

# Researcher tests pine needles in compost

Project aims to demonstrate carbon, soil benefits

By **MATTHEW WEAVER**  
Capital Press

SPOKANE — Researchers hope to prove pine needles make good compost.

“There are a lot of gardeners who believe you actually can’t compost Ponderosa pine needles,” said Steve McConnell, Washington State University Extension extension specialist for forestry. Pine needles do compost, but slowly unless they are shredded, he said.

“We want to demonstrate that they’re a great source of carbon and a good amendment to make your garden grow better,” he said. “We want to document that it actually happens.”

McConnell said the results of his study could have application for forestry and agriculture. It’s a way to use pine needles, he said. A farmer in the Columbia Basin uses three truckloads of pine needles for his irrigation circle, McConnell said.

“If you add organic matter to soil. You increase the moisture-holding capacity and the ability to buffer against climate change,” he said. “There’s applications out there, we just need to figure out how to do it.”

McConnell uses different materials: 110 pounds of Ponderosa pine needles, 23 pounds of dry leaves, 67 pounds of grass and 110 pounds of coffee grounds.

Colleagues, local lawn care services and coffee shops provided the materials.

In some cases, the pine needles were shredded and left lying in a yard for a year. Some pine needles are freshly collected and intact. McConnell will compare composting rates depending on treatment, monitoring temperature.

WSU Extension volunteer and master composter Ryan Herring expects the project to demonstrate pine needles increase fungal activity.

Herring said the project shows how much organic matter trees can produce, and the protection they offer against erosion. Farmers on the Palouse may wish to start planting more trees, as using their byproduct in the soil would have a huge benefit, he said.

“An acre of trees versus an acre of grass, you’re going to get a lot more carbon and organic matter from the tree,” Herring said. Over time, trees will output more than the grass, he said.

Ponderosa pine needles are acidic, another reason gardeners don’t usually use them, but McConnell said composting neutralizes them so that they don’t acidify the soil. He will closely monitor soil pH.

The current project will last 90 days. McConnell uses funds he has access to for the project, but is interested in finding sponsors.

There are a lot of mismatches when it comes to composting, he said. Both brown and green materials are necessary, which requires timing.

“Composting is kind of an art and a science,” he said.



Sean Ellis/Capital Press

Rep. Gayle Batt, R-Wilder, cooks breakfast for kids at the Canyon County Fair’s “Ag Country” tent July 23. The kids collected the food — bacon, eggs, milk, wheat — and then returned to the tent, where volunteers turned it into breakfast

## Scavenger hunt teaches kids the source of their food

By **SEAN ELLIS**  
Capital Press

CALDWELL, Idaho — At the Canyon County Fair in Southwestern Idaho, kids learn about where their food comes from by going on a scavenger hunt and collecting their own breakfast items.

In an “Ag Country” tent sponsored by Canyon County Farm Bureau, kids receive instructions on what food items they need to collect for their breakfast.

They then go to several different areas throughout the fair to collect milk, eggs, bacon and wheat. Their journey takes them to cow, chicken and pig barns and then back to the ag tent, where the food is cooked by volunteers.

The idea behind the scavenger hunt is to teach children through a hands-on experience that their food is raised by farmers and ranchers before it gets to the grocery store, said Kristie Dorsey, chairwoman of the CCFB Women’s Committee, which organizes the event.

“We want kids to really understand where their food comes from,” Dorsey said.

In its second year, the event has proven to be wildly popular and people lined up before this year’s fair opened its doors at noon July 23 to participate in this year’s breakfast scavenger hunt, said CCFB Executive Director Roger Batt.

When they return to the tent, the kids grind their own wheat into the flour that is used to make their pancakes.

“There’s something magical about that for the kids,” said Rep. Gayle Batt, R-Wilder, a women’s committee member and Roger Batt’s wife. “There’s a simplicity in that that a lot of people take for granted.”

Kids and adults who visit the tent are also encouraged to take one of four quizzes designed to teach them about agriculture and the different farm commodities grown in the region, state and nation.

For example, they can learn that Canyon County produces 55 percent of the world’s sweet corn seed or that the United States produces 20 percent of the world’s beef with only 7 percent of its cattle.

The tent includes 13 farm commodity displays that contain the answers to the quiz questions.

The Ag Country tent attracts about 7,000 people during the four-day fair and about 2,000 adults and children take at least one of the quizzes, Roger Batt said.

All of the events connected with the Ag Country tent center around teaching people about agriculture, he said.

While 84 percent of the land in Canyon County is in agricultural production, it’s also the state’s second most populous county and one of its fastest-growing and a lot of newcomers don’t understand how important farming and ranching are to the local economy, Roger Batt said.

The tent, which was packed shortly after the fair opened its doors, is one of the fair’s top destinations, he said.

## Grain buyers expand East Idaho operations

By **JOHN O’CONNELL**  
Capital Press

AMERICAN FALLS, Idaho — Eastern Idaho wheat farmers will have access to new buyers and more delivery locations when they sell this season’s crop.

Lansing Trade Group, a commodity trading company based in Overland Park, Kan., received its first shipment of grain July 21 at a new, 2-million-bushel facility located in American Falls at the intersection of North Pleasant Valley and Maple roads.

Jim Rooney, who will merchandise for the new Lansing facility, said grain unloading capacity in the region hadn’t kept pace with improved yields and harvesting equipment.

“There was a huge need for additional capacity and competition in this area,” Rooney said. “Growers will certainly see the benefit of having additional competition in the area from both the price and the

service level.”

