

—Case Study

Razorback's house of straw

In October 2011, volunteers flocked to assist Liz and Tim Gould put up and render the straw bale walls for their house on Razorback Ridge, between Camden and Picton in New South Wales.

The couple had moved their family from Sydney to Picton in 2008 searching for a tree change, and rented while they looked for something suitable on the local property market. After a disheartening search for a house with sustainable features, they decided to build a new home. They found five acres on Razorback and work on the project commenced.

When they began, Liz and Tim didn't know exactly what they were looking for but this changed when they met Sam and Simone of Viva Homes (www.vivahomes.com.au). Walking away from Sam and Simone's straw bale home, the couple knew immediately that the natural feel and solidity of the straw bale and earth-rendered construction was exactly what they had been looking for. While Tim had owner-built services and sheds on the property before, he and Liz decided to use professionals for the main house.

Draft plans were drawn up and handed to Jamie Brennan of Six B Designs to finalise and turn into a buildable reality. To build the house, Liz and Tim selected Frank Thomas of Yesterday, Today, Tomorrow Straw Bale Construction who uses a volunteer workshop model for all of his projects (www.strawtec.com.au). He advised Tim and Liz to find a good carpenter and said he would look after the rest.

Despite never having built with straw before, Camden builder Mick Kennedy of Benayla Constructions fit the carpentry bill perfectly. With his experience in repairing and rebuilding structures using original techniques at a nearby farm, he was able to prepare the frame for the straw bale workshop without problems.

Once the frame was in place, it was time to build the straw bale walls. Tim and Liz advertised a workshop for interested people to volunteer their labour in return for learning the techniques from Frank. The response was amazing, explains Tim, partly due to Razorback's proximity to Sydney, and numbers had to be capped at 20 or so participants per day.

The workshop stretched to six days: the first three and a half days were filled with fitting the bales into the frame, and for the remaining time some volunteers stayed on to learn the art of rendering. Liz was master caterer for the troops, while Tim managed the interactions between Mick, Frank, locals, volunteers and the media. Timing was critical for a number of tasks, such as running conduit for electrical and data outlets among the bales once they were in place, but before the rendering was done. Lime render was used for the exterior, while the clay for the interior render was sourced from the property. Tim says this is something he and Liz absolutely love about their house.

Tim adds that with growing demand, he hopes bales will be easier to source from local businesses. While he and Liz had to source bales from Griffith, a few days after the workshop he was in contact with farmers on the New South Wales North Coast who burn thousands of bales of rice straw yearly. "Clearly having a local source of bales of sufficient quality would reduce shipping and cost," he says. "However the local farmers approached were unfortunately not used to packing bales to the standard required. Hopefully this can improve over time."

Liz and Tim are extremely satisfied with the outcomes of their straw bale workshop – so much experience was shared among like-minded people and, of course, great progress was made on the house they hope to move into early this year.



④ A delivery of bales of rice straw is unloaded. In the foreground are the frames they will fill. All case study photos by Tim Gould



Tim and Liz's young daughter helps collect firewood on their Razorback property.



Volunteers work on installing the final layer of bales.



Once the straw bale walls are complete, the exterior is rendered with a lime mixture.