

MODERN GREEN HOMES

Sanctuary

INSIDE ISSUE 43

Off-grid island style; mudbrick barn reno; gas vs electric appliances; Tassie trail architecture; hip pocket energy retrofits; hemp takes strides; Nightingale's apartment gamechanger + more

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Passion project

A deceptively simple, low-energy home gives two Tassie tree-changers the breathing space they wanted to pursue their passions.



Incredible views across the Derwent River more than compensate for the challenges of building on a steep site and around remnant vegetation. Access is pedestrian-only, and to make it accessible for all abilities, the owners have installed stairs and a ramp. Images this page Chris Crerar.

WORDS Chris Crerar

PHOTOGRAPHY Nina Hamilton

AT DIFFERENT TIMES DURING OUR

lives we seek different things from our homes. In our twenties we may just want a city crash-pad, while in our thirties and forties proximity to schools or connection with community might be the priorities. At some point, downsizing and a tree- or sea-change could be on the agenda as the kids take off.

But what about planning a home that will still serve you well decades from now? A home that meets your current needs and also helps maintain your lifestyle and independence well into your latter years? That's exactly what former Sydneysiders Jenny Kyng and Doug Cooper were planning for when in 2011 they purchased a steep but spectacular north-east facing suburban block in Hobart's Tolmans Hill.

After years in the congested inner west suburb of Marrickville, the couple who both work in mental health, wanted to embark on their own "tree-change" and build a well-designed, architecturally appealing and efficient home that would also embody principles of universal design.

As a self-confessed architecture aficionado, Doug definitely wanted their new home to have aesthetic appeal, but equally important was the capacity of the house to meet their needs later in life in terms of ease of use and access, energy efficiency and low ongoing maintenance requirements.

"It wasn't simply about having a beautiful looking house – as in the facade and materials – but ultimately it's about the floor-plan, functionality and its broad sustainability as we want to stay in the house for as long as we can," Doug says.

And it's here that Uta and David Green from Hobart's Green Design enter the picture. Jenny and Doug engaged the small practice specialising in environmentally sustainable and ethical residential architecture, while they were still living in Sydney.

"Their work spoke for itself – beautiful, elegant and sustainable but not ostentatious," says Jenny.

Uta and David were challenged with creating the design for a modest-sized environmentally efficient home, to suit the clients' current and future needs, on a difficult, steep site.

"For me, engaging an architect is not just about aesthetics, but more about communication," Doug says. "We gave them a very strong brief, which they interpreted and came back with a great design."

A fundamental part of the brief was that the new house needed to incorporate spaces for Jenny and Doug to pursue their own passions. Jenny is a painter of people, while Doug also works as a freelance editor and collects books.

Uta says that not only was it a difficult slope to build on but this also made it

Off-grid transformer

Set on a secluded site with ocean views, this off-grid house on the Hawaiian island of Maui demonstrates that a local size restriction needn't get in the way of a functional, flexible, lovely home.

WORDS Anna Cumming

PHOTOGRAPHY Shawn Hanna

GRAHAM HILL IS NO STRANGER TO design challenges. Founder of small-space design consultancy LifeEdited, he's been experimenting for years with smart concepts and technology allowing people to "live large in small homes or apartments". These days he splits his time between his tiny (but very functional) New York apartment and Hawaii, where he has just completed a 93 square metre off-grid home in the hills on Maui's north shore.

"There are building restrictions on much of the land on Maui – 'secondary' houses must not be larger than a certain size," he explains. "On my piece of subdivided land, the limit was 1000 square feet [93 square metres]. So that was my challenge: let's see what we can do with 1000 square feet, let's make it off grid, and let's make it a great place to live with the functionality of a much larger house."

