

# People & Places

## Fungus expert spawns truffle orchards

Charles Lefevre inoculates trees with culinary fungus

By MATEUSZ PERKOWSKI  
Capital Press

While the technical craft of Charles Lefevre's job is complex, the purpose is simple: Encouraging the natural symbiosis between trees and fungi.

In Lefevre's case, the fungi are of the Tuber genus, which produce highly sought-after truffles and colonize the roots of numerous tree species.

Truffles are known for their culinary desirability and high cost, but the primary role of the fungus is as an extension of the tree's root system, helping it absorb water and nutrients. In exchange, it's supplied with starches and sugars for growth.

"Mycorrhizal fungi and mycorrhizal trees never live without each other," Lefevre said. "You don't have to trick them."

Even so, inoculating tree roots with the fungus in a nursery setting requires providing the right levels of nutrients, water, air and light.

Lefevre must also conduct genetic testing to ensure that his trees — which are sold to landowners across North America — are colonized with the right species of truffle, rather than some other type of mycorrhizal fungus.

Luckily for aspiring truffle farmers, the fungus will thrive in a "simplified" environment, such as a planted orchard, and doesn't require the complex ecosystem of an old growth forest.

"They're exactly the type of organism we can grow. They like living with us," Lefevre said. "They're early suc-



Mateusz Perkowski/Capital Press

Charles Lefevre, a mycologist, inoculates trees with fungi that produce truffles, which are noted for their aromatic qualities. Lefevre and his wife, Leslie Scott, also founded the annual Oregon Truffle Festival to promote native varieties of the fungus.

cessional organisms. When you wipe the slate clean, they're among the first organisms to arrive."

Aside from providing landowners with trees, Lefevre conducts site evaluations to see if a property has the basic criteria needed for effective truffle production and what can be done to correct deficiencies.

He's found that the fungus is adaptable to a broader range of soil conditions than traditionally thought to be appropriate, likely because the organism is liberated from its natural competitors.

Truffles prefer well-drained, rocky soils, but Lefevre's first customer planted inoculated trees in an area with a high seasonal water table.

"In spite of that, they're getting good production," he said, adding that several productive orchards currently exist in the Northwest.

Lefevre produces inoculated trees at three nurseries in Oregon and one in Flori-

da, though he doesn't divulge their exact locations to protect his company's proprietary technology.

New World Truffieres, as the firm is called, is working with nine species of truffle that colonize oak, Douglas fir, hazelnut and pecan trees.

Historically found in the wild, truffles were first grown in orchards of inoculated trees in France in 1977. The method was replicated in California a decade later.

"It proved the concept truffles could be grown elsewhere in the world," Lefevre said.

The truffle orchard industry is still new and will likely follow the trajectory of the U.S. wine industry, he said, noting that the first vineyards were planted in California 150 years ago.

"It's not going to be overnight," Lefevre said.

Aside from producing truffle-inoculated trees, Lefevre and his wife, Leslie Scott, launched the annual Oregon Truffle Festival a decade ago

to promote native varieties of the fungus.

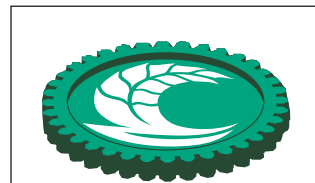
Truffles that are indigenous to Oregon's forests have often been considered inferior to European species, or a less expensive alternative to the real thing, but Lefevre has found they are just as aromatic if harvested correctly.

The practice of raking beneath trees is common among commercial truffle hunters, but this often yields truffles that are unripe, he said.

Specially trained dogs, on the other hand, find truffles that are ready for harvest, offering a measure of quality control, Lefevre said. "If it doesn't smell, they don't find it."

Oregon truffles harvested with the aid of dogs fetched more than \$700 per pound last winter, up from \$40 to \$70 when Lefevre began hunting them as a college student 20 years ago.

"The goal isn't to make them out of reach for local people, it's to give local people a chance to make more



### Western Innovator

#### Charles Lefevre

**Occupation:** Founder of New World Truffieres, which inoculates trees with the fungus that produces truffles

**Age:** 50

**Hometown:** Eugene, Ore.

**Education:** Bachelor of science in biology from the University of Oregon in 1990, Ph.D. in mycology from Oregon State University in 2002

**Family:** Wife, Leslie Scott, and two dogs

money," he said.

When Lefevre entered graduate school at Oregon State University in the mid-1990s, he gathered truffles to supplement his income, but his studies were primarily focused on matsutake mushrooms, which are also mycorrhizal.

Over the course of his studies, he encountered truffle experts and realized he knew enough about the fungus to begin inoculating trees himself.

In 2000, a landowner in Oregon asked him to inoculate domestic hazelnuts with the fungus because importation of the trees from outside the state was prohibited for phytosanitary reasons.

He then met other landowners interested in planting orchards, and soon a new company was born.

"I launched my business before I ever graduated," Lefevre said. "I never needed to apply for a job when I graduated."