Lansing also recently upgraded a 1.4-million-bushel capacity grain facility in Lincoln, located east of Idaho Falls, which was previously leased by Thresher Artisan Wheat.

The Scouler Co. recently opened a grain handling facility on 10 acres along the Union Pacific Railroad in Aberdeen. Furthermore, Thresher is completing improvements to its five Eastern Idaho facilities, including a new satellite location in American Falls with a 1.5-million-bushel dump facility.

“I’m excited that there’s competition,” said Aberdeen wheat farmer Kim Whalen. “I think it helps us diversify a little bit.”

Rooney said the stadium-style dump site at Lansing’s new American Falls facility will protect grain with walls, an aeration system and a tarp and will utilize two conveyors with a 40,000-bushels-per-hour unloading capacity.

## WSU names new interim provost, CAHNRS dean

Interim Washington State University President Dan Bernardo has named Ron Mittelhammer, current dean of WSU’s College of Agricultural, Human and Natural Resource Sciences, as interim co-provost of WSU.

Kimberlee Kidwell, current executive associate dean of CAHNRS, will become acting dean. Kidwell filled in as dean of CAHNRS last winter when Mittelhammer was out for medical reasons.

Mittelhammer said in a press release it would be a smooth transition.

“Our leadership team is perfectly well-suited to handle this unusual situation,” Mittelhammer stated. “Dr. Kidwell has my utmost confidence and the experience to provide strong leadership of CAHNRS in my absence. She will have the unwavering support of our highly skilled and effective associate deans, Rich Koenig and Jim Moyer.”

“The most difficult chal-

lenge we face in trying to move anyone into this role is the ‘domino effect,’” Bernardo stated of the provost position. “Anyone prepared to step into the role of provost is already fully employed, and removing them from their current role can create large institutional risks.”

Mittelhammer’s associate deans have already demonstrated their ability to manage the college in his absence, Bernardo added.

Mittelhammer will oversee issues related to faculty affairs and fiscal management for WSU. He will serve as interim co-provost with Erica Austin, vice provost of WSU.

WSU President Elson Floyd died of cancer June 20. Bernardo was named interim president while the board of regents seeks a replacement. The changes will be in place until a permanent replacement is found for Floyd, according to WSU.



Matthew Weaver/Capital Press

Washington State University Extension volunteer Alex Ratcliff turns pine needle compost July 14 at the extension office in Spokane, Wash.

## Growers: Monsanto investment in wheat research will spur industry

By **CAROL RYAN DUMAS**  
Capital Press

FILER, Idaho — Monsanto cut the ribbon on its new Wheat Technology Center last week among high enthusiasm from wheat growers.

The center will serve as Monsanto’s core wheat breeding research and development facility, bringing together some of the nation’s top researchers to maximize collaboration and spur innovation, said Kristin Schneider, Monsanto’s global wheat breeding lead.

Wheat is essential to the solution of feeding a growing world population, and technology is central to that vision, she said.

“We know we have the tools and technology to feed a growing world. This site will bring those tools together for wheat,” said Robb Fralley, Monsanto executive vice president and chief technology officer and World Food Prize Laureate.

Technology will allow the world to farm even better, more precisely, to feed the additional 3 billion to 4 billion people by 2050, he said.

“We’re all here to celebrate the opening of this site and talk about the importance of science in food production,” he said.

Wheat, grown in 42 states in the U.S., is at a crossroads, said National Association of Wheat Growers President

Brett Blankenship, a wheat grower near Washtucna, Wash.

Wheat has lagged behind production advancements in other crops, such as corn and soybeans, costing the industry in competitiveness, he said.

As recently as 1992, wheat was the No. 1 U.S. planted crop with just shy of 90 million acres. Wheat acreage has dropped to about 56 million acres today, he said.

“We need to reverse that trend. We need this type of innovation in wheat; technology and innovation are the future for wheat,” he said.

Some of the techniques and processes used at the Wheat Technology Center include doubled haploid breeding technology, as well as

seed chipping and marker-assisted breeding technologies, allowing researchers to sample seeds and look for “DNA fingerprints” associated with certain characteristics before planting, said Ben Eberle, Monsanto communications manager for wheat, cotton and specialty crops.

These advanced techniques reduce the time required for variety development, helping researchers respond more quickly and efficiently to challenges wheat growers face on their farms, he said.

No biotech research is taking place at the center, he said.

The Wheat Technology Center expansion at Monsanto’s vegetable research

facility at Filer added 14,000 square feet of greenhouse growing space and enhanced laboratory space and 10,000 square feet of seed processing, Eberle said.

The expansion, announced in the fall of 2013, represents a \$60 million investment, which includes additional equipment and facilities at five testing operations across the country, he said.

Burley, Idaho, wheat grower Wayne Hurst, a National Wheat Foundation director, past president of NAWG and Idaho Grain Producers Association, said the tech center is a wonderful, state-of-the-art investment in the future of wheat.

“This is going to help us

to be more profitable and productive and allow us to be more competitive,” he said.

Wheat represents 20 percent of the world’s calories, and demand continues to grow. The U.S. is losing out to other countries that are stepping up to fill the need, he said.

Much of the research in wheat has been funded by growers through public programs. Now multinational private companies are investing in wheat to take the same technology used to advance other crops and apply it to wheat, and the wheat industry has promoted those advancements, he said.

“It’s an exciting time to be in wheat,” he said.