

Roundhouse Living in Wales

One of Tony Wrench's roundhouses appeared in our book *Tiny Homes: Simple Shelter* (2012). Depicted here is Tony's own roundhouse, similar to the one shown in our book, along with 18 years feedback based on his experience with these earth-based structures.

—LK

HI FOLKS. I LIVE IN West Wales, UK, with my partner Faith in a roundhouse I designed and we built in 1997. It is about 85 sq. meters, (850 sq. ft.) in size; it cost £3,000 (\$4,500) to make initially, and we have spent another £1000 or so on it in the 18 years we have been living here.

It is based on the type of roundwood frame and turf-roofed houses used by Celtic, Mandan, Miwok, and Pomo peoples, plus some modern things thrown in, like wind-screen and double glazed windows, wood stove, running water (hot and cold), solar PV's on the roof, and a wooden plank floor. We are off grid.

Changes we have made:

Floor insulation

We started out with a bare earth floor: clay, which dried hard and a bit bumpy and was cold. After four years, I fitted a raised floor of planked wood over the central round room, but it was still a bit cold.

The walls are cobwood (wood rounds of 14" or 40 cm long with cob separating them and straw in the centre) and the roof has one strawbale thickness of insulation under the membrane, but the floor was taking a lot of heat away.

So two years ago we floored this area as well and filled in the 8" (200 mm) gap with foamglas, an inert insulation material like pumice, made from air compressed through molten recycled glass. This has worked well in keeping the space warmer.

Wind turbine and LEDs

We choose to use very little electricity, so have no fridge, freezer, TV, washing machine or

white goods, as they are nicely called. We started out with one little solar panel and a small battery and now have four panels on the roof, and 220 amp-hours of battery store.

We have also a small, 300w, Chinese-made wind turbine, bought on eBay, which has been great at getting us out of trouble in times of little sunlight. We have installed 4w LED lights, replacing tungsten bulbs. It's the dead of winter as I write, and I am using the battery on this laptop that I hope I can recharge soon from any sun we might have, and Faith is knitting by one 4w light.

We have a telephone land line, and run a router for Wi-Fi directly from the 12v battery, obviating the need for an inverter, which itself uses 10w just being on.

Rats

Naturally, a funky little home like this on the edge of a wild wood is attractive as a habitat to many animals. We have been visited by moles, shrews, voles, mice, rats, squirrels, and badgers. Rats are the one permanent problem, as our cat can handle smaller mammals, and badgers are too polite to overstay their welcome.

I put a few hay bales in the walls when we built this as an experiment, and rats find making a run through a hay or straw bale both fun and nutritious, especially if there are seeds left in the straw. So over the years we have adapted to deter rats and to ensure that no food is left out if they do get in or under the floor.

The cobwood "front" wall is now coated with a layer of chicken wire, then lime plaster, which looks good, keeps out draughts and also prevents



rats from getting in. We keep all our food in metal boxes. Of course rats can burrow, and are intelligent. They learn what is available, what is possible, what traps look like, and whether it is worth the bother. To a certain extent you can educate a new generation of rats to leave you alone, or just live in one zone near you, or to only take food from outside, for example from by the bird table.

Storage space

We have found that if you want to live simply and not keep buying fuel, you need to have a coppicing system for your trees, and you need space to store wood, kindling and shavings whilst it is all drying.

We started out with a funky little woodpile of about four meters by three (10' by 12'), and we still have this, but only for stuff we have brought in from the woods waiting to be processed. I do wood turning for a living, so we have a good supply of dry wood shavings to start the fire in the wood stove

each day. We have about four sacks of this around at any time.

For kindling and occasional bursts of good heat we have sticks, twigs and the raspberry canes from two years back. There are logs proper, cut and stacked, ideally for two years.

In addition, we have found that this grubby lifestyle requires a lot of storage for working clothes and for drying out wet working clothes. If you are designing a new small home, build this all into your design. Then double it.

Workshop and porch

At the start, tools were everywhere. Then I built a little pod onto the back door of the house, about 10' by 8' (3 x 2.5 meters), with a little bench and shelves and dozens of hooks on the walls.

All our tools are now in one place. If anything needs mending, it goes out there. When we come in with dirty boots on, they stay there. The workshop is also an airlock for wind and rain and has been very useful.

Similarly, at the other end, we had a problem with the front door opening out directly onto the west. We have built a porch that stops the wind and contains boots, coats, sensitive plants, and seedlings; it is also a great place to sit and catch the evening sun on a cold day. Everyone should have one.

Den for guests

For guests, we built a den in 2008, using all local resources and volunteer labor. It cost £800 (\$1,200) in materials and was done within three months. It has a wooden suspended floor, wood stove, and is silent. It is about 80 yards from our main house. I would much rather have two small dens than one big one.

Things we can't change:

We live about quarter of a mile from where we park our car, and about half a mile from the road.

Advantages: No road noise, lots of birdsong, strong legs, and an expertise in the use of wheelbarrows. You can get twice as much on a wheelbarrow if you have a good selection of stretch bungees to hold stuff down with. If one of you pulls a wheelbarrow with a rope, and the other pushes, you would be amazed at the size of sofa you can carry for a quarter of a mile.

Disadvantages: One day our bodies are just not going to be able to handle so much donkey work. The solution? A donkey, maybe. In truth, we will have to handle this challenge in the next ten years.



Things that work well and we don't need to change:

Plant grape vines in the ground and train them over the south side of your turf roof. Everybody wins.

A wood stove with a back boiler really works. We have hot water when we need it and are warm when we need to be.

The simpler your compost toilet, the better it works. Ours is a twin chamber, no separating pee from urine, no sealed floor. It cost us £5 eighteen years ago, has given us nine barrow loads of excellent compost every year, and runs on wood shavings from my workshop, so the wood goes back into the ground. The only thing we would change is not to build it fifty meters from the house. Ten would be just fine.

Solar panels work fine on a turf roof. Stand them up to face the sun appropriately, and they are silent and good helpers.

If you are going to be washing clothes by hand, preparing a lot of vegetables or fruit, making wine, etc, it pays to build two separate sinks in the kitchen.

I have written two books on building roundhouses; see:

 www.thatroundhouse.info

Floor Area: 850 sq. ft. / 85 m²

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Den for guests

