



The Crossing: a dream realised

Spreading seeds of sustainable living

BY SHARYN MUNRO

Upriver from Bermagui on the NSW south coast is The Crossing, a place that just might be magical, given how many serendipitous events it has attracted. And thousands of young people who have been lucky enough to spend a day or a week there would surely agree that it was a life-changing experience. Magic realism?

For the role of The Crossing is to open eyes to the reality of living sustainably, to offer the chance to not only see how easily such a daily lifestyle can work, but to practice it. From its buildings to its permaculture gardens, its solar power systems, water and wood collection and use, chook management, composting toilets, lighting and cooking systems, to its tree propagation and plantings, The Crossing allows a chance to 'walk the talk'.

Some who come may have an existing interest in such things; for others, especially the young, it will more likely be a revelation as well as an adventure. Providing youth with this experience was the dream of Annette and Dean Turner when they bought this 23.5 hectare bush block 24 years ago and began working to make those plans a reality.

The couple were not only starry-eyed idealists, but experienced and educated in the areas needed. For example, for three years they had lived in and managed (at low pay) a fully 'pioneer' youth outdoor education camp, Wollangarra, in Victoria, where no modern technology or electricity was used. An 'amazing experience for young people for a week' says Annette, but not as translatable to their daily modern lives. At The Crossing

they see that they can still have modern conveniences and run them off the sun.

Both wanted to live a life that made a difference and both really liked working with young people, so it made sense to aim to help build leaders keen on sustainability, who felt connected to bush and ocean and animals.

Serendipity of place

For about a year they searched the south coast for the right block, with the criteria being: a bush block, on water, capable of supporting agriculture, near alternative communities that they could tap into, and with a tourism industry that might provide jobs. The first agent they came to in Bermagui pondered the list, then said he thought he had the block they needed BUT it wasn't on the market.



With permission, he showed it to them. As soon as they walked onto it, recalls Annette, they knew this was IT. Its northerly aspect ridge of regrowth forest fell gently to a river flat at the base, fronting the Bermagui River: they were able to buy it for \$120,000 in 1994.

They later learnt that this was a traditional river crossing place for the local Yuin people, and as young people would make a crossing into adulthood here, learning ways to contribute to the environment and community, the name to choose was obvious.

Knowing better than to try to start off with no income and a mortgage, straight after Wollongarra they got a 'proper' job each, paid off the mortgage and saved hard. A permaculture course at Nimbin was their final education before they took the plunge.

Gus the Bus gets muddy

When they saw a 1960 Bedford bus by the side of the road in Lakes Entrance they thought it would make a good 'instant house'. It was advertised for about \$2000; they turned up with their \$1200 cash and got it. After tidying it up so it was liveable, in September 1998 they drove the bus north. They almost made it; the bus broke down in Eden, about 100km south of here, and had to be towed to site.

They'd arrived, with all their possessions, \$40,000 in capital, and a baby on the way, as Annette was five months pregnant.

Needing some clearing and a level pad for the bus, they quickly had some earthworks done, including a dam to collect water. The soil from these works proved to be perfect for mud bricks, with the right amount of small gravel; all they needed to add was water, so they started making mud bricks.

The bus needed a roof over it, so a post and beam construction went up, using timbers off the block. Unaware of the ferocity of the local termites, they put the poles straight into the ground. That never happened again; concrete pads and home-made steel stirrups were the go once that lesson was learnt.

Although they had never built in mud, it is 'so forgiving' that mistakes can be fixed. The bricks were puddled by feet; the gravel in the clay soon taught them to eschew bare feet for heavy socks taped high around their calves. They'd borrowed five metal moulds from neighbours, who showed them how to make and dry the bricks.

At the same time they were establishing garden systems, so enclosing the bus proceeded more slowly than expected, dictated by the safety needs of baby Jye: as he could crawl, they started a fence; as he could climb, they built walls.

Water was heated on a fire, they bathed in a bucket, and cooked on an open fire. But 'after three years of living like a pioneer, it didn't seem like such a jump'. In their rugged old F150 truck, they'd collected lots of second-hand doors and windows, and a wood fuel

stove, and by the time Jye was about 3½, Gus the Bus was encased in a mud brick house. The inside was sealed with a diluted *Bondcrete* solution. All up, Gus needed 900 bricks to become an all-weather home.

