

Living green at Bear Creek

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By MaryHelen Swanson

A North Branch couple is taking the green life seriously and is enjoying living inside a dome that is pleasing to Mother Earth in as many as 50 ways.

A view of the fireplace and second-floor railing. The rails are made of wood from northern Minnesota. The rock for the fireplace is local and the large hearth rock is taconite that comes from an abandoned iron mine on the Minnesota iron range. Temperature in the home is constant no matter which level you're on. The home was featured on cable television's World's Greenest Homes this fall. A film crew spent an entire day at Bear Creek Dome for a 15-minute segment on the show.

Dennis Odin Johnson and his wife, Tessa Hill, have been dwelling in their earth-friendly dome home since Oct. 13, 2007, the day they were married in the spacious, bright great room.

The home, the pair noted on a recent visit, was finished only the day before.

Their emphasis on green and healthy living stems from the loss of loved ones from cancers.

The Energy Star 5 Plus Bear Creek Dome is named for the creek that meanders through their rural North Branch property. And they named the creek, too. It was while asking a local historian for the name of the creek, they learned it was one of several in the area called Hay Creek. Because the couple has observed bear near the creek, they renamed it Bear Creek.

The beautiful home boasts 18-inch walls and roof that help maintain a constant temperature inside, summer or winter, and provide an R value of 55. They have installed two air conditioners, but never found the need for them this past summer.

The dome shape uses 60 percent less structural materials to build than a conventional box house.

Insulation is formaldehyde-free fiberglass made from recycled glass and some insulation is made from recycled blue jean material.

From the great room they look out triple-pane windows and overhead, the sunlight streams in from triple-pane skylights.

The positioning of the home on the property takes advantage of morning sun and eliminates the heat of the afternoon sun.

A unique sun tunnel in the ceiling over Hill's second-floor office brings extra daylight into the area, even on cloudy days. All light bulbs are compact fluorescent.

The concrete floor has radiant heating. And it is stained, eliminating the need for carpet or other floor covering.

Johnson pointed out that all materials used are non-toxic. There are no VOC paints, stains or wood sealers.

They used mold-free sheetrock with no paper facing.

IKEA cabinets in the kitchen area were built with non-toxic materials.

The outside of Bear Creek Dome uses machine-hewn 2 x 6 "log" siding with non-toxic stains. It will age naturally requiring minimal maintenance. There are solar-powered accent and path lights. There is no "artificial" lawn, and wildflowers and native habitat are protected and encouraged in the yard. There is no asphalt driveway, either.

Recycle, recycle

Johnson and Hill built the home using fallen and reclaimed wood, including the white oak window sills and bathroom countertop, the entry porch cedar posts and rough-sawn pine door trim, much of which is gathered on their own 50 acres.

The white pine wall paneling is from their property (fallen wood, not cut) and the white pine for the floors and stair treads was harvested during the Co Rd 17 interchange construction project.

The railings on the second-floor are fallen cedar from northern Minnesota.

Most interesting is the kitchen island counter and shower walls lining. It is reclaimed redwood from an 1890 Grainbelt Beer brewing vat. And Johnson still has some left over.

Rock for the huge, central fireplace came from Boulder Creek at Harris, but the large heart boulders are taconite stone from an abandoned northern Minnesota iron mine. That brings a bit of his youth to the home as Johnson is from the iron range.

Countertops are slices of banded taconite, polished to produce beauty that rivals any marble. It requires no sealer like marble.

A whole-house water filtration system softens and process all water used.

And an air-to-air heat exchanger, which is required on all new homes, constantly brings in fresh air and exhausts stale, moist air.

An area rug near the fireplace is made from recycled plastic bottles.

However, you will probably never find plastic bottles to recycle in their home as they also have their own soda-making machine.

Other unique aspects

In the living space is a large-screen television mounted on the wall that swings around so it can be viewed from the master bedroom.

Johnson, an architectural designer for 36 years, saw to some unique features.

Like the Murphy bed in that master bedroom, that, when lifted, creates a room that can be used for additional entertaining space as it is right off the living room.

And there's an infrared sauna in that bedroom, too, for taking the toxins out of your body.

“It’s 20 cents per sauna,” Hill said, “that’s better than steam.”

The recycling has even a nostalgic aspect as a dressing screen in the master bedroom was made from wallpaper that was leftover from Johnson’s bedroom in 1949. His mother saved the rolls.

And a dresser/vanity from Hill’s youth is quite comfortable in the upstairs guest bedroom.

“It’s good for the environment to use old things,” Hill said.

The counter top in the bathroom is made from fallen wood and the sinks are two wooden salad bowls Hill found online. The tile is recycled porcelain.

According to Hill, if you Google, you can find lots of recycled stuff.

Johnson advised that you have to do a lot of asking when looking for recycled items.

Their green, healthy living continues in the products they use. People need to think about recycled products such as paper towels, napkins and use non-toxic cleaning supplies, the pair said. And buy organic food as much as possible, they added.

The green continues to the exterior of the home and yard where there is no blacktop or hard surfaced trails.

Johnson, noted that the building code changes that provide for healthier living have been a long time in the coming. They came, he said, from a bill his former wife, Senator Janet Johnson, championed. Sen. Johnson passed away in late summer 1999.

“It’s taken this long for these things to come into play,” he said.

Natural Spaces Domes world headquarters is in North Branch where they have nine domes including the new, certified Energy Star 5 Plus Bear Creek Dome, Forest dome, office dome, two shop domes, Bear Creek Cabin dome, and a few others. They invite visitors to come see that they “practice what they preach” in green and healthy living.

For more on the Bear Creek Dome and Natural Spaces Domes, go to www.naturalspacesdomes.com. or e-mail: nsd@naturalspacesdomes.com; or call (651) 674-4292.