



featured

SWEET SUCCESS ON

Time and hard work transforms sagebrush site to couple's Wyoming wonderland

By Sandra Frost

Judy and Jim Pahl are enjoying the fruits of 30 years of labor.

When they moved to the 6.5-acre site overlooking the South Fork of the Shoshone River in July 1982, there was nothing but sagebrush. Today, they have a river-front, passive solar home, a large vegetable garden, a windbreak, several fruit trees, and two greenhouses, all surrounded by sagebrush steppe.

Slowing the Wind

The first task was slowing the strong winds whistling down the valley from the Washakie Wilderness Area. Jim planted a windbreak with plants from the Cody Conservation District. The drip-irrigated, four-row windbreak consisted of caragana and cottonwood trees, Ponderosa pines, and Rocky Mountain junipers. The cottonwoods died out quickly, but the three-row windbreak grew into 20-foot tall pine trees, junipers, and caraganas. Jim still provides drip irrigation to the windbreak through a 700-foot long tube with pressure-compensating emitters.

New pine trees were planted to replace ones that died from deer depredation. Jim puts wire cages around all trees until they are large enough

deer don't bother them. The wind break is several hundred yards from the house. A grass firebreak separates the windbreak from the house.

Jim had made repeated plantings of green ash trees for shade, but all died off in spite of plentiful water into September. "Finally, I learned that green ash need to be hardened off to prepare for winter by reducing water as early as August. Once I cut off water in August, the green ash trees survived South Fork winters," says Jim.

Moderating Temperatures

Jim designed and built their energy efficient home that uses solar hot air and wood stove heat. The home has a ground level main floor open to a loft above. The basement features a rear-entry workshop and belowground-level greenhouse. Judy starts flowers and vegetable plants in the passive solar greenhouse attached to the house. The greenhouse is set down into the ground for better insulation. When the greenhouse temperature is above 80 F, fans move heated air up into the house.

Jim added a second greenhouse onto a storage shed in 1995. Tomatoes, melons, and a grapevine flourish inside. The Pahls have had success with Brandywine, Cherokee



FRUIT VARIETIES

- 2 apple varieties for pollination. One died. Buck deer rubbed antlers on the other below the graft so they get apples of unknown variety every year.
- Manchurian dwarf apricots - alive but not bearing
- Nanking cherries - blossom but freeze and do not make fruit
- Chokecherries - birds eat
- Elderberries - deer eat, must fence

landowners

THE SOUTHFORK



Jim and Judy Pahl have added a windbreak, vegetable garden, and greenhouses to their property on the South Fork of the Shoshone River.

Purple, and Black Krim varieties of tomatoes. Judy has fresh salad fixings 10 months of the year with radishes and spinach grown around the edges. Outside the greenhouse, Cascade and Tettanager hops grow 10 feet up the south side of the shed. The greenhouses yield fresh produce in spring and fall when the outdoor garden does not. Judy's advice: "Can or freeze as much produce as possible in a good year, because the next year may be slim pickings," she says.

Deterring Deer Damage

Deer and grizzly bears visit often. Judy has advice for dealing with deer. "Fence anything you want to keep. Use physical barriers," she says. She has found that deer will eat almost anything. The only shrub the local deer won't eat is potentilla. This spring, Judy planted Monkshood, foxglove, butterfly weed, peonies, creeping thyme, and lavender (Munstead and Hidecote) – species the local deer have not shown a preference for



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– in the front herbaceous border. The Pahls fenced their vegetable garden against deer with snow fence topped with wire. They enlarged the fenced area to prevent deer from browsing the strawberry beds.

Bear Burglars

Grizzly bears follow the South Fork River and sample Pahl produce. One night, a bear rustled some apples from a tree near the house and left his claw mark. Grizzlies have dug up the neighbor's carrots and

parsnips. When close encounters are too close, Wyoming Game and Fish Department personnel trap and remove problem bears from the South Fork.

The Pahl's have three small grain plots they have rotated into barley or wheat over the years. The plots are small enough Jim can rototill and plant in a couple of hours using hand tools. Local bird populations now harvest so much of the grain Jim planted only one plot of barley in spring 2012.

They use barley straw as a garden mulch and the grain, that birds don't get, for a fall/winter cover crop in the garden plots.

"We have done wheat and barley for 15 years now. It just kills me to give it up, but the sparrows eat most of it," notes Judy.

Judy and Jim find there are always new challenges, new things to learn about living with nature in Wyoming. Every year is different.

Ornamentals the local deer do NOT eat

- Lavender - Munstead/Hidecote
- Peonies
- Foxglove
- Monks Hood
- Butterfly weed
- Creeping thyme



Judy Pahl shows borders made of concrete test cylinders.

INNOVATIVE COVERS KEEP PLANTS COZY

Judy and Jim have used some creative ideas in their garden. Jim recycled concrete test cylinders as borders for the raised beds (see photo, left). Judy devised a row cover that will stay on and not tear, even during high winds. She sews narrow tubes of vinyl and fills them with gravel. Then, she cuts large circles of row cover fabric, wraps the edges around the vinyl tubes, and sews them into place. She puts a milk jug next to the plants to raise the cover off leaves and lays the cover over all.

Another wonderful season extender is Judy's tomato cage that protects from wind, hail, and freezing temperatures (see photo, right). Here's how to make one: Form a cylinder from 6-inch concrete reinforcing wire 3 feet tall and 2 feet in diameter (or large enough to hold a mature tomato plant). Trim the wire so that legs stick out from the bottom. Fasten the cylinder edges together. Cover the wire with a greenhouse-type fabric that will last multiple seasons. The Pahl's used Polyweave greenhouse fabric that has lasted 18 to 20 years. The fabric should begin at ground level and

extend above the wire enough so a clothespin can keep the top edges closed.

The tomato cages can be left around plants all season either closed or open depending upon temperatures. In spring, dry straw is placed on the bottom over the dirt to prevent fruit rot. They transplant a tomato into the center of the cage and fill milk jugs with water to place around the tomato. The jugs will prevent freezing. Close the top of the cages with clothespins until outside temperatures warm, then open. Make sure your irrigation system will deliver water to the plants.



This tomato cage is made of tough greenhouse fabric and 6-inch concrete reinforcing wire.

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