so minute stroll.

But... there was something peculiar about this little valley, something not quite right, something somehow different. We realised what it was when someome pointed out that what was different was the vegetation, the trees, which we could see were of quite a number of different types.

Then, it dawned on us. Here we stood in a valley not of native bush but... of food trees. We stood amid a food forest on a grand scale.

It was something a council worker had planted over a decade ago, we were told... an edible, hidden treasure tucked



away in a steep sided little valley off the road in the suburbs... a mixed orchard of apple, stone fruit, avocado, loquat, medlar, olive, stone pine, a lone Bunya pine and so many more.

This was no modest planting in scale and, so were were informed, there are more of these semi-hidden food forests in New Plymouth. What farsightedness and what an edible landscape... I have seen nothing like it in Australia.

A track led on to a fence with a style to cross it and into a patch of remnant local forest... trees unknown to the Australians in the group and with tall tree ferns reaching high for the light. This was another valuable vegetative gem interfacing with the fruit and nut trees on the adjacent slopes to create something of biological importance in this city.

So, rare breeds, a little history, urban bushland, community orchards, chocolate slice and a landcape of very green, very corrugated New Zealand countryside that we passed through.

On the bus, Australian permaculture educator, April Sampson-Kelly, said something about this tour being as good as the permaculture convergence itself, and how true that was.

And tomorrow... more of it.





# GALLERY-APC11 TARANAKI TOUR













Avonstour Rare Breed Farm from top: A mobile chook shed moved around for grazing.

Living fence posts of poplar. Meat smoker for processing farm produce.

GALLERY-APC11 TARANAKI TOUR

# APC11 TOUR DAY 3



Dan and Bena's smalholding is presently in development. The bowl will eventually be terraced for fruit growing.



Dan demonstrates the combined grey/blackwater compost system.



Dan in one of his swales that harvest rainwater runoff.





# GALLERY-APC11 TARANAKI TOUR



Above: Always time for a break.

Left: Bena and lunch. No going hungry on this tour.

Below: April Sampson-Kelly, a permaculture educator offering an internet-based permaculture design course from her home at Mt Kembla, NSW.



# <u>APC11 TOUR DAY 3</u>TARANAKI



**PAT AND SANDI**—here's two people who have discovered the secret of life. For them, that consists of two things—gardening and surfing.

It was to their small property that we drove after leaving Dan and Bena's smallholding in the hills. Here near the coast the terrain is flat and the property appears as a clump of dense vegetation amid an open landscape of farmland.

Imagine their garden as a series of rooms divided by tall hedges that block the winds, each room having a separate purpose vegetable garden, various tree crops, entertaining and outdoor dining and, of course, the chook run. This takes the form of chickens occupying the ground layer with small fruit trees above, such as the ubiquitous feijoa that is found everywhere in this area.

And their other passion? Well, the Tasman coast with its long, cold swells is close by and the challenge must surely be choosing between riding their unfolding energy and the growing energy of the garden.



Below:

Dr Harry Harrison from South Australia's Rare Fruits Society is confronted by the flower of an Abbysinian banana.

Left below: The couple are partly fed from their kitchen garden.

Below right: The garden shed is equipped with a bunk.





# Last words—a reflection

# Permaculture as platform

APC11 made it clear to me that permaculture is a platform on which its practitioners build applications designed to achieve specific ends.

As a platform it consists of a set of ethics accepted by all who participate in the design system (I have yet to meet any practitioners who don't support the ethics) and a variable set of principles to guide its implementation.

The principles are not like fixed laws—they are selected as relevant to the purpose at hand and often have to be interpreted, negotiated and adapted. The ethics, in contrast, are fixed but are so general that they can be achieved in many ways.

There's another thing that the ethics do, and that's act as a barrier to entry... a filter. Many movements have barriers to entry and this makes sense as it imposes a core belief or approach that it can be assumed all practitioners act within. It's a sort of default setting for the movement.

