Pale cyst nematode



Globodera pallida

Appearance: One-millimeter long

Diet: Roots of plants in the Solanaceae family, which includes potatoes and tomatoes

Life cycle: Typically one generation per year. After fertilization, females swell up to appear as cysts on roots of the host plant. Each cyst may contain more than 400 eggs which can survive for several years.

Origin: Andes region of South

First observed in U.S.: 2006 in Idaho

Sources: USDA APHIS; University of Idaho

Capital Press graphic

Officials confirm another PCNinfested field

By JOHN O'CONNELL Capital Press

IDAHO FALLS — Another field has been added to an Eastern Idaho pale cyst nematode eradication program after soil testing confirmed the presence of the quarantined

Tina Gresham, director of the Pale Cyst Nematode Program for USDA's Animal and Plant Health Inspection Service, announced the addition of the 150-acre field on Dec. 21, bringing to 27 the total number of infested fields under special regulations.

Gresham said in a press release the field was already being sampled and under special regulations due to known associations with an infested field, such as common equipment use.

'Trace work is ongoing to identify and regulate any additional fields that may have been exposed to soil from this recently detected infested field," Gresham said in the press release.

PCN, a microscopic parasite that can reduce potato yields by up to 80 percent, was first discovered in Eastern Idaho in 2006. Infested fields have been found within a roughly 5-square-mile area of Bonneville and Bingham

Officials have been working to contain infestations and eradicate the pest since then, as its presence, if left unchecked, could create trade problems.

The program now includes 9,540 regulated acres, 3,047 of which are considered infested.

The program scheduled an information session last week in Idaho Falls.

The agenda included a program update, a PCN perspective from Scotland, efforts to use "trap" crops to stimulate hatching of cysts in the absence of a viable host, biological-control options, the potential to plant quinoa as a cash crop that may reduce cyst viability, resistant potato varieties and other topics.

What's Upstream ramped up its spending for 2016 legislative session

Website costs \$125 an hour to develop

By DON JENKINS Capital Press

The What's Upstream website cost \$34,187 to develop and tens of thousands of dollars to publicize during the 2016 Washington legislative session, according to newly available Environmental Protection Agency records.

On behalf of the Swinomish Indian tribe, Seattle lobbying firm Strategies 360 bought billboards and radio spots to direct motorists and listeners to the EPA-funded website.

The site's imagery implied farming turns water brown and kills fish. A "take action" link urged visitors to send form letters to legislators asking them to consider mandatory 100-foot buffers between farms and wa-

The records, released in response to a Freedom of Information Act request by the Capital Press, do not provide a



Don Jenkins/Capital Press

A What's Upstream billboard shows cows in a stream, implying that Washington farmers were polluting public waters. The photo was not taken in Washington.

total spent on the billboards and radio spots. Added together, invoices top \$60,000.

It's unclear whether the EPA reimbursed the tribe. Neither the radio spots nor billboards disclosed EPA's support, a requirement of agency-funded projects. Efforts to obtain comment from the EPA were unsuccessful.

What's Upstream lead organizer Larry Wasserman did not respond to an email seeking comment.

The EPA records, the latest batch released in response to FOIA requests, provide more details about activities timed to influence state lawmakers convening last year in Olympia. No bill related to agricultural buffers received a hearing. The campaign generated 51 form letters to the 147-member Leg-

The Washington Public Disclosure Commission is

probing whether the What's Upstream campaign broke state law by failing to register as a lobbying organization. The PDC has yet to announce whether it will take enforcement action.

The EPA's inspector general is looking into whether the tribe and Northwest Indian Fisheries Commission violated federal anti-lobbying laws.

A grant ostensibly for Puget Sound restoration was awarded in 2010 to the fisheries commission and passed through to the tribe. The EPA allowed What's Upstream to take shape over five years, but disavowed the project last spring when confronted by angry federal lawmakers.

Records show the EPA scrambled in early April in response from an inquiry by U.S. Rep. Cathy McMorris Rodgers, R-Wash., to find out how much the What's Upstream campaign cost. The project had a six-year, \$655,000 budget, but the EPA has not detailed how much was actually spent. McMorris Rodgers' staff did not respond to a request for comment.