### Capital Press

Established 1928  
**Board of directors**  
Mike Forrester .....President  
Steve Forrester  
Kathryn Brown  
Sid Freeman ..... Outside director  
Mike Omeg ..... Outside director

**Corporate officer**  
John Perry  
Chief operating officer

**Capital Press Managers**  
Mike O'Brien .....Publisher  
Joe Beach ..... Editor  
Elizabeth Yutzie Sell ..... Advertising Director  
Carl Sampson ..... Managing Editor  
Barbara Nipp ..... Production Manager  
Samantha McLaren ..... Circulation Manager

Entire contents copyright © 2015  
EO Media Group  
dba Capital Press

An independent newspaper  
published every Friday.

Capital Press (ISSN 0740-3704) is  
published weekly by EO Media Group,  
1400 Broadway St. NE, Salem OR 97301.

Periodicals postage paid at Portland, OR,  
and at additional mailing offices.

POSTMASTER: send address changes to  
Capital Press, P.O. Box 2048 Salem, OR  
97308-2048.

#### To Reach Us

Toll free ..... 800-882-6789  
Main line ..... 503-364-4431  
Fax ..... 503-370-4383  
Advertising Fax ..... 503-364-2692

#### News Staff

**N. California**  
Tim Hearnden ..... 530-605-3072

**E Idaho**  
John O'Connell ..... 208-421-4347

**Idaho**  
Carol Ryan Dumas ..... 208-860-3898

**Boise**  
Sean Ellis ..... 208-914-8264

**Central Washington**  
Dan Wheat ..... 509-699-9099

**E Washington**  
Matthew Weaver ..... 509-688-9923

**Oregon**  
Eric Mortenson ..... 503-412-8846  
Mateusz Perkowski ..... 800-882-6789

**Graphic artist**  
Alan Kenaga ..... 800-882-6789

#### To Place Classified Ads

Ad fax ..... 503-364-2692  
or ..... 503-370-4383  
Telephone (toll free) ..... 866-435-2965  
Online ..... www.capitalpress.com/classifieds

#### Subscriptions

Mail rates paid in advance  
Easy Pay U.S. \$3.75/month (direct withdrawal from bank or credit card account)  
1 year U.S. .... \$49.99  
2 years U.S. .... \$89.99  
1 year Canada ..... \$275  
1 year other countries ..... call for quote  
1 year Internet only ..... \$49.99  
1 year 4-H, FFA students and teachers .... \$30  
9 months 4-H, FFA students & teachers ..... \$25  
Visa and Mastercard accepted

#### To get information published

**Mailing address:**  
Capital Press  
P.O. Box 2048  
Salem, OR 97308-2048

**News:** Contact the main office or news staff member closest to you, send the information to newsroom@capitalpress.com or mail it to "Newsroom," c/o Capital Press. Include a contact telephone number.

**Letters to the Editor:** Send your comments on agriculture-related public issues to opinions@capitalpress.com, or mail your letter to "Opinion," c/o Capital Press. Letters should be limited to 300 words. Deadline: Noon Monday.

#### Capital Press ag media

www.capitalpress.com  
www.FarmSeller.com  
www.AgDirectoryWest.com  
www.OnlyAg.com  
www.facebook.com/capitalpress  
www.facebook.com/farmseller  
www.facebook.com/onlyAGdotcom  
twitter.com/capitalpress  
www.youtube.com/capitalpressvideo  
www.blogiculture.com

#### Index

California ..... 8  
Dairy ..... 14  
Idaho ..... 10  
Livestock ..... 14  
Markets ..... 15  
Opinion ..... 6  
Oregon ..... 9  
Washington ..... 11

#### Correction policy

Accuracy is important to Capital Press staff and to our readers.

If you see a misstatement, omission or factual error in a headline, story or photo caption, please call the Capital Press news department at 503-364-4431, or send email to newsroom@capitalpress.com.

We want to publish corrections to set the record straight.

## Oregon FFA students collect 130 tons of food

By GEOFF PARKS  
For the Capital Press

The Lower Willamette FFA District's Food For All program headed into its stretch run with the finish line — Dec. 23 — in sight and a goal of 130 tons of food for needy Oregon families nearly all collected and distributed or ready for distribution.

Food For All is a joint project of the district's high school FFA chapters at Perrydale, Willamina, Dayton, Amity, Sheridan and Yamhill-Carlton. It was created in 1997 by Kirk Hutchinson, the now-retired Perrydale FFA chapter adviser.

At the end of each year, the Perrydale K-12 education complex resembles a beehive of activity. Students from kindergarten through high school age work furiously to collect, sort, package and distribute potatoes, rutabagas, onions, squash, cabbage, dried and fresh fruits, beets and other vegetables and produce over the course of the first three weeks of December, said Perrydale's first-year FFA adviser, Christina Lorenz.