In the beginning their water supply was from 20-litre drums; they bought a shipping container, placed it higher up the hill, and put a roof over it to collect water for a tank. A hose ran downhill to the bus, so they had cold water on tap. Then they put in a small 12V solar system to run lights.

Busy as they were with practical matters, they were nevertheless concurrently spreading the word, engaging with the local community, never losing sight of their dream. They'd already set up a Volunteer Board. So Bega Valley Shire Council would know they were not a pair of hippies living in a bus, they gave Council a presentation which was amazingly well received, resulting in unsolicited offers of support, which continues today. The Mayor was extremely encouraging, promising that, for example, any DA application would be free, which Annette reckons has saved them tens of thousands over the years; plus they have had small grants from Council for projects like waste management. Their first visiting group were Green Corps volunteers, who camped in tents, and helped with making those mud bricks for Gus. But the plans to better accommodate youth groups were proceeding apace.

The Red Rattler

Once again a Victorian roadside spotting paid off; they saw an old train carriage in a paddock, where it had been sitting for 15 years. It turned out to be owned by a friend's aunt and uncle. The 1930s timber Red Rattler still had charm, but having been home to rats, chickens and birds, and with some roof leaks, it was a mess.

But at the time they did not have the \$500 to buy it. When Neilma Gantner came to visit, they enthused about what a good bunkhouse it would make and the next day received a cheque in the mail for \$500. This was their first donation... serendipitously again, right at the perfect time. Neilma Baillieu Gantner, (1922-2015) daughter of Sidney Myer, had philanthropy and arts in her veins. A writer herself (as Neilma Sydney), and living in Bermagui, she founded the

Four Winds Cultural Festival there, and remained an annual supporter of The Crossing through the rest of her life.

She encouraged them to apply to the Myer Foundation for their first grant, to move the train, which would cost about \$7500. It was successful. At 18m long, weighing about 16 tonnes, with no rolling stock, this was a huge undertaking. Their Wollongarra friends in Heyfield came up with a method to load the carriage using a timber loader and a tow truck. Steerable dolly wheels were put under the other end of the carriage and it became its own trailer on the semi-trailer truck. Mat Evans (a Crossing board member at the time) rode it to steer more acutely around the corners on their winding dirt access track. As he said at the end, 'You usually have to pay for a ride like that!' It only needed a police escort over the Brogo bridge for the whole of its 500km trip.

At The Crossing they paid a local earthmover in whisky to lift it onto a log cabin type framework of wooden logs built by Ross Rixon and Graham Fall, two master axemen and bushmen who helped in the early days of the project. The temporary logs were later replaced with poured concrete supports.

A second grant, to clean and repair the carriages, came from the IMB Community Foundation, who have been solid supporters ever since. It had always been intended to retain the train's original colours, so the external flaking red paint was sealed as part of the upgrade to a bunkhouse just in case there was any lead in it. A tin roof was built over the original wooden slatted roof, extending to a verandah around the train. This was achieved with the help of another grant from the IMB and CASS Foundation and as always, lots of volunteers. Round timbers for the verandah and roof were all off the block.

In another show of community support, the local Probus Club made the double timber bunks in the train carriages. The train can accommodate up to 24. Sleeping eight to a carriage, kids love the bunkrooms, and the original signs on the honey-coloured varnished doors such as 'Mens Washroom' and 'No Smoking'. It is a sign of the times that there were two smoking compartments and one non-smoking!

Space had been left between the bus house and the train for the planned communal hall, with cooking and showering facilities.



PHOTO: ANNETTE & DEAN'S ARCHIVES



Straw Biscuit Hall

The Global Financial Crisis (GFC) was a disaster for many, but not for those community organisations who received the large stimulus grants dispensed by the Rudd government. The Crossing received \$100,000 to build the hall, which took place around 2006. Hundreds helped in the various stages, with two main builders: Colin Jack (a Crossing board member), and his friend Adrian McBeth. With help from Colin, Dean and Annette designed the hall as a passive solar structure.

A tractor had been donated by then, so it was used to raise and fit the large posts and double beams of the hall and large open outdoor area. In general, they milled as much timber of their own as they could, using a *Lucas Mill* owned by Mat Evans.

Its passive solar components include a heat-retaining concrete slab, northern orientation with most windows, correct eave overhangs for their latitude, lots of cross-ventilation, and clerestory opening windows. The latter are of double-layer polycarbonate, which will be replaced, as it melts in extreme heat, an awareness from the recent bushfires.

