Busy as a bee with pollinator health

By Bruce Pokarney

There seems to be no shortage of interest and concern for pollinators globally, nationally, and, most certainly, locally. Oregon is recognized as one of the more proactive states in addressing pollinator health issues and understanding the importance of pollinators to the state’s diverse specialty crop agriculture.

With its own diversity of programs, experience, and expertise, the Oregon Department of Agriculture (ODA) connects in several ways with comprehensive efforts to make the world—at least Oregon—a better place for pollinators.

“The fact that we, as an agency, have dealt with pollinator health issues in so many ways is an indication of the importance we place on bees—not only for the role they play in agriculture, but what they mean to our ecosystem,” says Helmuth Rogg, ODA’s Director of Plan Protection and Conservation programs.

About two-thirds of the world’s food and fiber crops depend on pollination for reproduction. The fates of commercial honeybees brought into the state and Oregon’s native bee population are critical to the future of Oregon agriculture. Understanding how people impact pollinators, both positively and negatively, is at the heart of ODA’s efforts.

It’s a big topic and one that has the department abuzz with activity.

Plight of the bumblebee

Concerns over pollinator health have increased while the number of commercial honeybee hives in the US have decreased due to a complex set of factors that includes disease, parasites, habitat loss, pesticide exposure, and more. For the most part, Oregon’s 500-plus native bee species are in abundance and doing well. That includes eight bumblebee species, an unusually high number for any state.

In the summer of 2013, pesticide applications in Wilsonville led to the death of a large number of bumblebees. ODA’s investigation found that a pesticide product particular...
One of my biggest observations is how nice everyone is. I spent 12 years in Washington DC and was ready to leave for a lot of reasons. It was a great place to live and work, but I was ready for a different pace and quality of life. People in Oregon want to engage, they want to get to know you. They really care about my background and what brought me to Oregon. I call it “Midwest nice” in Oregon.

I’ve learned quite a bit about Oregon agriculture. Coming in, I knew about its diversity, but to be here, experience it, and actually talk to the people who grow eight, nine, or 10 crops on their farm, gives me a whole different perspective. For Oregon agriculture to thrive, we need to embrace the state’s diversity and embrace all types of production practices. It takes organic, conventional, biotech, small farms, large farms. But the underlying theme is that nearly all are family farms in Oregon. It’s a very exciting industry that obviously fuels a lot of our economy and way of life. I have been surprised by a couple of issues connected to Oregon agriculture. One is how stark the urban-rural divide is. We are often five generations removed from how our food is produced. People think a gallon of milk comes from a grocery store and don’t necessarily understand or have an appreciation for the processing, the transportation—all the way down to the dairy farmer and the people they employ. That issue is not unique to Oregon, but since our state is so diverse, it can be challenging. It’s also a big opportunity.

One other challenge that is surprising to me is land use and making sure we protect agricultural land. As population centers grow, a lot of them—particularly in the Willamette Valley—are doing so around high value, highly productive ag land. That can cause tension. Sometimes farming is loud, smelly, and can slow traffic down during harvest as big pieces of equipment move on roads and highways. With an increasing urban-rural interface, I have learned early that Oregon needs to keep its productive lands available to farming.

My impression of the job itself? I’m incredibly lucky every day I come to work. I hope I feel like that in two or five years. I think I will, but I definitely feel that way two months into the job. It is a great organization. A day doesn’t go by that someone doesn’t tell me that. We have outstanding employees doing great work in Salem, but also throughout the state.

The job has been good, but I’m not sure I would recommend that anyone start a new job as an agency head during the beginning of a legislative session. It is challenging and very fast paced, but I’m also learning about every single issue going in Oregon agriculture. It is the most intense on-the-job training I’ve ever had, but coming out of session and over the next several months, I’m going to have a good grasp of the issues and how they impact Oregon’s diverse agriculture.

