# Farmers test biochar's benefits

# Kelpie Wilson investigates substance to improve cropland

Capital Press

Calling Kelpie Wilson a "biochar believer" isn't a joke.

"I'm a believer in science," she said, "and the science tells us biochar is worth pursuing.'

And at this point in her life, Wilson is in chase mode. She is part of a Southern Oregon group, the Umpqua Biochar Education Team, or UBET, that is working with 10 farmers to make biochar, mix it with manure and apply it to their land.

The work is funded by a two-year, \$75,000 grant from the USDA's Natural Resources Conservation Service. The UBET group's biochar findings will be shared with others through extension agents and NRCS.

"One of my roles, I feel, is to thoroughly investigate it and understand it, and communicate that to others," Wilson said.

Among other things, the group has teamed up with welding students at Umpqua Community College, who make farm-scale kilns in which farmers can burn debris and produce biochar. The group's work was displayed during a biochar conference held Aug. 22-25 at Oregon State University. About 300 researchers, educators and producers attended.

Biochar is essentially charcoal made from burning such things as woody debris or straw in the presence of little or no oxygen. As a soil amendment, it retains moisture and nutrients, increases pH and sequesters carbon. Limited field trials have shown it can increase crop yield.

Agricultural interest is high, but



Courtesy of Wilson Biochar Associates

Kelpie Wilson heads a project in Southern Oregon in which farmers are making biochar and applying it to their soil.

biochar is expensive to make. Research and commercial development is advancing in a herky-jerky fashion, in part because of the diversity of biochar sources and applications. In addition to being a soil amendment, for example, it can be used to control odor and absorb pollutants. In some instances, it's being used to help clean up mining sites.

Wilson said the industry needs to

"It is all over the map," she said. "There are so many things to do with biochar, and so many ways to make it, and it impacts so many other industries. It needs to have success in one aspect."

She has an idea about that, too. During the biochar conference at OSU, one speaker said California has an estimated 66 million dead trees in its public forests. The speaker, Raymond Baltar of the Sonoma Biochar Initiative, said dead trees could be logged and burned in converted biomass plants to make biochar, which then could be applied to California's drought-stricken farm-

And that, Wilson said, could be that gets biochar off and running. "Let's save California agricul-

the one big, quick, focused move

# Western **Innovator**

### Kelpie Wilson

Occupation: Principal consultant at Wilson Biochar Associates.

Personal: Age 60, married to George Shook, a noted banjo player. Lives on rural property outside Cave Junction, in Southern Oregon. Avid hiker and backpacker, loves gardening, raises worms. The name Kelpie is Scottish, and refers to a water fairy said to inhabit ponds and lochs.

Background: Lived in Pennsylvania, Virginia and overseas growing up as her father worked for the government, was an English literature professor and eventually served as president of California State University at Chico, commonly known as Chico State. Wilson earned a mechanical engineering degree from Chico State.

Turning Point: Wilson got her driver's license as the Arab oil embargo of 1973 was unfolding. The disruption to American life, with motorists restricted to buying gas on alternate days, convinced her that pursuing renewable energy was critical.

Activist and advocate: Worked for environmental groups, particularly on forest issues, and lobbied for protection of roadless and wilderness areas on public land.

These days: Believes biochar has great potential to improve soil, retain water, boost crop yield and sequester

Website: www.wilsonbiochar.com

ture from the drought," she said. "It's one region, but it could have a huge impact.'

or guaranteed protection,"

Yoo said in Hangzhou, Chi-

na, where he was attending a

consolidation, without com-

mitting huge sums of taxpayer

cash, of Hanjin and its smaller

Officials appear set on a

Group of 20 summit.

## **Capital Press**

Mike Forrester .. ....President Steve Forrester Kathryn Brown Outside director Mike Omeg Outside director

> Corporate officer John Perry Chief operating officer

### Capital Press Managers

Mike O'Brien Publisher Elizabeth Yutzie Sell .... Advertising Director Carl Sampson......Managing Editor Barbara Nipp ....... Production Manager Samantha McLaren.... Circulation Manager

Entire contents copyright © 2016 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

### To Reach Us

97308-2048

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

# **News Staff**

### N. California

### Tim Hearden . 530-605-3072 E Idaho John O'Connell. . 208-421-4347 Idaho Carol Ryan Dumas **Boise** . 208-914-8264 Sean Ellis

### **Central Washington** 509-699-9099 Dan Wheat.. E Washington Matthew Weaver 509-688-9923

503-412-8846

Alan Kenaga... .800-882-6789

### To Place Classified Ads 503-364-2692 Telephone (toll free)......... 866-435-2965 Online ..... www.capitalpress.com/classifieds

Mateusz Perkowski ....... 800-882-6789

Oregon

Eric Mortenson ..

