

He Makes Money After “Going Nuts”

Mark Shepard, Forest Ag Enterprises, thinks more farmers should “go nuts” and consider raising nuts as a cash crop. On his 100-acre farm in southwest Wisconsin, he grows and harvests all kinds of nuts – including some exotic varieties that shouldn’t be able to survive his cold winters. When he isn’t planting and harvesting nut crops, he’s experimenting and researching ways to better handle the crops.

“Why plant corn and soybeans every year when you can plant trees once and harvest nut crops for generations?” he asks.

Shepard has filled his farm with as many perennial crops as he can get to grow in his weather and soil conditions. In addition to nuts, his apple trees supply fresh fruit and cider for local markets, and he’s in the final stage of licensing for on-farm hard cider fermentation and marketing.

Pears, cherries and berries of all sorts are also grown on Shepard’s farm. However, it’s the nuts that he feels have the most potential. He’s one of a select group of self-supported nut crop researchers. Unlike major row crops, there isn’t government agency or university support for the kind of research he and others do.

“There is very little breeding being done to develop suitable nut varieties for northern climates,” he says. “I collaborate with people doing breeding work in Saskatchewan, Alaska, Maine, New York, Ohio and Iowa.”

Currently he’s working on hazelnuts for biodiesel (which he uses for all of his powered farm equipment) as well as food. He also is growing and selecting varieties of pine nuts, Japanese walnuts (called heartnuts) and pecans that will survive Wisconsin winters.

Shepard is involved in efforts to revive the American chestnut and butternuts, by working to identify disease resistant strains.

He’s crossing butternuts with Japanese walnuts to produce a hybrid called butterhearts. He is also selecting for hardy pecans, English walnuts and pine nuts.

The process he follows is simple. “You plant a bazillion seeds and keep the ones that meet your criteria,” says Shepard. “You may keep one or two out of 4,000 or 5,000. That’s where you start your breeding program.”

Every generation, he selects for better producing trees. Meanwhile, he harvests some of his nuts for the nutmeats, which

he sells fresh, roasted or chocolate-coated. Nuts are also used for additional research, as well as for sale as seed or to plant himself to produce the seedlings that he sells. In addition, he consults with anyone who wants to plant nut trees and does custom planting of seedlings and seed nuts.

Shepard is also developing equipment to make harvesting and processing easier. He has a husker and cleaner for hazelnuts, as well as a cracker, and he’s working on a sorting and sizing table.

“I can put 2,000 lbs. of nuts through the husker an hour,” he says. “I plan to combine the husker with screening, sorting and cracking in one machine. I expect it will be the size of a small van.”

The husker is a modified walnut huller. It has a long cylinder with rebar for the bottom side and a hopper at one end. As nuts in nut clusters feed into the husker, a rotating brush rubs them against the rebar. Trash falls to the floor, while clean nuts exit to a basket at the end of the husker.

“The trick is to keep the nuts between the brush and the bars,” says Shepard.

After running hazelnuts through the husker, they are often run through an aspirator to remove more trash. Constructed from pvc pipe with a high-speed fan, it allows nuts to pass through the air stream while trash is blown out the exhaust pipe.

The cracker alone is the size of a refrigerator or soda machine. It can process around 125 lbs. of nuts an hour. Shepard didn’t want to give too many details because he has applied for a patent on it.

“It was developed for hazelnuts, but so far it has cracked every nut I’ve run through it, from pine nuts to walnuts and pecans, as well as ones I don’t grow like pistachios and almonds.”

Shepard is still in the process of establishing prices for his nut processing equipment. He does have prices on his seedlings and seed nuts for broadcast planting.

“Prices vary depending on the number and size of the seedlings, which I sell by bundles of 10 to 25 seedlings,” says Shepard. “Generally they run from \$3.50 to \$8 per plant. If you buy a thousand or more, you get a lower price. Nuts for seeding run \$3 per lb.”

Contact: FARM SHOW Followup, Forest Agriculture Enterprises, P.O. Box 24, Viola, Wis. 54664 (ph 608 627-8733; forestag@mwt.net; www.forestag.com).



Home-built husker – a modified walnut huller - can handle 2,000 lbs. of nuts per hour.



Aspirator uses a high-speed fan to remove trash, which is blown out an exhaust pipe.



Photo shows a crew member with hazelnut seedlings.

Demand Strong For Rare Mammoth Donkeys

Ron and Suzanne Paddock have been breeding Mammoth Donkeys for 9 years. Demand for the rare breed is strong.

“For us, it started out as an innocent little project, but it blossomed into a wonderful business which we call Big Ears Donkey Ranch,” says Suzanne. “We’re the only registered breeders in Manitoba, as far as we know. We started out with only three of them, and right now we have 22 on the place. They’re really gaining in popularity because they’re such good pets, and there are just so many things that people can do with them.”

Mammoth Donkeys have docile temperaments. They’re used for trail riding, skidding firewood, small farm work, as guardian animals to protect cattle, sheep or goats, and simply as companion animals for people and other horses.

Formally called “American Mammoth

Jackstock”, the unusual donkey breed was developed at the time of George Washington. Animals were selectively bred for their size and used specifically for breeding to draft horses for farm work.

Black was the most common color for Mammoths when the breed was developed, but now, all colors exist, according to Paddock.

The population peaked in the 1920’s with an estimated 5 million Mammoth Donkeys worldwide. Today, there are thought to be just 3,000 to 4,000 registered animals in the world. They’re on the Rare Breeds list in North America.

To be registered, Mammoth Donkey jacks must be 56 in. and over, while jennies must be 54 in. and over. They often live for 25 or more years and are generally healthy, hardy animals, but should receive the same vaccinations and de-wormings as a horse.



Mammoth Donkeys are a rare breed, with just 3,000 to 4,000 registered animals in world.

When being ridden or driven, they like to go at their own speed and don’t like to gallop.

Because of their natural herd protection instincts, donkeys have a dislike for dogs and other canines, and will attack them with their hooves.

Prices for Paddock’s registered Mammoth Donkeys generally range from \$1,500 to \$2,500 (Can.) for weanlings and yearlings.

So far, they’ve sold animals to enthusiasts from Manitoba, Saskatchewan, Alberta and B.C..

Contact: FARM SHOW Followup, Ron and Suzanne Paddock, Big Ears Donkey Ranch, P.O. Box 191, Baldur, Man., Canada R0K 0B0 (ph 204 535-2141; rslizzarta@inethome.ca; www.bigearsdonkeyranch.ca).