

Money-Making Ideas To Boost Farm Income

If you're looking for new ways to add to your bottom line, take a look at the money-making ideas featured here and on the next page.

If you've found or heard about a new income-boosting idea, we'd like to hear about it. Send details to: FARM SHOW Magazine, P.O. Box 1029, Lakeville, Minn. 55044 (ph 800 834-9665) or email us at: editor@farmshow.com.



Photo courtesy Andrea Johnson, Minnesota Farm Guide

Joann and Lee French, founders of French Agricultural Research, Inc., provide contract research and pest management to chemical companies.

Raising Insects For Agricultural Research

To feed army worms, Lee French pours stale beer into a cup filled with cotton balls and slips it into a bag filled with the squirming insects. "They like Old Milwaukee," he says.

In another 80-degree chamber, European corn borer moths survive on water in screened cages.

French and his wife, Joann, raise insects as part of their business, French Agricultural Research Inc., in Lamberton, Minnesota. Some of the insects are used on their farm for contracted research, but most are sold to 50 clients throughout the U.S. and the world. Chemical and seed companies use the insects to test the effectiveness of their products. There will always be a market for farm-raised insects because it isn't cost-efficient for companies to raise the insects themselves.

But the Frenches have to keep on top of things because of changing conditions. "For example, the Western corn rootworm beetle changed its biology four times since 1967," French explains. They have become resistant to insecticides.

Some insects are remarkably adaptive. When Minnesota producers started using crop rotation instead of growing corn year after year to eliminate the Northern corn rootworm beetle, the eggs simply sat dormant until corn was planted again - up to four years. In the East, females started laying their eggs in soybean fields, which could hatch the next year when corn was planted.

Raising insects is not as easy as it sounds. The dozen insect species the Frenches raise have different environmental needs. French, an entomologist for 40 years, says he learned to raise insects during graduate studies. The instructor thought it was important to understand the insect's whole life cycle and its environment.

In 1982, a USDA research lab asked if he'd raise insects for them. He didn't know if there would be a market, but French and his wife, a biologist/chemist, started a part-time business. There was plenty of demand; they had nearly 500 clients at one time.

French made his own chambers and the couple added on to their 50 by 100-ft. facility as they could afford it. Today they have fewer clients - mostly due to companies merging - but are busy enough to hire five full-time employees plus several part-time workers during busy times.

Besides raising insects, French grows up to 4,000 test plots of corn on 300 acres, and does research and consulting work. During the political turbulence in 1995, he did "undercover work" with the World Health Organization dealing with a Western corn rootworm beetle problem in Yugoslavia.

"We stick with ag pests," French says. "We've been asked to rear many other insects, but we only rear insects that can make a profit."

He adds with a laugh that his employees tell him they are not interested in "donating blood" for mosquito research, for example.

Being successful in the business requires meticulous recordkeeping, experience raising insects and good observation skills.

"It's not about being scientific, it's the art of doing it," French says. "It takes knowledge of your surroundings. It changes with seasons." It's always important to create moisture in the atmosphere, he adds, by adding a humidifier, pouring water on the floor, or adding water to dishes of eggs.

Keeping insects alive is also not as easy as it sounds. Though shipped quickly overnight or within a couple of days overseas, hot water bottles or ice packs are added to shipments to keep temperatures at 40 to 85 degrees.

The Frenches ship insects year round, but are busiest in spring and summer. They sell the following insects in all stages from eggs to adults: four types of corn rootworms, European corn borer, black cutworm, tobacco budworm, corn earworm, fall armyworm and beet armyworm. They also raise wireworm and white grub larvae.

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Miracle Strawberry To Be Available Soon

After growing - and tasting - thousands of strawberries over the past decade, Harry Swartz, owner of Five Aces Breeding, has developed a new "million dollar" variety that ripens all at once and is suitable for mechanical harvest. It should be on the market within the next few years.

Swartz, a plant sciences professor at the University of Maryland, has developed many successful raspberry varieties working with client companies in Chile, England, Spain, Mexico and the U.S.

A decade ago, he began working with strawberries, crossing commercial varieties with wild strawberry varieties and planting as many as 25,000 plants per year in breeding fields in the U.S. and other countries.

It's been a Don Quixote-like quest, Swartz says.

"Once in a while you succeed," he explains. "I just didn't realize I'd have to eat all these strawberries. You eat 1,500 to get one with just the right mix of flavors and aromas."

Swartz says he has discovered berries with intense aromas and the flavors of vanilla, cinnamon, chocolate and mint. After years of plant selection, Swartz says some of those berries should be in grocery stores on the Eastern seaboard in 2008.

Meanwhile, Swartz continues work on what may be a "million dollar" plant that could change the commercial strawberry industry. While evaluating plants in Huelva, Spain, in 2006, Swartz and an English researcher found a unique plant. Instead of the familiar three-bladed leaves, the plant had single-bladed leaves. Instead of a cluster of blossoms that ripen at different times, the plant had single trusses that all ripen at the same time.

Named Monophylla for its single leaf, the plant is being studied by Gary Coleman at the University of Maryland to figure out the



"Million dollar" strawberry variety ripens all at once and is suitable for mechanical harvest.

genes responsible for its unique traits as well as its optimal growth environment. It will also need to be crossed with other varieties to get the berries to stand up better for mechanical harvest.

Swartz explains that there is concern that in another decade strawberry growers will have a difficult time finding workers for the labor-intensive job of picking berries. As he and others work on suitable plants, other researchers are working on developing mechanical harvesters.

"The goal is to have people eat more fruit," Swartz says. "We want to offer people alternatives."

Variety development takes time and is expensive, however. As Swartz works on his new variety, he isn't certain how or when it will be released to the market.

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Veterinarian Creates Ag Dating Website

After hearing single friends complain about the difficulty of meeting people with agriculture roots and similar interests, Brandy Phelps created a dating website for country folks. The site www.ag-personalities.com officially went online in August, 2007.

There are other ag-related dating sites, Phelps says, but they tend to be very specific, for farmers or people who like horses, for example. "Mine is broad and general - it has that country state of mind," she explains. "When I say agriculture, I'm talking about people who hunt, fish, rodeo, camp, ride horses, raise livestock, farm, ride 4-wheelers, watch NASCAR, and love big tires on jacked up trucks. My hope is to bring those people together wherever they live."

Phelps, a Virginia horse veterinarian, works on the site on her time off - checking emails, screening applicants and making sure the site is working properly. As a Christian, she says she sets standards and rejects profiles that are lewd and include curse words. She realizes, however, that some profiles may not be truthful, so she warns clients to use common sense when connecting with others on the website. Phelps lists several terms and conditions for members, who must be 18 or older.

Phelps offers memberships for different lengths of time: \$13.95/month to \$145/year. She also offers a free 14-day trial period.

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Brandy Phelps is a veterinarian in Virginia who saw a need for a new kind of dating website.

personalities.com; www.ag-personalities.com).