That food is delivered by the Perrydale students and teachers to various areas around the state identified as economically depressed and in need of food services, with the goal of providing 40-pound bags of farm-fresh



Photos by Geoff Parks/For the Capital Press

Alex Hawes, 17, uses a forklift to unload donated onions for repackaging at Perrydale High School during the school FFA Chapter's Food For All project.

food to at-risk families.

Lorenz said a new wrinkle was added this year to the structure of the program that assures it hews to one of its missions as "a service learning project to teach students a variety of skills while putting food on the table for needy families."

Hutchinson, who still works long hours alongside the kids each December helping organize the work, introduced a new designation for six of this year's FFA chapter members, making them Food For All Ambassadors.

"We wanted to start a program so we could get some of the leaders from within our school" to perform outreach, public relations and cold-call contact functions,

Lorenz said.

The ambassadors line up partners, donors and volunteers for Food For All, which begins gearing up in October.

For example, ambassadors Maddy Ford and Michelle Sekafetz, both 14, contacted "possible partners" — donors, farmers and transport services — via letter.

"We then set up appointments with them to go and talk about the program," Sekafetz said.

"All the schools work together on this project," Sekafetz said, adding that the ambassadors and other students have traveled as far away as Union in northeast Oregon and Ontario in the southeast corner of the state to make their pitches. Food For All



Perrydale High School FFA Food For All ambassador Kyndle Moore, in the yellow shirt, shows Perrydale Elementary School students how to bag oranges.

donations have been going to the economically depressed Coos Bay area for 14 years, she said.

"By coincidence one year, we were talking to someone in Coos Bay who said he got a real good deal on potatoes — \$1 a bag," Hutchinson said. "I told him I could get him all the bags of potatoes he wanted for free, and that started the partnership with Coos Bay."

"Now, we always go to Coos Bay because they make a donation to our program to

buy string and bags and pay for some meals for these kids while they're on the road or whatever we need to keep our program going."

The more pro-active efforts of the ambassador team seem to have paid off, as the original goal for this year of 253,000 pounds of food collected jumped to 260,000 pounds with a week to go.

"We are just overwhelmed with the amount of things to do (in December)," Hutchinson said.

### Calendar

To submit an event go to the Community Events calendar on the home page of our website at www.capitalpress.com and click on "Submit an Event." Calendar items can also be mailed to Capital Press, 1400 Broadway St. NE, Salem, OR 97301.

**Thursday, Jan. 7**  
2016 Precision Farming Expo, Three Rivers Convention Center, Kennewick, Wash.

Idaho Irrigation Equipment Show and Conference, Nampa Civic Center, Nampa, Idaho.

**Friday, Jan. 8**  
2016 Precision Farming Expo, Three Rivers Convention Center, Kennewick, Wash.

American Farm Bureau Annual Convention, Orlando, Fla.

**Saturday, Jan. 9**  
American Farm Bureau Annual Convention, Orlando, Fla.

**Sunday, Jan. 10**  
American Farm Bureau Annual Convention, Orlando, Fla.

**Monday, Jan. 11**  
American Farm Bureau Annual Convention, Orlando, Fla.

**Tuesday, Jan. 12**  
American Farm Bureau Annual Convention, Orlando, Fla.

Cropping Systems Conference, Three Rivers Convention Center, Kennewick, Wash.

Kennewick, Wash.

Far West AgriBusiness Association annual winter conference, College of Southern Idaho, Twin Falls, Idaho.

Potato Expo 2016, Mirage Hotel and Casino, Las Vegas, Nev.

**Wednesday, Jan. 13**  
American Farm Bureau Annual Convention, Orlando, Fla.

Cropping Systems Conference, Three Rivers Convention Center, Kennewick, Wash.

Far West AgriBusiness Association annual winter conference, College of Southern Idaho, Twin Falls, Idaho.

Potato Expo 2016, Mirage Hotel and Casino, Las Vegas, Nev.

**Thursday, Jan. 14**  
Far West AgriBusiness Association annual winter conference, College of Southern Idaho, Twin Falls, Idaho.

Oregon Mint Growers 67th Annual Meeting, Salishan Lodge and Golf Resort, Gleneden Beach, Ore.

Potato Expo 2016, Mirage Hotel and Casino, Las Vegas, Nev.

**Friday, Jan. 15**  
Oregon Mint Growers 67th Annual Meeting, Salishan Lodge and Golf Resort, Gleneden Beach, Ore.

**Wednesday, Jan. 20**  
2016 EcoFarm Conference, Asilomar Conference Grounds, Pacific Grove, Calif.

**Thursday, Jan. 21**  
2016 EcoFarm Conference, Asilomar Conference Grounds, Pacific Grove, Calif.

**Friday, Jan. 22**  
2016 EcoFarm Conference, Asilomar Conference Grounds, Pacific Grove, Calif.

**Saturday, Jan. 23**  
2016 EcoFarm Conference, Asilomar Conference Grounds, Pacific Grove, Calif.