In doing permaculture, a flexible and imaginative mind is a distinct advantage. So is a capacity for a blend of critical, analytical thought and whole systems thinking—the ability to see the elements of a design or of some problem you are trying to solve in all their connections to other elements. Dee Turner's farm, Taranaki



**MAYBE IT'S JUST** a partial impression coming from having an innovative bunch of people together in one place, but I came away from APC11 with the notion that people in New Zealand are applying the design system's ideas and principles in a diverse and exploratory sort of way. From community economics to planning, creating community housing, rural landuse and community-led development, there was much to suggest that permaculture design in New Zealand has in many cases taken a leadership role.

I thought I might be imagining this or making an assumption based on too little evidence after comments from one prominent New Zealand practitioner exhorting her fellow countryfolk to catch up. However when I asked an Australian attendee back in this country he said that it was his impression too that permaculture practice in New Zealand was in many ways exemplary.

There are many innovative things going on here, too, that permaculture people are involved in. The sense I got at the convergence was that in the New Zealand examples there was some kind of more direct link between permaculture are the initiatives people were taking. In Australia it seems that there is greater distance between permaculture and some of these things. Community economics, for example... LETS (Local Exchange and Trading Systems) once had deeper links with permaculture because of the overlap of people involved in both. Now, that link seems more tenuous and LETS and others of the kind are sometimes led by people with no history in permaculture.

It was a pity that the video link to David Holmgren, at the start of proceedings, was dysfunctional and we were left with a recorded mini-lesson of David going through the principles. A direct Q&A would have been more interesting especially if he had responded to questions from APC participants. Bill Mollison was to attend but he was not fit to do so, at the time recovering from a recent health issue.

It is the precedent of history that these two are asked to convergences and is fitting that this is done. I think what would be most valuable from them would be a retrospective on the design system... how they see it having changed and a little speculation as to its direction in relation to changes in the world.

At APC11, participants asked the organisers for more time to network. At all of the convergences and conferences of the Australian City Farms & Community Gardens Network (http://communitygarden.org.au)that I have attended, informal, unstructured time to meet and talk has been valuable though in short supply, but at recent permaculture convergences it's been as if organisers have felt it necessary to fill every minute. People could decide to meet and talk but there was competition with organised events and it was always a tough decision to drop out of the official program even temporarily to have a conversation. The networking time at APC11 was valued.

Sometimes, it's as if the ruralurban divide that supposedly separates rural and urban Australians manifests in permaculture.

There has been something of a rural farming focus in permaculture that is demographically unrepresentative though nutritionally relevant and which has been reflected in convergences, though those who attend them will recognise that this is something of a generalisation. That's why the greater focus on economics at the morning keynote presentations was welcome as was content around urban systems and social permaculture. For Australians, it was as if the reality that we are an urban nation had been recognised.

## Social permaculture

One of the opening activities was to cluster at one then another of the themes organisers has posted on signs on the wall of the main hall. I found a reasonable number meeting under the 'social permaculture' sign.

Speaking with people there, it was apparent that there exists ambiguity about what the term implies. This varied from someone who asked whether it was about permies getting together to have a good time (perhaps not such a bad idea at all) to more accurate allusions to permaculture's 'invisible systems' or 'soft systems'.

Is it that more people are realising that it is relationships between people, the use of authentic participatory processes (rather than just consultation) and skills in simple project management that make permaculture projects work, or otherwise, and that the design of physical things like sites is the less challenging and is often subsequent to getting those soft systems done first?

My thinking on this was influenced during training in the practice of placemaking by Australian consultant, David Engwicht. David explained that producing a design for a site comes later and that defining what goes into that design, and where, is what leads the design process.

This goes against the idea of the professional landscape architect or planner—or the permaculture designer— taking a design led approach. What we want is a people-led approach, led by those who would use the design.

This, I think, would be good for permaculture practitioners and is a way of making real the notion of social permaculture. It could be a positive point of difference separating them from other designers. I think that more permaculture designers need to adopt this approach and that it be taught in permaculture education.

Thinking back on APC11, it seems we are in some ways moving towards a people-centric approach to our work in the design system. This low-key, convivial convergence nudged us forward just that little bit more.