The EPA did learn from the fisheries commission that the original What's Upstream website cost \$9,375.

A revised website — with the new imagery and "take action" link — was launched in late 2015 to coincide with the legislative session. The new site cost \$24,812.50, according to the fisheries commission. Website development costs equaled \$125 an hour.

To promote the website, Strategies 360 bought spots on Seattle public radio station KUOW. Five invoices, billing for dozens of spots aired over three months, totaled \$22,303.

Strategies 360 contracted with Lamar Advertising to place billboards in King, Whatcom, Skagit and Thurston counties. Two contracts to make, install and display nine billboards totaled \$39,135.

Billboards went up in Olympia and Bellingham, but came down after U.S. Sen. Pat Roberts, R-Kan., took note and said they were a malicious smear on farmers.

Winter rains could boost Red Bluff Bull Sale receipts

By TIM HEARDEN Capital Press

RED BLUFF, Calif. -The wet winter's positive impact on the cattle market has ranchers upbeat at this week's 76th annual Red Bluff Bull and Gelding Sale.

In all, 400 bulls are entered in the Jan. 28 sale, which caps five days of livestock auctions and other activities at the Tehama District Fairgrounds.

Consigners will try to top last year's \$1.49 million in total bull auction receipts, and their chances are improving. The winter's rain and snow has prompted cattlemen to begin to rebuild their herds, which could push up prices, sale manager Adam Owens said.

"It was weaker this fall, but it's been getting stronger with all the rains in California," Owens said of the market. "There'll be bulls in every price range. There always is."

At the Shasta Livestock Auction Yard in Cottonwood, Calif., feeder heifers sold for as much as \$142 per hundredweight on Jan. 13, up from a high of \$117 per hundredweight at a sale three months earlier. Bulls have consistently topped out at roughly \$75 per hundredweight through the fall



Brian Birt and Tony Welch load fencing onto a forklift Jan. 17 in preparation for the Red Bluff Bull and Gelding Sale at the Tehama District Fairgrounds. The 76th annual event ends Jan. 28.

and early winter.

Last year's \$1.49 million in receipts for 305 bulls fell short of the record \$1.56 million paid for 238 bulls that passed through the Don Smith Pavilion in 2015, but was the sixth straight year the bull sale topped the \$1 million mark.

Owens said he isn't sure whether this year's sale will exceed those numbers.

"It's pretty hard to predict," he said. "I would think it would be pretty similar, maybe."

The bull sale is the last of four auctions to be held this

week in Red Bluff. The bidding was to begin with the eighth annual online feeder and replacement heifer sale on Last year about 80 lots were

sold, bringing as much as \$234

er hundredweight for weaned heifers and \$252 per hundredweight for weaned steers. In all, 92 horses and 20

stock dogs were entered in their respective sales on Jan.

In 2016, 104 geldings sold for a combined \$755,250, while 17 working cattle dogs brought \$107,400 in total sales – an average of \$6,318 per The auctions highlight a

packed week that will also include trade and art shows, a kickoff breakfast, beef forums and seminars and a bull riding competition. The festivities began Jan.

24 with a 7 p.m. "Roots and Boots" concert featuring Sammy Kershaw, Pam Tillis and Collin Raye at the State Theatre downtown.

Activities also included a Jan. 26 clinic and demonstra-



manager Adam Owens carries a section of fencing Jan. 17 during preparations for the sale at the Tehama District Fairgrounds.

tion by Oakdale, Calif., cow

horse expert Clayton Edsell and a California Cattlemen's Association-sponsored forum on farm management practices in drought on. Jan. 27. The Red Bluff's Buckin'

Best Bull Riding event begins at 7 p.m. Jan. 28, followed by a party and dance.

Pre-sale tickets range from \$20 for general admission to \$75 for premium seating, parking and a reception.

For information, visit http://www.redbluffbullsale.

Grower forum will tackle falling number problems

By MATTHEW WEAVER Capital Press

Storing wheat as a way to improve its falling number test score is one tactic that will be discussed during a Jan. 31 forum in Colfax, Wash.

Two studies say the enzyme alpha amylase, which damages starch, degrades over time in storage, said Camille Steber, molecular geneticist with USDA Agricultural Research Service.

