

# FEATURED LAND OWNER: — frost top orchard

By Bobbi Roos

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Retirement and ending up in the Bitterroot Valley seems to be common ground with many Bitterroot residents. For some of those retirees, acquiring several acres to “stay busy” completed a life long dream. Mary and Al Pernichele of Corvallis, Montana definitely planned their retirement time around staying busy in the Big Sky on 14 acres.

In 1998, after visiting many different locations in the western U.S., they settled on the Frost Top Orchard in Corvallis. The idea of an active retirement was part of their plan and an apple orchard seemed to fit the goal of staying busy and doing something that was fun and rewarding. Since settling down in the Bitterroot Valley, they have learned a lot about the apple orchard business and are always eager to share their experiences with others.

Currently the 10-acre orchard has approximately 3,000 apple trees. *McIntosh* and *Spartans* were the original cultivars when they first acquired the orchard, but they have experimented with several different varieties, some with great success. “Honeycrisp are one of our favorites,” says Al. “Other cultivars we like to grow are *Macoun*, *Jonagold*, *Gala*, *Zestar*, and *Williams Pride*, but *McIntosh* is considered the best cider apple.” Along with their apples, they make apple cider in the Red Barn at the orchard. Because it is unpasteurized, it can only be sold at the orchard. When they first started marketing their apples and cider, they loaded up their vehicle and took road trips to promote their locally grown apples and cider. “The marketing tours,” as Mary likes to call those earlier days, “were long but well worth it.” Now their clients come to them, which is part of the fun of this venture.

“Customers are the best part of the business,” stated Al and Mary. “Meeting people and nurturing life-long relationships are an important part of having a home-based business.” By getting to know their customers, they can now sell everything they produce directly from their barn. They used to sell most of their apples to grocery stores, but have learned that they can get better prices and have more fun selling directly. Beginning a few years ago, they start getting calls from customers in early August from as far away as Bozeman and Helena reserving cider and boxes of the apple cultivars they like best.

They have also taken their products to the Farmer’s Market in Hamilton, but not on as many Saturdays as they used to. Today, the Pernicheles sell some of their early varieties at the Farmer’s Market, but they are much too busy to continue those Saturday visits when their main crops are ready.

Depending on the production year, there are other garden items offered to the public at the orchard. The Pernicheles have had good success with candy onions, which are large sweet onions. There is also room for surplus production from neighbors, such as different varieties of squash. Crafts done by a local artisan can also be found in the storefront, along with homemade jams and jellies. Apple and pumpkin butter are the biggest sellers when it comes to homemade goodies and are generally sold within hours of being made. Honey is also a by-product of the orchard.

When touring the orchard, improvements and signs of continual upkeep can be found. A new micro sprinkler irrigation system, which involved the Natural Resources



Conservation Service, has recently been installed to replace the previous drip irrigation system. There are also plans for a soil moisture monitoring system to help improve water efficiency on the orchard. Using irrigation water efficiently is a critical factor in agricultural production in western Montana and is very important to the Pernicheles.

Fertilizer needs are usually determined through a foliar analysis instead of the usual soil analysis. The soil is tested periodically, but the most effective results are obtained from testing the leaves of the trees directly for nutrients. Results tell the Pernicheles what fertilizer is required at that point in time. Fertilizer is applied through the drip irrigation system and through foliar applications.

Between 200 and 400 new trees are replanted each year at the Frost Top Orchard. Al is an accomplished grafter and does the grafting on the orchard, and also teaches a class in the spring on grafting. His classes are limited to 12 participants and there is usually a waiting list. He also works with both the honey and the mason bees on the orchard, a critical component of the orchard operation, because without them there would be no pollination and subsequent fruit production.

As with any agricultural crop, there are pests and abiotic (i.e., environmental) damages to deal with. Codling moths and leaf hoppers are the insect pests that seem to plague the Frost Top Orchard the most and apple scab has been the worst disease pest in 2010. As for weeds, kochia takes top honors at the orchard. Spotted knapweed, a noxious weed common to the Bitterroot Valley, has not been a problem; this is likely due to the fact that the Pernicheles closest neighbor is the Western Agriculture Research Center, home to Jim Story,

retired biological control scientist, and also home to several thousand knapweed root weevils.

The most persistent pests at the orchard are the wildlife. Mule deer and whitetail deer populations have grown to large numbers in recent years. "We have counted as many as 87 deer at one time eating the leaves off of established trees and devastating the newly planted trees," say the Pernicheles. According to Galen Frost, who established the orchard, deer were quite rare when he was at the orchard. Deer damage to mature trees is tolerable, but newly planted trees must be protected. The orchard is surrounded by electric fencing and there is also some standard fencing, but even neighbors with 10-foot fencing find that the deer can still access their tasty twigs. Mary believes the orchard is a training ground for the does to teach their fawns how to browse apple trees.

Abiotic damage varies with weather events throughout the growing seasons. The killing freeze in the fall of 2009 left its mark on the apple trees and the spring of 2010 saw some frosted blossoms. Harvest is typically between 2,000 and 4,000 bushels of apples and 2,000 to 4,000 gallons of cider, but twice in twelve years the orchard has lost its production to late spring frosts.

When asked what advice they would give to someone new to the apple orchard business or any small-acreage agriculture business, both Al and Mary agreed that meeting local needs and getting to know customers in your area are the keys to success. They also advise not trying to get too big and only expanding if you feel there is need. ■

PHOTOS BY BOBBI ROOS

