An Expert At Straw Bale Gardening

By Nancy Leasman

"Why didn't I think of that?"

That's the question gardeners often ask themselves after hearing Joel Karsten's presentation on straw bale gardening. He perfected his technique 8 years ago and now teaches it to others.

Karsten's garden "revolution" got started after his grandma mentioned a radio discussion she heard about growing potatoes under straw. That led to a discussion with his dad, Glen Karsten, about the possibility of growing things directly in straw bales. They decided to give it a try.

"We did 50 bales the first year," Karsten says about their gardening experiment. They tried various fertilizers and watering methods to give the composting process a good start. Taking a scientific approach, with the bales divided into 10 separate plots, he says the results were amazing. "Everything worked!"

Karsten has gone on to perfect his system. These are the basics:

Place up to five straw (not hay) bales in a row, end to end, "cut" side up.

Drive in a 6 to 7-ft. post or stake in the ground at each end.

Provide growth support wires by fastening 14 to 16 gauge wire from post to post with twin bottom wires 10 to 12 in. above the bales and single wires at 10-in. intervals to the tops of the posts. (The twin bottom wires allow for insertion of plastic sheets to protect tender young plants.)

Condition the bales over a 10-day period: Days 1, 3 and 5, sprinkle 1/2 cup of cheap

fertilizer (34-0-0) over each bale, then water thoroughly. Days 2, 4 and 6, water. Days 7 through 9 use 1/4 cup of the fertilizer plus water. Day 10, apply one cup of 10-10-10 fertilizer and water. Karsten advises using the cheapest fertilizer available.

Karsten says by the end of the conditioning period earth worms will have moved in and mushrooms will be sprouting in the bales. The strings that hold the straw together are important since they hold the outer shell of the bales while the inner part decomposes and becomes the perfect growing media. Tomatoes, pepper, cabbage, broccoli and other young plants can be planted in holes made in the newly composted middle of the bales. A 1 to 2-in. inch layer of potting soil placed on top of the bales is advisable for starting seeds that might slide into holes in the straw.

Straw bale gardening works for nearly all annual vegetables and flowers. One exception is corn which could only be planted one or two stalks per bale, limiting production. This planting method is also a solution for gardeners with tomato growing difficulties due to Fusarium and Verticillium wilt, fungi that stay in the soil and stunt or kill tomatoes planted in the same area year after year.

Benefits of straw bale gardening include: no weeding, no tilling, low cost, less stooping and bending, fewer bugs and pests, and ease of harvest. Karsten recommends installing a drip irrigation system for even watering. He says planting can be done up to a month



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earlier in the bales which give off heat as the straw composts. He offers many more tips and techniques on his website and in his handy booklet, "Guide to Straw Bale Gardening".

Karsten's current garden is at 240 bales.

He estimates that his low labor garden will require only about 18 hrs. of work per season.

Contact: FARM SHOW Followup, Joel Karsten, 1313 Willow Circle, Roseville, Minn. 55113 (ph 651 470-2096; advprod@comcast.net; www.strawbalegardens.com).

Rolling Garden Makes Veggie Production Easy

Forget about frost or heat damage to garden plants with a Portable Home Garden (PHG). When extreme temperatures threaten, just push the rack of potted plants under roof. The rest of the time the PHG just about takes care of itself.

"We use a hybrid-hydroponic system with all the nutrients in the water supply," explains Terry Hill, Portable Home Garden. "Our units come with a fully irrigated system with a water manifold with adjustable drippers to each pot. You can increase water flow to water loving lettuce or reduce it for herbs."

Hill has worked with citrus, vegetables and cattle marketing his entire life. A few years ago, he began work on a vertical wall hydroponic system. Today he has more than 30,000 plants growing and producing fruits and vegetables in less than a 1/4 acre.

"People who asked to tour it liked what they saw, but they wanted something smaller," recalls Hill.

PHG now offers systems as small as the Mini 36 with 10 pots and the TR6-48 that holds 36 pots. The three basic models are 44

in. high by 28 in. deep and range from 29 to 51 in. wide. Prices range from \$120 to \$250 for the home-sized units.

Commercial scale units are also available and range from around \$500 to \$20,000.

All models are designed to fit through a 36-in. wide door. They also share a common material, F-G polyvinyl chloride. The material is rust proof, chemical resistant, UV protected and easy to clean.

"We use coir (coconut fiber) growing medium as it's lighter and holds more water than peat moss," says Hill. "Each pot can hold one to two plants depending on the size of the mature plant."

Systems can be ordered direct from the company website or through distributors. Hill is looking to add distributors in the U.S. and Canada. The company and its distributors also handle growing medium, fertilizer and irrigation equipment, including fertilizer injectors and timers and other accessories such as brackets for mounting grow lights.

"We sell to a lot of people in apartments and condos, but also to those who just want





Rolling garden comes with adjustable drippers for each pot. Cart fits through a 36-in.

a simple to maintain, compact system," says Hill. "Restaurants are putting in small units to grow fresh herbs, and schools are using them to teach kids about growing food. A group of nursing homes in N.C. have found our units are good therapy. One older resident said it

brought the farm back to her."

Contact: FARM SHOW Followup, Portable Home Garden, 3288 N.E. Appaloosa Street, Arcadia, Fla. 34266 (ph 863 993-1778; mail@portablehomegarden.com; www. portablehomegarden.com).

Handy "Hood Rail" For Yard Work

By C.F. Marley

When using our old Cub Cadet garden tractor to do yard work, we sometimes like to carry buckets and bags, and even toolboxes, on the hood of the tractor.

Vibration from the tractor engine could cause the items to slip off, so to keep the items contained we attached a wooden rail around the top of the hood. The rail is made from 1 by 2 wooden strips and is easy to attach -- all it takes is a few 1/8-in. stove bolts at the ends of the rails. We painted the rail white to match the color of the tractor.

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Wooden rail around top of garden tractor's hood contains buckets and bags, etc.

Low-Cost Greenhouse

Wess Cornelius, Winlock, Wash., built a low-cost, 16 by 24-ft. greenhouse out of 8 by 8-ft. plywood panels, which were used to build the building's floor, walls, peak ends and roof panels.

The building stands in his back yard.

"It didn't cost much to build and is really handy," says Wess. "I use the south end of the building as a greenhouse and the north end for storing yard equipment. I went to my shop and built all the building's components out of 8 by 8-ft. plywood panels, and then stored and painted the pieces in my garage.

"When the weather permitted and I was ready to put up the building, I piled everything onto a flatbed trailer and hauled it into my back yard. Then I used a manlift to lift the various pieces into place. The floor panels went down on top of a foundation that



Wess Cornelius used 8 by 8-ft. plywood panels to build greenhouse's floor, walls, peak ends and roof panel.

I made from pressure treated 4 by 4's. Then I stood the walls up and fastened them together. It took only about 12 hours to stand the entire building up."

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