Storage seems to work better when temperatures are higher, and doesn't work in the cold, Steber said.

"Storing it over the winter isn't as useful as storing it over the fall," she

The falling number won't get worse in storage unless the wheat gets wet and sprouts, Steber said.

Steber is one of several speakers on the agenda for the forum, which will be hosted by the Washington Association of Wheat Growers at noon Jan. 31 at the McGregor Co. training facility in Colfax.

"Falling number has been on the forefront of everybody's mind," said Lori Williams, WAWG outreach coor-

About 42 percent of the samples tested by the Washington Department of Agriculture last fall had low falling numbers. Low test numbers were also found in about 25 percent of the Northern Idaho wheat crop and a small percentage of the Oregon crop. Elevators dock the price for scores below 300.

The forum will cover causes and industry efforts to help farmers who have been docked, Williams said.

Steber wants growers to understand that the falling number test is a way to measure the enzyme.

The biggest need is for varieties

bred with genetic resistance to late-maturity alpha amylase and pre-harvest sprouting. The falling number test used by grain elevators and customers overseas doesn't distinguish which is the cause, she said.

Steber also heard from farmers that club wheat variety Bruehl is susceptible to falling number problems. Though Pritchett is an improvement, it is also susceptible.

Both varieties resist snow mold, Steber said. Crescent is better than Bruehl and Pritchett for falling number, but doesn't have snow mold resis-

Toxic plants cost ranchers \$300M a year; management key to prevention

By CAROL RYAN DUMAS Capital Press

TWIN FALLS, Idaho — Livestock deaths and other expenses related to toxic plants cost Western ranchers more than \$300 million annually, researchers say, and the best way to reduce the impact is through better management.

Those direct losses result from death, abortion, birth defects and reduced animal productivity. But there are also indirect losses, such as costs related to veterinary services, fencing and altered grazing plans, Jim Pfister, USDA-ARS research rangeland management specialist, told livestock producers at the University of Idaho Range Livestock Symposium on Jan.



Jim Pfister, a research rangeland management specialist with the USDA-ARS Poisonous Plant Research Laboratory in Logan, Utah, talks about managing for toxic plants on the range during the University of Idaho Range Livestock Symposium in Twin Falls on Jan. 11.

Pfister is part of a team at USDA's Poisonous Plant Research Laboratory in Logan, Utah, that takes an interdisciplinary approach to solving poisonous plant issues.

"It's important to remember that the dose makes the poison. All substances are a poison," he said.

Some plants are only toxic under certain conditions, such as certain stages in their life cycle or how they are ingested,

Many toxic plants flourish on rangelands across the Intermountain West. Some of the most problematic include larkspur, locoweed and lupine.

"Larkspur probably kills more cattle on Western ranges than any other plant," he said.

Losses are typically 3 to 5 percent annually but can be as high as 10 to 20 percent in an individual herd. Cattle generally like larkspur, and at some point in the season they've probably all been eating it, he

Toxicity is problematic because it varies greatly from plant to plant and year to year. Toxicity decreases as the sea-

son progresses and drops significantly after the first frost. Clinical signs of toxicity in livestock include staggering gate, muscle tremors and lying

Whether it causes cattle to drop or die depends on how much they eat, how fast they eat it, the amount of toxic alkaloid in the plant, how many consecutive days they've eaten it, how much they move around after ingesting it — exercise exacerbates the effects - and individual susceptibil-

ity. The toxin in the plant can paralyze the diaphragm and cattle can die from bloat or respiratory failure, he said.

Adequate moisture this year indicates a good year for larkspur, which could re-

duce grazing options to the

early and late seasons. Cattle typically eat the plant after it flowers — a window of high risk when it is palatable and toxin levels are moderate — so ranchers could graze the area before that window and later, when the plant is in the late pod stage, he said. The plant is not toxic to

sheep, so they could also graze sheep ahead of cattle to reduce how much is available to cat-

Herbicide control can be used if it's allowed, and drug therapy is available but cattle can relapse and need more than one treatment.

Grazing management plays an important role in reducing livestock losses, but researchers are doing genetic testing in cattle for resistance and susceptibility to larkspur.