The finished house is a useful demonstration of what can be achieved, especially for other landowners with the same size restriction. A simple rectangle, the house features four small bedrooms

along one side, three of which transform quickly and easily into study, sitting or eating spaces with the help of neat fold-up 'Murphy' wall beds with attached folding tables from Resource Furniture. "Even though they are really small rooms, they have a secondary purpose," says Graham. Along the other side, two bathrooms and extra toilets – all composting, waterless ones – cater for the possibility of a full house of guests.

A modest kitchen and interior dining area at the end of the house features a small lounging area, but it's in the expansive 'lanai' (verandah) where most of the living is done. Here, modular outdoor furniture can accommodate up to 20 people for relaxing or meals. This semi-outdoor living space is ideally suited to the year-round mild warm microclimate here, 100 metres above sea level; wide roof overhangs shade the lanai and protect it from the sometimes heavy rains.

Along with clever use of space, Graham was keen to make the build "very green". "We recycled the beginning of a house that



Graham's house is built on a 0.9 hectare site, sloping down into a gully. "It feels very private, even though there are neighbours nearby," he says. "There's a great view of the water about a mile away, and of the West Maui mountains 15 miles away."





The living area is all on the upper storey, with a large garage and storage space underneath.



Perched on a steep site deemed too difficult to build on by most buyers, the Nine Tsubo House fits into a cube with 5.5 metre sides. Its footprint of just 30 square metres means a site coverage of only 5 per cent, so hardly any of the block's bushland had to be disturbed for the build.

On cloud nine

This New Zealand architect borrowed a Japanese compact house concept for his own small home, achieving an uplifting living space in a mere 50 square metres.

WORDS Anna Cumming
PHOTOGRAPHY Paul McCredie



Krysty and Andrew share their home and the beautiful views with their two whippets. The deck appears to be built above a void, but in fact the ground is an easy step off in all directions.

WITH A FOOTPRINT OF JUST 30 SQUARE metres and a mezzanine of a further 20, the Nine Tsubo House is a size many people would consider more suited to a quick weekend getaway than a permanent home. But architect Andrew Simpson, his partner Krysty Peebles and their two dogs have been living here happily for the past six years.

The initial impetus for their small house project was a common one: cost. “When we started looking around for a house to buy, it became pretty clear that we couldn’t afford anything much in Wellington, so we started looking at the idea of building a really small place,” says Andrew. “We had previously lived in a couple of quite small architecturally designed rental houses – one was just 36 square metres. So we knew that we were comfortable living in compact,

