



Terry Everard and his wife, Alison Roberts, with fall fruit from their orchard.

featured

Terry Everard and Couple put conservation

supply for their orchard. An 8,000-gallon underground fiberglass storage tank captures the spring's flow 24 hours a day – about 1,400 gallons. The second spring provides water to an additional livestock tank.

An additional 1,500-gallon, above-ground storage tank collects rain runoff from the shop's metal roof. A rainstorm of only 9/10-inch on the 3,000-square-foot roof will fill the tank. This is the primary source of water for the drip irrigation system in the orchard and garden.

Everard used information from a *Mother Earth News* catalog and from his office to design his own system. He captures rainwater because of the poor quality of the ground water. Ground water in this area of Wyoming can have high levels of calcium and magnesium, he says. Over time, this inhibits the desirable nutrient uptake many plants require for optimal growth. Everard had the water tested to confirm his suspicions. He installed his runoff capture system in 2003. With his rainwater system providing water, he is seeing better plant growth in the orchard and garden.



Everard installed a 1,500-gallon storage tank to collect rain from his shop roof. One .90 rain fills the tank.

By Sharon Williams

As a district conservationist with the Natural Resources Conservation Service (NRCS), Terry Everard promotes water conservation, proper grazing management, and healthy forests every day to his customers.

He also walks the talk on 260 acres he and his wife, Alison Roberts, own in southeast Crook County. Their land was the farmstead and winter place in the 1950s and '60s for a sheep operation that summered in the nearby Moskee area. A granary and two lambing sheds still stand. The farmstead area is about three acres, while 190 acres are ponderosa pine forest and 67 acres are rangeland.

Everard's office is in the U.S. Department of Agriculture Service Center in Sundance. His customers are primarily private landowners, mostly ranchers who request assistance in designing and engineering projects that benefit soil, water, plant, and wildlife needs.

Everard grew up in Cody. After graduating from the University of Wyoming in 1978 with a degree in range management, he took a job with the Bureau of Land Management in Worland mapping rangeland. Later that year, he was offered a permanent position with the Soil Conservation Service (now called NRCS). He met and married Alison after moving to Sundance in 1984. He has one daughter, who lives in Florida.

After having lived in many areas of the state, he is very aware of the harsh conditions of Wyoming's climate.

Water conservation is uppermost on the couple's minds, especially during drought. There are two natural springs on the property. The main spring provides water to the house, shop, and one livestock tank, and it is a backup

landowners

Alison Roberts

practices to work

Overflows from both storage tanks empty into a pond built in 1995 and stocked with rainbow trout. A permit is required from the Wyoming Game and Fish Department to stock fish.

The overflow water from the storage tanks splashes into the pond, which oxygenates the water. The pond is 16 feet deep when full to help fish survive the winter. He used knowledge gained from his day job to design and supervise construction of the pond. Terry and Alison enjoy watching the children of friends and relatives catch their first fish.

The second spring flows ½-gallon per minute and feeds a second stock tank near the first that is a central location for two pastures on the property. Gates allow cattle to use the stock tanks and rotate through his two pastures. His neighbor runs 110 head of cattle through the pastures along with his own 12 pastures.

Everard and his neighbor manage their “rotation grazing” by moving cattle every five to 12 days through the 14 pastures. Each year, the cattle will be on his property about three weeks total. The cattle are moved faster early in the growing season and slower in the later summer months. This provides cattle quality fresh grass while leaving ample grazing for the numerous deer, elk, and turkeys.

“Plants are no different than us. They need rest, too,” says Everard. “If a plant is continually grazed off and can’t put any energy back in the root system, it will weaken. When this happens, undesirable plants such as weeds and cheatgrass start taking hold and crowd out the native desirable plants. Mother Nature put those good plants out there for a reason. We have the capability of controlling the numbers and time livestock are out there.”

Rotation grazing improves the health and vigor of the plant. He believes timing



An overlook on the Everard property.

of grazing is more critical to a plant than the amount of the plant that is used. Since implementing this plan in the early 1990s, Everard has observed healthier pastures and fewer weeds.