When I took this job, I committed to visiting all 36 Oregon counties in my first year. I’ve been able to check off a couple of counties but there are 34 more to go. I look forward to getting out and seeing all types of agriculture—not only the benefits and opportunities, but also the challenges—and how ODA can help farmers, ranchers, and businesses navigate those challenges.

It’s been an exciting first couple of months with more to come. There is a lot for all of us to look forward to.

Director's column: Alexis Taylor
been incredibly active at the state level. When the Oregon Legislature created the Pollinator Health Task Force a couple of years ago, Kachadoorian gave several presentations that helped focus the implementation on pollinator plans. As a board member of the Association of American Pesticide Control Officials, she has worked with major players in the pesticide regulatory world and key stakeholders to try and figure out what should be done nationally. Now she’s teaming up with OSU’s Melathopolous to craft an Oregon plan.

“I’m so impressed that people here want to do the right thing,” says Kachadoorian. “They see that everyone has to step up to the plate. Government can’t and shouldn’t do it all by itself.” We need the participation of extension, farmers, beekeepers, commercial pesticide applicators, and homeowners.

One focus of the work is developing better pest management decision-making tools to help homeowners and small landscaping operations, in both English and Spanish, followed by an extensive public awareness campaign. One product is already making a difference—a public service announcement now playing on a Hispanic television station directed at Spanish-speaking pesticide applicators.

What will the plan ultimately look like? From a grower’s perspective, it’s all about the tools—best management practices that allow them to take actions to address pest problems without harming bees. Oregon’s version is expected to be action-oriented and will take into account the tremendous diversity of crops found inside the state. “I heard from a beekeeper in another state that nobody there even knows there is a pollinator protection plan in that state,” says Kachadoorian. “He says they went through such a big effort, held stakeholder meetings, developed a written plan, and it went on a shelf. We know that’s not where it stops, we need to keep this going, make it an actionable document.”

A draft of Oregon’s Pollinator Plan is expected to be available for public comment in September 2017.

The Oregon Bee Project
A nearly $90,000 Specialty Crop Block Grant was awarded last year by ODA to fund an Oregon Bee Pilot Project. The project kicked off last year and funding will carry it through September 2019. At its heart, the project is designed to recognize, encourage, and support Oregon farmers and their efforts to protect pollinator populations. The project is supported by the long-standing unique experience of ODA’s Insect Pest Prevention and Management Program (IPPM), which has identified important native pollinators and their impact on selected specialty crops.

“We have a unique agricultural system in Oregon with crop diversity,” says Sarah Kincaid, IPPM entomologist. She is spearheading the Oregon Bee Project effort. “This environment is uniquely suited to promote pollinators for a number of reasons. That crop diversity provides them with a long season of forage resource, starting very early in the spring and through the entire summer. That gives pollinators the nectar and pollen they need to build their nests and raise their young.”

Working with a diverse set of collaborators—all interested in protecting pollinators—ODA has put together a project outline that involves research, public outreach and education, and other components that recognize growers who adopt practices beneficial to pollinators.

“Oregon also has this fantastic human capital,” says Kincaid. “Farmers in Oregon care about delivering a quality product and they are also stewards of the land and care about beneficial insects, especially pollinators. Because of the specialty crops we grow in Oregon and the reliance on both managed and native bees, there is natural interest to protect those pollinators.”

Many farms provide hedgerows and natural areas bordering the crop fields, which provide habitat to a diverse array of nesting habitats and forage at times when crops are not in bloom. This is the kind of bee-friendly activity already taking place and worthy of recognition. Research is a major component of the project. College students will help identify key bee pollinators of specialty crops, analyze pollen transfer, and observe how often the bees forage.

“The program begins doing the research we need to begin filling our knowledge gaps about our native pollinators,” says Kincaid.

