"It lets me maximize use of our available growing space," says Martin, who built this 12-ft. high metal rack and put several 5-gal. buckets on it.

Tomatoes grow out the bottom and peppers grow out the top. Buckets fit inside old wheel rims, which slide back and forth on the rack.

Upside Down Tomato Growing Rack

Al Martin of Sidney, Ark., read a recent story in FARM SHOW about growing tomatoes upside down in 5-gal. buckets. He took the idea one step farther, building a 12-ft. high metal rack with several 5-gal. buckets on it. Tomatoes grow out the bottom and peppers grow out the top.

"It lets me maximize use of our available growing space," says Martin, who tried the idea for the first time this past summer. "I don't have a lot of space so if I grew tomatoes on the ground our goats would just eat them up. And as long as I was planting them this way, I didn't want to waste the soil on top of the bucket."

He cuts a 2-in. dia. hole in the bottom of each bucket. Soil is added, along with some straw on top that serves as a mulch to hold water. The seedling grows out of the hole and the tomatoes that hang down are easy to pick.

The buckets fit inside old wheel rims, which can be slid back and forth on the rack.

He fills each bucket with a mix of manure, dirt and peat moss. "I mix up a gallon of Miracle Gro every week, climb the ladder, and pour a gallon into each bucket," says Martin.

At other times he can water the plants right from the ground, thanks to a "watering can" that he built out of a 12-ft. length of conduit. He bent the conduit into a U shape at the top and mounted a shower head on it. The bottom end of the conduit connects to an ordinary garden hose. "I simply hang the shower head over each bucket. The soil is about 4 in. below the top of the bucket, so when water starts spilling over the top I know that's enough," notes Martin.

Contact: FARM SHOW Followup, Al Martin, Rt. 1, Box 114A, Sidney, Ark. 72577 (ph 870 368-5540 or cell ph 870 373-1149; cen92903@centurytel.net).

A-Frame Veggie Garden

Retired physicist Jack Nachamkin of Glen Mills, Penn., has had tremendous gardening success by using a scaffolding system to support a variety of vegetable plants. He says his system dramatically increases production and uses space more efficiently.

In 2005, Nachamkin set up a hanging bucket system on his deck, using an 8-ft. section of A-frame scaffold made from 2 by 4's and plastic buckets.

By cutting a 2-in. dia. hole in the bottom of each bucket, he was able to grow "inverted tomatoes" from the underside, and potatoes on top.

Nachamkin included a dozen crushed egg shells in each bucket of potting soil and suspended them with two hooks each, from the top of the A-frames. He also ran a drip line to each one for watering.

He also grew bean plants in pots, positioned so they would climb up over the A-frames.

Nachamkin says the hanging buckets each produced 1 1/2 to 2 lbs. of potatoes and a good number of tomatoes. The bean plants were also very productive.

"We got the idea because we have so many mice and voles. This gets the plants up out of the way," he says.

Nachamkin set up eight large A-frames out in the field to grow cucumbers.

"My wife and I got tired of bending over to pick cucumbers," Nachamkin explains. "The eight frames are 96 feet long, nearly eight feet high, and the cucumbers grew all the way to the top. I planted them only inches apart and now we're harvesting 8 to 10 pounds of cucumbers per day. We're giving them away and pickling them, because we're so overwhelmed with production!"

The A-frames are made from 2 by 4's, held together by sawhorse hinges at the top and 1 by 2 braces on both the inside and outside of the legs. Each 12-ft. length of A-frame has 3 pairs of legs screwed on, according to Nachamkin.

The structure is covered with plastic mesh - the kind used in deer fencing. Each frame is anchored with wooden 2 by 2-in. stakes, driven into the ground and firmly attached to the legs. "We moved them into position by attaching old bicycle wheels to the middle legs. It took very little effort for a single person to move them after the wheels are attached. We only had two axles and two wheels, so we just transferred those from one section to the next, using pre-drilled holes for the axles."

Nachamkin said he used the best quality wood for his A-frames, and he weatherproofed them with stain. His total expenses came to about $1,400 for all eight frames (which included the wood, hardware, stain and the mesh).

"A lot of the vines had to be hand trained to the mesh. This was done by gently lifting them up into place. We tied down the ones that did not 'cooperate' with twine," he says.

Contact: FARM SHOW Followup, Jack Nachamkin, 51 Broomall Lane, Glen Mills, Penn. 19342 (ph 610 455-3897; jackn1@verizon.net).

Tired of bending over to pick cucumbers, Nachamkin set up 8 large A-frames for them to grow on. Frames are nearly 8 ft. high, and cucumbers climb all the way to the top.