**Graphic artist** 

**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. .... 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

## To get information published

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

Visa and Mastercard accepted

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 marketplace.capitalpress.com www.facebook.com/capitalpress www.facebook.com/farmseller www.facebook.com/onlyAGdotcom twitter.com/capitalpress www.youtube.com/capitalpressvideo www.blogriculture.com

## Index

Livestock	1
Markets	1;
Opinion	. (

## Correction policy

Press staff and to our readers.

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

# Hanjin pledges \$90M to resolve shipping cargo chaos

By YOUKYUNG LEE AP Business Writer

SEOUL, South Korea (AP) — Hanjin Group said Sept. 6 it will inject \$90 million, including \$36 million from chairman Cho Yang-ho's personal assets, to help resolve disruptions to container cargo transport caused by Hanjin Shipping Co.'s financial troubles.

The move follows South Korean government demands that the parent company do more to help as Hanjin's vesseis remain stranded outside ports after the company filed for bankruptcy protection last

Hanjin Shipping is seeking protection from creditors in dozens of countries, hoping to minimize seizures of its assets. With the company's assets frozen, its ships are being refused permission to offload or take on containers at ports worldwide, out of concern tugboat pilots or stevedores may not be paid. Out of 141 vessels the company operates, 68 were not operating normally, were stranded or seized, as of Sun-

The world's seventh largest



AP Photo/Elaine Thompson File

ocean shipper, Hanjin Shipping is part of the Seoul-based Hanjin Group, a huge, family-dominated conglomerate, or chaebol, that also includes

the container shipping industry.

The Hanjin Group said in a statement Sept. 6 that it will provide its stakes in overseas terminals, such as the one Hanjin operates in Long Beach, California, as collateral to borrow 60 billion won (\$54 million).

That still falls short of the fees that Hanjin Shipping must pay for services it needs to off-

load cargoes already on its vessels. According to local media reports, that amounts to 600 billion won (\$543 million).

It was unclear if banks or the government might provide more financing to resolve the immediate crisis.

In the meantime, South Korean regulators said they are directing Hanjin Shipping vessels to unload cargoes in a few key ports, including in Singapore and Hamburg, Ger-

With the country's largest ocean shipper idled and the in crisis, a government task force is directing moves to salvage the container shipping sector, which like ocean shipping worldwide has been battered by weak demand and

"The government is making all-out efforts to minimize damage and loss of consignors," Finance Minister Yoo Il-ho told reporters Sept. 5. "Korean government-led response teams will be formed in the selected offshore ports to swiftly receive stay orders

shipbuilding industry also overcapacity.

rival, Hyundai Merchant Marine, which already is being restructured. Hanjin Shipping was handling nearly 8 percent of the

trans-Pacific trade volume for the U.S. market, and with its container ships marooned offshore, major retailers have been scrambling to devise contingency plans to get their merchandise into stores.

The shipping company has posted net losses every year since 2011. Last week, creditors led by the Korea Development Bank rejected a plan by Hanjin Group to spend another 500 billion won (\$447.2 million) to rescue the shipping firm, way short of Hanjin Shipping's more than 6 trillion won (\$5.37 billion) in debts.

Hanjin's shares jumped 20 percent on Sept. 6 on hopes for government help for the company, after falling 13.7 percent on Sept. 5.

# Illness linked to imported produce finds foothold in Texas er circumstances that could

By DAVID WARREN Associated Press

DALLAS — Health officials are trying to determine why there's been a dramatic increase in the number of people in Texas each year who contract a food-borne illness that's often linked to produce imported from Mexico and other warmer climes.