Along with a research component aimed at filling in some of the gaps in knowledge of native pollinators, the project aims to encourage farmers who take it upon themselves to change the landscape to be more pollinator-friendly.
Saving the City of Roses from Japanese beetle

The Oregon Department of Agriculture has proposed a multi-year project to eradicate the state’s largest ever Japanese beetle infestation. The proposal, if approved, would involve treatment beginning this spring of approximately 1,000 acres and about 2,500 single-family residences in an area of Washington County within the city of Portland. A record-breaking 369 Japanese beetles were found in traps placed in the area last year, as well as numerous live beetles found feeding on roses and other plants in the largely residential area that includes the Cedar Mill and Bethany communities of northwest Portland.

The option of doing nothing about the destructive insect pest could have devastating effects.

“If Japanese beetle becomes established in Oregon, it would significantly reduce the quality of life for residents and increase costs to agriculture,” says Clint Burfitt, manager of ODA’s Insect Pest Prevention and Management Program. “Overall, there would likely be a large increase in pesticide use by the ag industry and residents who want to protect their lawns and ornamental plantings.”

The invasive Japanese beetle is a major plant pest in other parts of the US. As a grub, it can be very destructive to turf. As an adult, the bright metallic green beetle with copper-colored wings covers feast on a wide variety of plant material including trees, shrubs, flowers, fruit, and vegetables. It is a pest that can be destructive in urban and agricultural environments, and also is subject to agricultural quarantine regulations. The beetle has the ability to quickly reproduce and attract small mammals, such as raccoons and skunks, which can cause turf and lawn damage as the animals search for grubs as a food source. ODA has been using an early detection, rapid response approach for years to find and eradicate populations of the pest. In the past, Japanese beetle has made its way into Oregon through air cargo carriers with multiple detections over the years near Portland International Airport. In recent years, ODA has conducted eradication projects in residential areas of Portland and Cape Junction.

The beetles usually are spread through plant material as people move in from infested areas in other parts of the country. When soil is moved as new residents bring in house plants, as an example, it could be harboring Japanese beetle eggs and larvae.

“This area of northwest Portland could be considered a high risk area for the introduction of Japanese beetle because a number of people have moved into the neighborhoods over the last five years,” says Burfitt. “I suspect somebody might have brought this into their house plants.”

An ODA risk analysis shows the economic impact to all crops, commodities, and other related businesses could be as much as $45.5 million if Japanese beetle becomes established in Oregon and is generally dispersed throughout the state.

ODA’s Kirstin Richard has become familiar with the local neighborhood affected by Japanese beetles and has personally met with many residents.

The environmental impact could be equally significant. In areas back east where Japanese beetle is established, people who want to keep their plants alive have to increase their use of pesticides.

“Because pesticides would have to be applied annually, in perpetuity, to keep plants like roses or other ornamentals—or in the case of growers of wine grapes, hops, or particular horticultural plants—the establishment of Japanese beetle would result in ongoing pesticide use,” says Burfitt. “We are trying to save the City of Roses. This invasive species would also hit residents’ vegetable and ornamental gardens. In a high Japanese beetle population, people have a hard time growing many of the plants they prefer to grow in an urban setting.”

Over a five-year period, the proposed treatments would start sometime each April and be finished, at the latest, by the end of May. “Our proposal is to only treat turf grass and ornamental planting beds,” says Burfitt. “That means riparian areas, natural areas, vegetable gardens, orchards, nurseries—none of those areas are being scheduled for treatment. If someone’s property has turf grass or it has ornamental plantings, we are proposing to treat it.”

The method of treatment does not include a spray or aerial application. ODA employees will spread a granular application of a reduced-risk insecticide called Acelepryn on all the grass and ornamental planting beds of residential and commercial properties within the treatment area. Each property will be treated just once annually. It will take about 90 days for the insecticide to work its way into the soil, where the grubs would likely be found. The timing is designed to target the most vulnerable life stage of the Japanese beetle.

“This insecticide does not pose a hazard to humans or domesticated animals if used according to the label,” says Burfitt. “It’s about as low-risk of an insecticide we can use that would also be effective in eradicating Japanese beetle. The product was effectively used in Orem, Utah, during a successful five-year project. It has also been used in Boise and has been adopted by California as the insecticide of choice.”