Everard has completed 130 acres of timber thinning along with addressing defensible space issues around the farmstead. Thinning trees to about 14 feet apart will reduce fire danger and allow the remaining trees to be healthier during drought and insect outbreaks.

“Doing forest management is kind of like investing for retirement when you are in college,” says Everard. “The work you do today will pay big dividends 20 to 50 years from now.”

They plan to harvest the marketable timber every 20-25 years. The trees around the farmstead area have the lower 6 to 8 feet of branches pruned. This will reduce the chance a ground fire will climb the trees and cause crown fires, which spread quickly. Recently, Everard added a 2-inch dry hydrant to the main pipeline that will allow firefighters to refill trucks in a matter of minutes. The hydrant has no other use. He also has a spray truck and firefighting tools ready for use at a moment’s notice.

VITAL STATISTICS

- Elevation: 5,040 feet**
- Number of days in growing season: Usually 115 days**
- Hardiness zone: 4**
- Average annual precipitation: About 16 inches**



The Everard's orchard in spring time.

There were five apple trees in the orchard when they bought the property in 1990. All the trees had fire blight with numerous dead branches. With proper pruning, he has rejuvenated the trees to bear approximately 14 bushels of apples each year. He believes they are McIntosh and Wealthy apple varieties and the trees had been planted in the early 1950s. Over the past 15 years, he has planted 26 fruit trees to supplement the orchard varieties.

A new apple variety called Honeycrisp, developed by the University of Minnesota, is one he is anxiously waiting to bear fruit. He observes that a fruit tree is usually about four to seven years in the ground before beginning to bear much fruit in Wyoming. He will prune blossoms and a few branches those first years to help develop a strong root system.

In order of success in fruit productivity, Everard would rate them as follows: apples, plums, cherries, pears, raspberries, apricots, and blackberries. See page 21 for related article.

He has planted multiple varieties to test winter hardiness and adaptability to what he considers a zone 4. He finds that zone 3 plant stock does best for hardiness, but zone 4 offers more varieties. See diagram of Wyoming zones page 21.

One hobby he enjoys is grafting fruit trees from the Black Hills area to his own fruit trees. He has the most success with chip budding in the fall. A small chip is sliced off of new-growth wood where a leaf connects. It is then attached to new growth on the recipient stock.

Due to his short supply of water, Everard has

converted most of his lawn from bluegrass to a low-maintenance mix of ryes and fescues that survive with limited watering.

"Water conservation is my strong point," he says. "I couldn't accomplish what we have here without practicing water conservation efforts. It is so rewarding for me to practice on the ground what I try to teach other landowners."

Publications are available from the University of Wyoming Cooperative Extension Service. *Low Maintenance Grasses for Revegetating Disturbed Areas and Lawns*, B-1070, is available to download at <http://ces.uwyo.edu/PUBS/B1070.pdf>. Hardcopies are \$3.50 each. *Landscaping: Turf in Wyoming*, B-1129, is available to download at <http://ces.uwyo.edu/PUBS/B1129.pdf>. Hardcopies are available for \$5.

Other lawn and garden publications can be viewed at http://ces.uwyo.edu/PUBS/Turf/Turf_Pubs_Main.html.

Hardcopies can be obtained by e-mailing the College of Agriculture's Resource Center at cespubs@uwyo.edu, calling the center at (307) 766-2115, or writing to the University of Wyoming, College of Agriculture, Department 3313, 1000 E. University Ave., Laramie, WY 82071

Everard considers himself a conservationist. He doesn't like the word preservationist. The good Lord put all these resources on this earth for us to use, he says.

"If we use our resources, we need to be mindful our children and grandchildren desire a healthy place to live also," says Everard. "It is my responsibility and goal to leave this property in better shape than when I acquired it. Be a good steward of the land."



Two photographs taken in same area. At left, an area of unthinned growth, while thinned ground is shown at right. Thinning reduces fire damage and increases health of remaining trees.

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