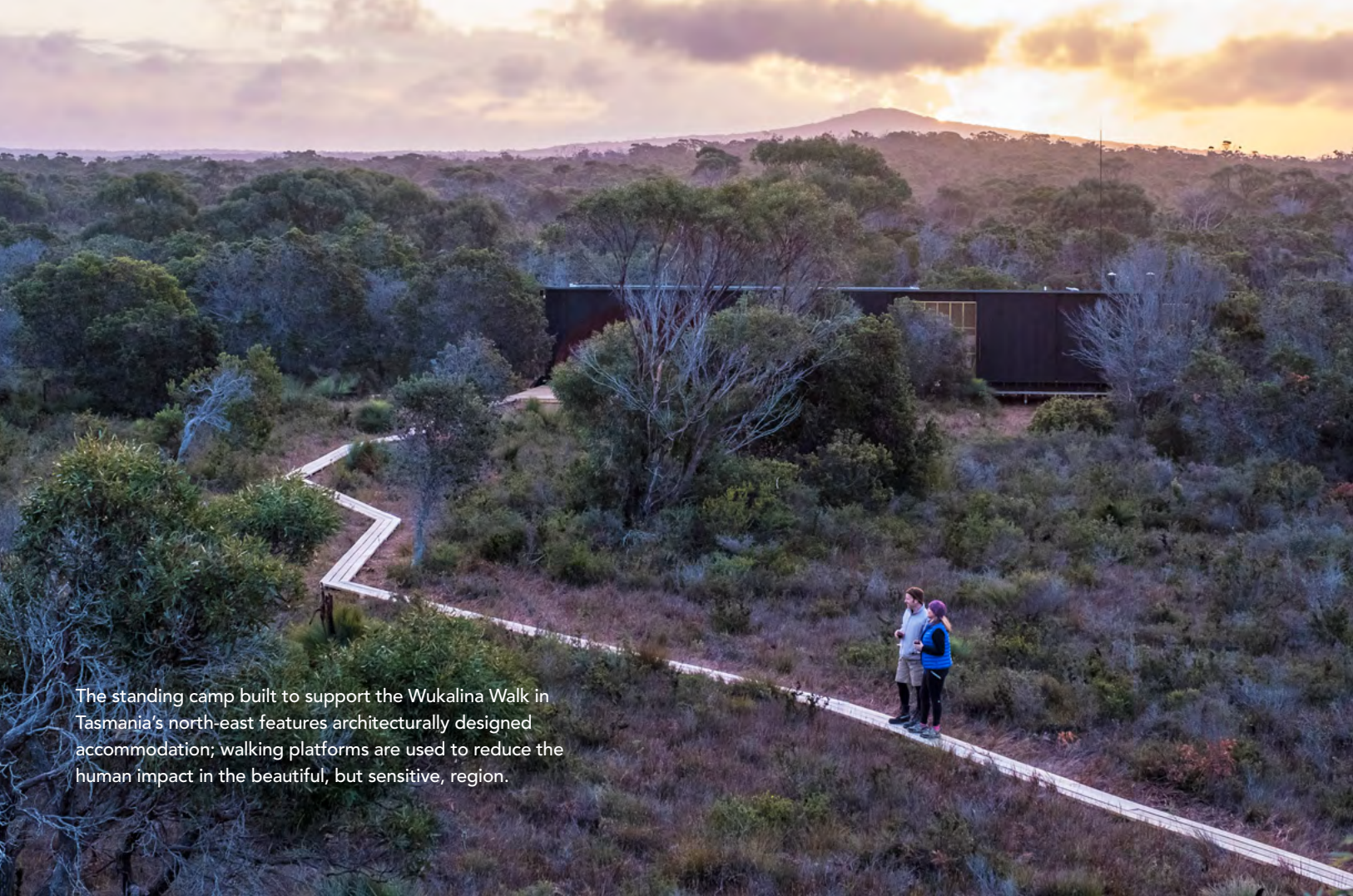
well-designed spaces. Building small was what we could afford, but also what we were used to; it wasn’t a compromise.”

The couple lucked into a steep site with sweeping north-west valley views in Island Bay, a southern suburb of Wellington. The house Andrew designed, after many iterations, consists of a kitchen, lounge area, den and bathroom/laundry downstairs. Upstairs there’s a mezzanine bedroom and study overlooking a double-height space with 4.5 metre high glazed doors opening onto a deck jutting into space above the slope.

The whole house fits into a cube with 5.5 metre sides, a constraint Andrew chose based on the “nine-tsubo house” family home design concept developed by Japanese architect Makoto Masuzawa in

the 1950s. (A ‘tsubo’ is a traditional unit of area measurement equivalent to two tatami floor mats: about 3.3 square metres.) Having spent time in Japan as an architecture student, Andrew found that designing his own nine-tsubo house gave the whole project more meaning. “Personally it linked me to that story and my own history in that country.

“Japan in the 1950s was very economically constrained,” he goes on, “and at the time we were feeling rather like that ourselves. The nine-tsubo approach is a sensible, economical way of building a house, and of course there is also a sustainability aspect to it – I think from an environmental impact point of view the single biggest thing you can do when building a house is build it small.”



The standing camp built to support the Wukalina Walk in Tasmania's north-east features architecturally designed accommodation; walking platforms are used to reduce the human impact in the beautiful, but sensitive, region.

Hike in quality

Tasmania's investment in architect-designed, environmentally sensitive walkers' huts – that stay naturally warm and dry year-round – is paying dividends for wilderness tourism and hiker comfort.