This time there was a timber stud frame, with infill of rice straw 'biscuits'. This method, new to me, was taught to them by local artist James Lynn who had built a house like that. Because it is not using full bales, just the peel-apart layers called biscuits, the infill fits within a normal stud wall frame. I asked where the rice straw came from. As Annette

tells me, I can only think that this project and this couple have a licence on serendipity, which I wasn't even sure I believed in until now.

Annette rang a rural friend from uni days, seeking contacts. With the resulting list of rice straw growers in hand, she started calling, finding nobody at home, so leaving messages. She gave it up until evening when farming folks might be indoors. Then she got a return call from the first person on her list, who said he'd just delivered a double semi-trailer load of rice straw bales to a property half an hour's drive from The Crossing, and they had seriously over-ordered. Annette didn't know the people concerned, but she had friends in that area who turned out to be a neighbour of the rice receivers, the Kotvois, and could introduce her. The Kotvois liked the project idea so much they gave them the straw for free. As Annette says, 'the gates continue to be opened'.

Over chicken wire, the straw was given two cement (for fire) coats of render. Luckily, the young people loved the rendering, often the hardest job of a straw building.

A very large wood-burning *Thermalux* stove is used for cooking and space and water heating in winter, connected to the solar hot water panels as their winter back up. This Australian manufacturer, *WISELIVING*, sold it to them at cost, another wonderful example of the generous help they keep attracting. There is also a second-hand donated slow combustion wood heater in this

large space. Firewood separated into various stages of drying is efficiently—and picturesquely—stacked under cover up the hill, and its getting is one of the jobs kids take on.

Most of the hall is a spacious open area used as a lounge room; a trellis outside those northern windows is for deciduous leafy vines to give shade in summer. The area did have dining tables in here, but under COVID restrictions, these were moved outside into the open undercover area. This is paved with bricks, second-hand and seconds, which were easy for kids to lay.



PHOTO: ANNETTE & DEAN'S ARCHIVES



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Living with water and power

The building includes a modern two-shower bathroom section on the train side. While 260,000 litres of drinkable rainwater water is collected, all systems for drinking, kitchen and showering are gravity fed. The kids learn to respect water; timers on the showers make a loud noise when usage reaches the advised limit of four minutes.

Wherever possible, the workings of this sustainable lifestyle, such as the solar electricity, are made visible. So the solar panels are on the ground and regulator panels are in the middle of the living/dining areas. A specially set up board allows switching between different light bulbs – incandescent, halogen, compact fluorescent and LED – with an amp meter, so the huge differences in the energy draw can be seen.

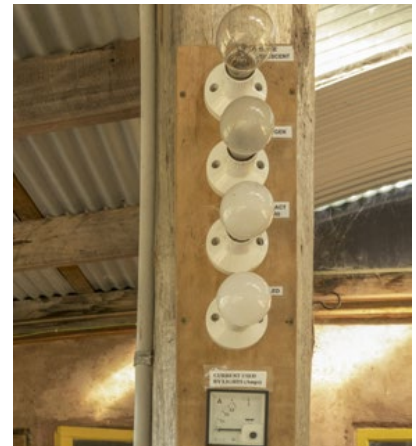
There will be three different types of solar systems and batteries. Everyday lead acid batteries run the bus house, while nickel cadmium batteries run the hall and the train carriage bunkhouse. The latter were second-hand, rescued from the Parliament House backup system many decades ago, when they were about to be sold for scrap. Nickel cadmium have a really long life (75 years) but the cadmium is currently hard to recycle and only one European country is accepting it. The third storage method will hopefully be lithium ion, in a new semi-sponsored modular fire-resistant



building, like a tiny house, to go near their new workshop, for which they are currently applying for a grant.

A *Selectronic* inverter and a *Voltran* MPPT regulator supply 240V to all. They have a 2.5kW system, which runs a fridge and a freezer, power tools, lights and computers. And not only kids needs to be shown smart solar power use; the place is let out as well to groups or courses such as permaculture or Landcare, and there is always someone on site to explain how things work and why e.g. no toasters at 6am or hair dryers at night!

As programs and courses increased, they next turned attention to building accommodation for staff and teachers, which was added on to the end of the train nearest the hall. This two-bedroom extension was constructed as post and



beam, with stud walls, clad in second-hand weatherboards and ply. Windows were made for them by a 'fabulous volunteer', a jack of all trades called Tony Hansen who would come several days a week. Earlier, a similarly handy bushman, Graham Fall, had taught Dean a lot, such as the power of leverage, how to use your brain rather than brawn.

