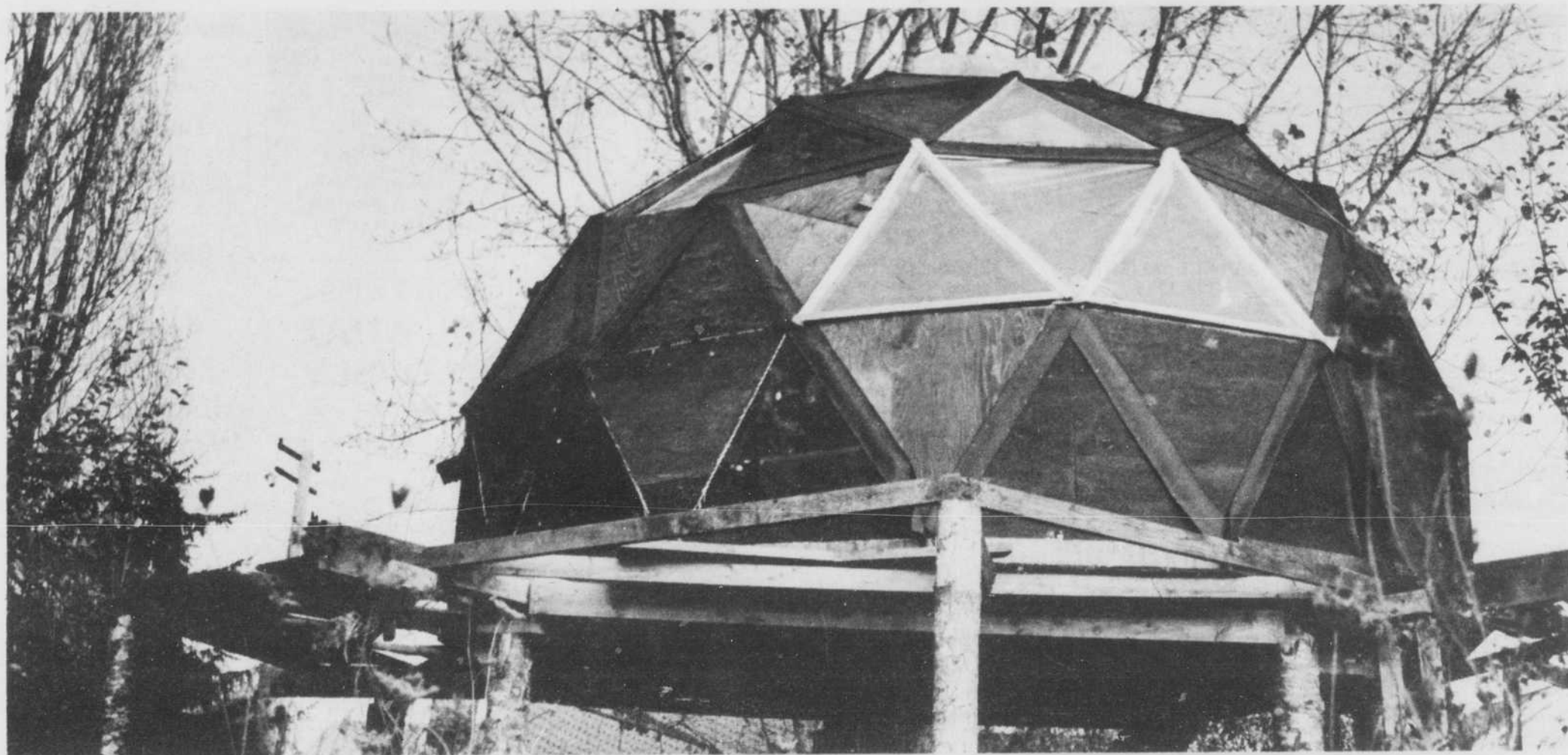


Better domes and gardens



Geodesic domes have a "very high structural performance as accomplished with only 3 percent of the weight of any given material necessary to produce equivalent structural and functional capabilities by any other known systems," says the man most often credited with the invention, R. Buckminster Fuller.

Geodesic dome has vaulted into popularity

Birds do it. Bees do it. Why can't we do it?

Actually, there's no reason why we can't. After all, insects, cavemen, Eskimos and medieval Irish monks have been doing it in various forms for thousands of years — living in geodesic domes, that is.

According to Webster, a geodesic dome is "a domed or vaulted structure of lightweight straight elements that form interlocking polygons."

If that definition doesn't do the trick, all sorts of nicknames transmit the imagery of such dwellings —

Molotov mushroom, bubblegum beehive, lunar lumps, polymer puffballs and humanoid terrariums, to name a few.

There are two prime reasons why a person might want to live in a geodesic dome. One is that they can be cheaper to build and maintain. The other reason is more "spiritual."

According to R. Buckminster Fuller, the man generally credited with transforming domes into a practical alternative to conventional dwellings, geodesic homes have a "very high structural performance as accomplished with only 3 percent of the weight of any given material necessary to produce equivalent structural and functional capabilities by any other known systems."

Energy bills can be reduced sharply because it takes less energy to heat and cool a spherical home than the traditional rectangular-box design. Savings can amount to one-half or two-thirds of a conventional home with the same square footage.

For Barbara, a young mother living on welfare in Eugene, a geodesic dome was a way for her to reconcile desire with reality.

"I'm a 25-year-old woman with a kid and not much income. The thought of having my own home intrigued me," says Barbara, who asked that her real name not be used for fear that welfare authorities would try to take her dome.

"This is the one way I can have my own house without it costing an arm and a leg and without someone else telling me what I can and can't do with it. If I want to punch a hole in the wall and put in a window, there's nobody to tell me I can't."

Barbara bought her dome for \$150 from a man near Dexter who had several on his property and wanted to clear the land for other purposes. But she has been unable so far to find someone who will allow her to move the dome on his or her land in exchange for labor.

"I want to live in the woods, near a stream, basically hippie style," says Barbara.

Even though her structure is "illegal as

hell" because it doesn't meet the minimum state codes for wiring and plumbing, she thinks the modifications could be made cheaply.

The dome is 18 feet wide and 18 feet tall. It is a "split-level" home with a loft for the bedroom. Shingles help it blend more naturally into the woods, and she plans to add a skylight and stained glass windows to give it a more lived-in look.

Although the building can be assembled and disassembled at will, it can be a tedious process. Barbara figures it will take her a week to take it down and another two weeks to set it up once she finds a suitable site.

Portions of the building, cut at specific angles in hexagonal and pentagonal shapes, are pieced together by bolts and resilient graphite plastic piping.

Even if she does find a place for her dome, Barbara runs the risk of being evicted unless she invests enough money to meet state building codes. But that threat doesn't seem to bother her.

"Well, I'll tell them it's a workroom. It's legal as a shed," Barbara says. "And if they wonder why I have a bed inside there, I can say 'well, this is a workroom, and sometimes I get tired of working.'"

Bonnie Schreder, of west Eugene, has a similar 18-foot dome in her backyard. She couldn't be more pleased with it.

"We bought it not so much as a novelty as an extra house for guests and for meetings," says Schreder. "The energy created inside the dome because of its circular configuration is very high. It's a great place to meet or meditate. There's something about a dome that gives out a very special, spiritual energy."

"It really creates a very nice building. I don't know how else to describe it," Schreder says. "I think that almost anyone you talk to that has a geodesic dome will tell you there's a very nice feeling about it."



Bonnie Schreder is silhouetted near a window in her dome. "It's a great place to meet or meditate. There's something about a dome that gives out a very special, spiritual energy," she says.

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