WORDS & PHOTOGRAPHY Chris Crerar

IF YOU WERE TO HIKE INTO

Tasmania's spectacular Frenchman's Cap as recently as November last year, the hut that greeted you below its summit, on the shores of Lake Tahune, was unlikely to leave you with great memories. Constructed in 1971, the single room un-insulated prefab hut was small and often crowded, a condensation trap, dark and a generally unpleasant place to spend the night in one of Australia's most

spectacular locations.

What you will find in its place today will give walkers a vastly more pleasant and safer experience. Opened by the Parks and Wildlife Service in April 2018, the new Lake Tahune Hut represents a new benchmark for walkers' huts in Tasmania's alpine wilderness, but in many ways also retains much in common with the more traditional mountain huts. The new hut is more

evolutionary than a departure.

Tasmania now has a wide network of public and privately run huts in its national parks and wild places, widely varied in terms of amenity, comfort and safety. The first huts however, dating back to the 19th century, were generally constructed by trappers, highland cattlemen, loggers and miners. As these industries faded away or changed, many of these huts were utilised

and adapted by early walking clubs.

“A lot of the early huts have morphed from industry-based huts into recreational huts, and the early clubs such as the Hobart and Launceston walking clubs were very good at doing up a lot of these huts and getting them in fit states for the walking fraternity,” says the recently retired head of the Parks and Wildlife Service Peter Mooney.

“But now we’ve come to the era of the modern-day hut, which is all about efficiency and longevity and built to a standard where it might have a 50-year lifecycle. Some of the early huts virtually had seasonal lifecycles, they were pretty rudimentary,” he adds.

Take any of those early bushwalkers into the recently constructed huts along Tasmania’s newest multi-day walk, the Three Capes Track, and they probably wouldn’t believe their eyes. Built to a standard not seen before in Tasmania, the three huts along the dramatic coastal experience on the Tasman Peninsula provide memory foam mattresses, gas-powered cooking facilities, charge points

for mobile phones and other devices, plus an onsite ranger.

These new huts are about much more than simple creature comforts, however. In terms of response to the site, the designs, sustainability, environmental and fire risk management, they do represent something of a departure from what has traditionally been provided in Tasmania’s parks. But then, so does the Three Capes Track. Conceived as a “dry foot” walk, this experience is different to most in Tasmania in that it was developed and designed to attract new walkers, families and help people who have always enjoyed the wilderness to continue walking.

“Three generations of the same family can walk together. None of our other walks can provide that,” says Peter Mooney. “You can have an 85 year old walking with his daughter and grandson, all walking and holidaying together.”

The huts along the Three Capes Track also feature initiatives such as angled windows to prevent bird-strike, large decks and art features as well as the capacity to be locked down and provide an internal fire

refuge in case of bushfire.

It was along Australia’s original multi-day walk, the Overland Track – traversing the Cradle Mountain-Lake St Clair National Park – however, that the need first arose for the introduction of modern walker-specific huts. Many of the original huts along the 65km western highlands walk were either early pioneers’ huts or early bushwalking huts, often now too small to cope with growing walker numbers, or built in inappropriate cold and damp areas.

Some of these huts have been replaced or superseded by newer versions, with the parks service maintaining a policy of replacing huts – except where they have historical value – rather than duplicating them. It has been something of a learning curve for the department however, with



The original Lake Tahune hut was replaced this year with an 8 Star passive solar building designed by Green Designs and constructed by prefab specialists Valley Workshop.



The famous and spectacular hike to Lake Tahune and Frenchman’s Cap has just got better. A new hut was helicoptered in during the summer and is now fully operational.



The new hut at Lake Tahune is naturally lit, has classic hiker hut bunks and is well equipped for cooking. Inside is cosy warm thanks to heat exchange technology powered by a micro hydro system that runs from a nearby creek.