Patterned after last year’s successful gypsy moth outreach efforts in Portland, ODA is collaborating with numerous partners to educate residents. A postcard visually asking people to “help protect the City of Roses from Japanese beetle” has been sent to those in the infested area. Along with a short summary of the beetle’s threat, the card directed residents to a secured website that asks how they want to receive communication.

“Our goal is not just to notify, but to actually increase community engagement on this process,” says Burfitt. “We asked for communication preferences, whether it’s an email address or a cell phone number, that gives us a way to notify and share information with people in the treatment area.”

Two open houses in March gave residents an opportunity to learn more about the proposed project and interact with ODA staff as well as other community stakeholders in the area. There also is a comprehensive website available to those interested at: www.japanesebeetlepdx.info

Provided that funding is secured and ODA Director Alexis Taylor approves, the proposal will transition into a project that begins this spring and hopefully ends in success sometime in 2022.

Animation students help ODA depict the JB threat

By Emily Bosanquet, Assistant Professor Pacific Northwest College of Art

In December 2016, Pacific Northwest College of Art’s Art + Science Initiative collaborated with Oregon Department of Agriculture to use art as a means to communicate to the public pressing ecological and economic concerns. ODA realized the compelling power of images to help communities understand the impacts of invasive Japanese beetle, and figure out what to do in response to this looming pest. PNCA students Sarah Birch and Cai Veronda set to investigating and working alongside ODA scientists to help apprehend and understand our world, and foster a more inclusive, collective consciousness about the world we want to create.

More details about PNCA’s Art + Science Initiative online: www.pnca.edu/programs/special/c/art-science-initiative/
Eastern Oregon’s cruel winter

The winter of 2016-17 had a major impact for a majority of Oregon. Snow and ice—traditionally not always a sure thing for much of the state—pelted both urban and rural area with indiscriminate relentlessness. But the lasting power of the storms, as well as the sheer intensity, focused on Eastern Oregon. No place was hit harder than Malheur County. It’s hard to prepare for a one-time accumulation of 38 inches.

“Damage done to buildings and infrastructure is very visible but it’s just the tip of the iceberg,” says Casey Prentiss, the Ontario-based operations manager for the Oregon Department of Agriculture’s Shipping Point Program. “What isn’t so visible is the damage done to the community’s psyche and our way of life. So many people are so deeply affected in so many ways that it’s not easy to measure.”

Initial cost estimates on full recovery exceed $100 million. It could take up to three years for the Treasure Valley to get back on its feet. For some perspective, consider that kids in the Ontario School District went to school just three days between December 16 and January 22. Holiday break accounted for some of the closure, but 10 of 13 scheduled school days were lost.

While the damage was not confined to agriculture, farmers and ranchers particularly have been dealt a tough blow. At least 1,000 mother cows were lost and assumed dead while about three out of every 10 calves were lost at birth. Livestock weight gains have been less than half of normal years. The region has long been one of the nation’s top producers of onions. Commodity loss is estimated at 150 million pounds.

At least 50 onion storage and packing facilities collapsed due to snow and ice accumulation. Thanks abound regarding insurance policies that won’t cover replacement costs. There remains one very real possibility—many Oregon growers who need to rebuild might do so across the Idaho border.

“While I was shocked by the first hand was worth a million,” says Director Taylor. “It was hard to fully understand the scope of the damage and clean up that lies ahead for these communities until I saw it up close.”

But Taylor saw something else, something encouraging during her visit. “While I was shocked by the amount of devastation, I was heartened by the resilience of those communities. Neighbors helping neighbors to push snow off their roofs, people with minor damage being willing to wait on repairs while the small business whose building was destroyed are at the front of the line. With staff living and working in those eastern Oregon communities, ODA is proud to be their neighbors as well and working to help those communities rebuild.”

Governor Brown issued a statewide declaration of emergency to provide communities with state resources to support storm recovery efforts. A request for a federal disaster declaration has been made. The Board of Agriculture also has paid close attention to the plight of Malheur County in the wake of this winter’s wrath.