Although there have been outbreaks in several states in

To submit an event go to the Community Events calendar on the

home page of our website at www.

capitalpress.com and click on "Sub-

mit an Event." Calendar items can

also be mailed to Capital Press, 1400

Broadway St. NE, Salem, OR 97301.

recent years, including one in 2005 in Florida that sickened nearly 600 people, cyclosporiasis infection rates returned to normal levels after the

sources were contained. But in Texas, the number of cases shot up from 44 in 2012 to 351 in 2013 and has remained in the triple digits ever since, with 200 in 2014, more than 300 last year and more than 100 so far this year, according to the Texas Department of State Health

State and federal health officials say an increasing amount of produce that's imported from tropical and subtropical regions — where the parasite that causes the illness is endemic — is likely contributing to the recent outbreaks.

Some in the past few years were traced to tainted produce from Mexico, but officials haven't found a common source for this year's cases in Texas, said Christine Mann, a spokeswoman for the Texas department.

"It's very challenging for epidemiologists to investigate food-borne outbreaks," Mann said, explaining that investigators must consider myriad factors like the travel itinerary of people who become ill.

She said there are oth-

cheon 9 a.m.-4 p.m. Chemeketa

Community College Eola Wine

Studies Center, 215 Doaks Ferry

Road NW, Salem. In addition to the

strategic plan discussion the council

will also celebrate champions in in-

vasive species efforts at the awards

GASES / WELDING / SAFETY / FIRE 20 Northwest Locations

be driving up the number of cases, such as the outbreaks raising more awareness of the disease, leading to additional testing for it and more diagnoses.

And given its long border with Mexico, Texas could be consuming more imported produce than other states, raising the risk of infection, Mann speculated.

1-800-765-9055

Calendar Sponsored by:

Monday, Sept. 12 Oregon State Board of Agricul-

ture meeting. Wildhorse Resort and Agriculture.aspx Washington State Fair, 10 a.m.-9 p.m., 110 Ninth Ave.

Tuesday, Sept. 13

Oregon State Board of Agricul-Agriculture.aspx

ture meeting. Wildhorse Resort and Casino, Pendleton. www.oregon. gov/ODA/AboutUs/Pages/Boardluncheon. tinyurl.com/OISCSummit Wednesday, Sept. 14 Washington State Fair, 10 a.m.-9

p.m., 110 Ninth Ave. SW, Puyallup. (253) 845-1771, www.thefair.com/

p.m. Clackamas Community College, Oregon City, Ore. Small Farm School

is aimed at beginning small-scale commercial farmers in the Willamette Valley. Workshop topics include goat, hazelnut, cut flower and vegetable production, on-farm veterinary care, electric fencing for pastures, new farmer business and marketing, tractor safety and operation, small engine repair, farming with native beneficial insects and pasture care. Several classes will be held at the OSU North Willamette Research and Extension Center in Aurora. Small Farm School is a collaboration between OSU Extension, Clackamas Soil and Water Conservation District and Clackamas Community College. Cost: \$75 for adults, \$50 for youths 13-18 with an adult

## Accuracy is important to Capital

If you see a misstatement,

set the record straight.

# Saturday, Sept. 10 Practical Application of Soil Management Principles: Down and

Dirty, 9 a.m.-noon SOREC Extension Building Auditorium, 569 Hanley Road, Central Point, Ore. Wear work clothes and bring gloves for the second session of this two-session class. Move beyond theory and learn about the Rogue Valley soils. https://secure.oregonstate.

edu/osuext/register/1064

Washington State Fair, 9 a.m.-10 p.m., 110 Ninth Ave. SW, Puyallup. (253) 845-1771, www.thefair.com/

Eastern Idaho State Fair, 97 Park St., Blackfoot. 208-785-2480, https://funatthefair.com/

Sunday, Sept. 11 Oregon State Board of Agricul-

ture meeting. Wildhorse Resort and Casino, Pendleton. www.oregon. gov/ODA/AboutUs/Pages/Board-Agriculture.aspx Washington State Fair, 9 a.m.-10 p.m., 110 Ninth Ave. SW, Puyallup. (253) 845-1771, http://www.thefair.com/

Casino, Pendleton. www.oregon.gov/ODA/AboutUs/Pages/Board-SW, Puyallup. (253) 845-1771, http://www.thefair.com/

Oregon Invasive Species Coun-

cil 2016 Summit and Awards Lun-

Thursday, Sept. 15 Small Farm School, 8 a.m.-4:30