healthy living

The comfort of cob

Fairy tale cottage takes shape from mud and straw

By Linda Egenes

Dirt. Mud. Clay. Cob. Cob building is an ancient way to build with earth, used most famously in England to create picturesque cottages with thatched roofs. There are many advantages to cob building: It can be warm in winter and cool in summer; it's natural, nontoxic and beautiful; and it costs very little.

Just ask Hap and Lin Mullenneaux, a Fairfield, Iowa, couple in their 50s who recently sculpted their own cob home with the help of friends and family. The total cost for their modest 14-by-18-foot, two-story cottage? Just \$7,000. And half of that was for the green metal roof and sturdy Pella windows.

Labor of love

It all started in the summer of 2007, when the Mullenneauxs attended a workshop at Cob Cottage Company in Oregon with Ianto Evans and Linda Smiley, who are credited with bringing cob building to the United States and promoting it around the globe through workshops and their book, "The Hand-Sculpted House."

After their trip to Oregon, Hap and Lin traveled to England, where they met Iowa City transplant Adam Weismann and his partner, Katy Bryce, who also trained at the Cob Cottage Company in Oregon. They now live in Katy's native England, where they have won numerous awards for their cob building projects, plaster restoration work and books.

Back home in Iowa last fall, Hap and Lin purchased a \$700 camper on eBay, parked it on their land near Fairfield's Abundance Ecovillage and moved in. They planted trees, built a hoop greenhouse that serves as an open-air garden in summer, and constructed the three-sided rustic wood shed that serves as their outdoor kitchen, shower and workshop.

When spring came, they started constructing the cob cottage with the help of more than 50 volunteers. I was one of those volunteers, and I helped Lin







Lin Mullenneaux (top) mixes dung with clay to create plaster for her and her husband Hap's cob home (bottom), which cost about \$7,000. Hap made the kitchen shelves (right) from old walnut boards. (Submitted)

mix the cob on tarps using buckets of clay substrata dug from their own land, buckets of sand, water and straw. We mashed it with our feet, formed it into lumps with our hands, and tossed it fire-brigade style in buckets to Hap, who slapped it on the wall to meld with other cobs into a solid earthen mass.

Experiment in sustainability

A few months later, on a cold November day, I visit Hap and Lin in their completed cottage. They've covered the cob walls with a water-resistant render made of cow dung, earth and straw that they white-washed with lime. It's a fairy tale place with a limestone foundation, a green metal roof to catch rainwater and a periwinkle blue door. It sits comfortably on the land, as if it grew there.

Winds gust up to 35 miles per hour, but the 18-inch earthen walls keep the cottage warm, even without a fire in the wood stove, the only heat source.

It's the first time I've seen the finished interior, and I feel like I'm being hugged by nature. Plaster walls — made by Lin from a mixture of kaolin clay, sand, straw, wheat paste and cattail fiber — are

smooth and curvy, like sculpted stone. Sturdy benches carved out of cob, beams of round pine logs that Hap cleared as deadwood from the local forest, and a winding slate staircase to the sleeping loft add rustic charm. Coat hooks are made of tree branches.

Hap has built a kitchen counter out of old planks and stained them golden. The dark-brown grain forms an intricate pattern. When a friend gave him some walnut boards that had been sitting outside for seven years, Hap made them into shelves that hold Mason jars of beans and grains. Cast iron pans and bunches of dried garlic and fennel from Lin's garden hang from the rafters.

Lin offers me a seat on one of the sculpted cob benches that's shaped like a couch and covered with sheepskins. Hap sits in his rocking chair next to the built-in walnut book shelves and computer shelf. A wire to power the computer is the only electricity in the home, and eventually that will be powered by solar panels.

"Do you want to see the cowboy bathtub we're looking for?" he asks. It's a small galvanized tin tub with curved sides like an upside down cowboy hat. It will fit in the sleeping loft, and an Amish pump will supply water — heated on their wood stove — through a copper pipe.

"This is an experiment in sustainability," says Hap.

Hap and Lin hope to inspire and teach others to build their own homes with natural materials. Hap is the treasurer of the Sustainable Living Coalition, which is creating a campus adjacent to the Mullenneaux homestead and Abundance Eco Village. It will include a center for sustainable living and courses on permaculture and natural building. Already, some of the volunteers on the Mullenneaux house are starting their own cob building projects in Fairfield.

Built by nature

Hap notes that their home's interior, with its rounded niches and undulating walls, is a result of the flowing nature of cob building.

"It's a comforting space," says Lin, who feels that what's missing in modern architecture is the curved line — the feminine element, the comfort of the mother.

"When you use uniform materials, straight boards and sheet rock, the result is something straight and rigid," says Hap. "With cob building, it's easier to be round than straight, and you naturally create more curved, gentle shapes. Every cob home is unique. You're never going to feel that oppressive uniformity in a cob home."

Hap also has thought a lot about the difference between natural building and green building.

"'Green' is a term that is getting over-used and abused these days." he says. "I'd define 'natural' building as using unprocessed materials as much as possible."

He lists what he feels to be natural, unprocessed materials: round wood, clay soil, stone, sand, straw. "When you use materials in the form that nature made them, you have to work cooperatively with nature. They start to shape the creation—they design the home."

"It's like fitting together the pieces of a puzzle," adds Lin. "You can't decide it all ahead of time."

"You find the stone and see where it belongs," says Hap. "The house comes into being as a co-creation with nature. It's much more of an artistic process."

Read a longer version of this story online at radishmagazine.com and see more photos of the Mullenneauxs' cob home at phase.com/hapm/ourhouse.

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