Home, small home: Santa Cruz teen's big vision is to build tiny for a better future

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Wild ideas come naturally to Kendall Ronzano. In her spare time, the busy York School junior is building a miniature house on a trailer. No, she's not moving out of her Westside home just yet. Ronzano plans to donate the house -- or auction it off and donate the proceeds -- to a local homeless family.

Inside the space of a large walk-in closet, the house packs the basic requirements for shelter into 117 square feet. Eighteen feet long and 7 feet wide, the Lusby Tumbleweed Tiny House design includes a covered redwood porch, a galley kitchen, dining space, shower, bathroom, and lofted sleeping space, all mounted on a trailer.

"I think it's really important for everyone to learn how to build a house," Ronzano said. "We pass by the homeless shelter every day on the long commute [to York School], and it just reminds me how instantaneously someone can lose their home. A lot of times it's because of the economy. And so I thought, you know what, maybe somehow I could build this house and then give it back to them."

Utilizing fundraising skills she learned for post-9/11 disaster relief and a supersized dose of determination, the 16-year-old already is kneedeep in the project, which she calls NerdGirlHomes. The tiny home, which was started in May, is framed; installing the shower and putting up plywood for the walls are next.

In between juggling a busy Advanced Placement course load and playing club volleyball, Ronzano has found dozens of donors and

sponsors among family friends and the greater community including Davenport-based Big Creek Lumber, Monument Lumber in Freedom and Smeenk Construction in Santa Cruz, and more volunteers than she knows what to do with.

"The best part of it is the feeling that you're making a difference and seeing how many people in the community are getting so excited about [the Lusby Tumbleweed Tiny House], and are so fascinated and are willing to support the project," said Ronzano. "I wake up in the morning and sometimes we'll have neighbors knocking on the door like, OK, we want to see what stage you're on now!' "

Less is more

The Tumbleweed Tiny House was designed by Sebastopol artist-turned architect Jay Shafer. Shafer envisioned a downsized life where he could live simply and take his home wherever the wind blew. The design and its











subsequent siblings were so successful that Shafer wrote two books and has sold numerous pre-made Tiny Houses and more than 800 sets of design plans -- Ronzano bought her plans for \$859 -- since launching the Tumbleweed Tiny House Company in 2000.

The versatile Tumbleweed designs can be used as a primary residence, mobile camper, home office, art studio, guest house and vacation getaway. But the benefits are hardly minimal -- not only does the Lusby design cost just \$21,250 to build, but building small greatly reduces the user's environmental footprint.

"The sure thing you can do to be sustainable as you are building a new house is just to build it small," Shafer said. "Because no matter what, you're going to be using fewer resources. In a world where everything is posed as green, at least using less is a sure bet."

A peek inside Shafer's own miniature house reveals a trendy interior that includes bookshelves, a closet, a queen-sized bed and a lofted storage space. Although most of Shafer's designs call for traditional, cottage-style exteriors, there are also contemporary designs.

For the mod gypsy, the Popomo design is 172 square feet and features hot-rolled corrosion-resistant steel siding, which resembles a smooth boxcar.

In all, Shafer has designed seven Tiny Homes and nine Small Homes of various sizes and styles. His designs have been featured on "Oprah" and in The New York Times.

Environmentally focused designers and architects applaud the approach.

"The size of the average American home has ballooned in the last 50 years," said Mark Primack, a Santa Cruz architect who actively promotes alternative, socially responsible development for Santa Cruz. The former city councilman is the designer of the proposed LEED-certified Delaware Addition live/work neighborhood.

"In this world today, the average person lives in 100 square feet," Primack added. "That would be a family of four in what we regularly build in a two-car garage."

But thanks to an economic downswing and increasing environmental awareness, the trend of building small is beginning to catch on. Instead of supersizing, some people are choosing to downsize their living space for various reasons ranging from economy and environmental ethics to a desire for a simpler life and less housework.

"Sustainability is not about buying new stuff, it's about not having to buy new things," Primack said. "History shows us that in times of economic contraction, people become more introspective, more thoughtful and more conservative, not in a political sense, but in a kind of material sense. The focus of quality in your life rather than quantity is a very important move in the sustainable movement."

Living small is an idea rooted in the past that may shed light on how to overcome a modern problem as the human population grows.

"The secret to the future is learning to live in smaller space and learning to live closer to each other," Primack said. "The most important thing people can do now is to experiment with ways of strengthening community."

It takes a village

When Ronzano was very small, she wanted to design and build her own house. All by herself. When she reached the mature age of 6, she dreamed of creating an animal conservation organization with preserves on all seven continents.

"I've continued to grow and change," Ronzano said.

She laughed, though, thinking about her dream as a young girl. "That would have been really interesting to build [a house] all on my own."

It's that same independence and environmental consciousness that propelled Ronzano to start the Tumbleweed Tiny House in her Miles Street driveway. Ronzano calculates she has already spent 343 hours on the project, including three eight-hour construction days. She has raised \$4,496 of her \$14,500 fundraising goal. Donated materials will bring her to the \$21,250 total the designer figures the home will cost.

Ronzano stresses the importance of using local materials, environmentally friendly design, and breaking down the stereotype of a lazy teen by building the house herself. "Especially girls," she said. "People think [a girl] wouldn't actually do the work.".

Any doubts she will be able to master the skills needed to build an entire house seem misplaced when Ronzano shares how she learned to weld and handle power tools:

"In seventh grade, for my science fair project, I decided I wanted to create a contraption that you could exercise on while playing video games. So I built my own stationary bike, and hooked it up using an alternator, inverter, etcetera, and it powered the TV and the video games. ...It was a little bit difficult to actually play the video games."

Ronzano calls herself a kinesthetic learner and makes it clear she likes to do things for herself. A graduate of Santa Cruz Montessori School, she believes her alternative Montessori education has helped her excel in hands-on learning. She credits the mentorship of her father, a contractor, and other family friends with helping her master new skills needed for building the Lusby Tumbleweed Tiny House.

"Usually I won't even let my dad put on the tool belt, I'll just go, Instruct me from afar because I don't want you to take over.' I don't want him to help me, I want to do it on my own. I've always been like that," said Ronzano.

Since starting the building part of the project, Ronzano has learned to use a Sawzall, impact driver, pneumatic framing gun, jigsaw, electric staple gun and a die grinder.

But the construction skills are only half the education.

On her blog, <u>www.nerdgirlhomes.wordpress.com</u>, Ronzano notes that she has learned " that support comes in all forms -- financial, words of encouragement, materials, introductions, sharing ideas, giving feedback and belief."