All are now part of their *Airbnb* rental offering for families, groups, couples and individuals, which volunteer Lily Donovan established for them.

The bus muddie is now the home of current camp host, Chelsea Moseley. Going nowhere, it needs no engine, so the stove was installed in the engine bay! A later mud brick building, the tool shed, gave kids the chance to experience that fun and constructive mud pie play.





Maximising and integrating

The extensive fruit and vegetable gardens use the swales and terraces made across the slope. They quickly learnt to fully enclose vegetable gardens from possums and wallabies and birds. Weld mesh was found to be the best, as its natural curve gives strength; held down in slits cut into sill logs, it's overlaid with chicken wire and now fine nylon, so even tiny birds can't eat the coming blueberry crop. All are irrigated from a high dam using gravity, and some solar pumping from a reserve dam.

Other swales are planted with indigenous wattles as 'chop and drop' mulch and soil improvers. As Annette says, after a permaculture course, 'you have new eyes'. About 19,000 trees have been planted here, most by the camp kids. Reforesting of the Bermagui River edge has been a major project, including on a neighbouring farm. The plantings link the Crossing Conservation Agreement Area with adjacent Coastal National Parks to the north and south. Some small areas have been kept for cell grazing for their little flock of five 'mower' sheep.

The chooks play a big role, apart from egg provision. From their chook shed via an under-track pipe tunnel and an over-gate aerial run, they access the fruit orchards to keep them weed and pest-free. All food scraps go to the chooks; their manure, leftovers and bedding straw is scraped downhill to the compost bins.

All toilets are composting, the products of which go to the orchards. The greywater goes to a reed bed recycling system, and the reeds from that are cut for mulch. Volunteer Ruby, whom I met there, had just done that with Annette. Planting, harvesting and propagating; all participants see how the collected local seeds of koala food trees and fire retardant species like kurrajongs are raised in the propagation shed. Ruby, an environmental science graduate from Mexico, said that what she has learnt here, with the immersion in permaculture, 'has been amazing', and she would like to apply this in future.

This is what the Turners aimed for, and through their connections with programs around the world they have helped, and continue to help, thousands of young people to see new ways of living. In 2006 they set up The Crossing Land Education Trust and gifted the land

of The Crossing to it. This not-for-profit Trust will carry the work beyond them. They have a program manager coming in 2021, who will take on a significant part of Dean's work. They have built their own sustainable house on the property, not in the actual Crossing complex.

Fire lessons

Almost 400 houses were lost in their Shire in last summer's fires. Whilst the Crossing escaped the nearby Badja Road fire, it made them realise how ill-prepared they really were. They have now replaced every upright piece of plastic piping and installed roof sprinklers with galvanised metal, so the water supply is assured. Generous donations during the fires helped pay for this plus building a fire trailer carrying 1200-litres of water.

Very much a part of the community, as COVID cut all youth camps, they started offering The Crossing as a place for those to meet, road-by-road, who'd been through the six weeks of high anxiety as to whether they'd be burnt out. At the 10 Badja Fire Edge Road Gatherings here they shared experiences, how to work together in future and what was needed to be safer next season. Great ideas were generated; for example, communications and power were blown but UHF radios

were not, so now all the roads are getting these, and will test them monthly. The resulting Badja Fire Edge Roads Facebook page (closed group) is full of useful tips like where to get full breathing apparatus and fire retardant tree species, a packing list, a relationship matrix, discussions in advance of a crisis and writing it down!

The Crossing's story, its many awards and programs, are detailed on their website, including a great short video; there is also a resources page with lots of information on fire retardant design. I urge readers to check out the extraordinary amount on offer here; I am overwhelmed at the ongoing co-ordination needed, as well as the physical work.

I take my hat off to Annette and Dean, who have spectacularly achieved their dream of making a difference, especially for young people. I'd like to see a week's camp at The Crossing as a mandatory part of the secondary school curriculum.

The Crossing gives me hope. ♦

Sharyn Munro is an author and regular contributor to The Owner Builder. She lived for decades in her solar powered, owner-built mud brick cabin in the NSW Upper Hunter mountains. Now she lives in the Manning Valley.
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PHOTO: ANNETTE & DEAN'S ARCHIVES

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