“The impact of weather events is something all of us in agriculture have to deal with, but when you see and hear about the tremendous hardship taking place east of the Cascades, it reminds us all that we can’t always prepare for those things beyond our control,” says board chair Pete Brentano.

“These folks are fellow Oregonians, and we all need to rally around them. I’m glad to see this area of Oregon is getting the attention statewide in the wake of all the damage. We are thankful and grateful that the governor and key legislators have responded and have traveled to the area to see how they can help. Until those affected are back on their feet, we can’t let this become yesterday’s news.”

For Malheur County, the balance of 2017 will be about recovery. Another growing season approaches. Whether the infrastructure is in place to allow for farmers to succeed remains to be seen. But you can count on a tremendous effort of a strong-willed community.

Celebrate Oregon Agriculture commercial

A new spokesperson for the Celebrate Oregon Agriculture campaign has arrived. ODA Director Alexis Taylor is appearing in 30-second commercials on KATU television this spring urging Oregonians to enjoy and appreciate the bounty of the state’s agriculture. Wilco Farm Stores provided the venue for the TV shot and the Oregon Seed Council provided sponsorship help.

Follow the Celebrate Oregon Agriculture campaign on Facebook: CelebrateORag

Instagram: @celebrateoregonagriculture

Blog: www.celebrateoregonagriculture.com
Oregon agriculture found itself right in the middle of Asia's largest food and beverage show in Tokyo this March, and the local companies participating in the four-day event believe it was time well spent. Foodex Japan 2017 attracted more than 82,000 food and beverage buyers from around the world, a majority from Asian markets that happen to be Oregon's top customers.

Four Oregon companies participated in Foodex as part of a Western United States Agricultural Trade Association (WUSATA) project to connect western states to the tremendous export opportunities available at the show. Oregon Department of Agriculture trade managers Theresa Yoshioka and Sue Davis coordinated the WUSATA effort and kept their eyes and ears open for new and exciting developments during the show.

The Pacific Northwest is able to enjoy a taste of the West. Those attending Foodex didn’t have to travel to Oregon for a sample of the state’s agricultural bounty. It was brought to them courtesy of Oregon State University Chef Jason Ball and ODA. The “Taste of the West” presentation featured Oregon ingredients such as dried beans, fresh cranberries, and cherry preserves. Chef Ball was asked to prepare four dishes using 13 ingredients provided by the Western US companies exhibiting at Foodex, including those from Oregon.

Oregon foods perform on the biggest stage in Asia

ODA Trade Manager Theresa Yoshioka participated in Asia’s largest food and beverage show. Ball presented the unique tastes at the WUSATA’s USA Pavilion after a special reception hosted by the Japanese Agricultural Trade Office the night before.

The presentation introduced the Japanese consumer to some interesting twists on common American food products. A bean salad with pickled fruit, a sour cherry and blueberry rice gummy, and a cranberry, raisin, and date paste spread with artisan crackers and cheese—all unique recipes developed by Chef Ball. Food buyers and others working up a thirst at Foodex were treated to a cranberry and black cherry lemonade.

One Oregon standout at the show was fresh cranberries, which caught the eye—and palate—of those attending Foodex. With their longer growing season, Pacific Northwest cranberries are harvested much later in the year than other US regions, so the berries have time to ripen to a deeper color and sweeter taste. Dragonberry Produce of Canby was one of four Oregon companies participating in the show. Other local companies in the spotlight were Oregon Cherry Growers of Salem, Townsend Farms of Fairview, and Dundee Fruit Company.

“WUSATA has been slowly increasing the number of companies that come with me to Foodex,” says Yoshioka. “I’m happy with the increase in companies taking advantage of the opportunity that WUSATA provides at this show and happy that Oregon has a good showing at Foodex each year.”

With tens of thousands of potential buyers representing Oregon agriculture’s key export markets, Foodex Japan 2017 was certainly the place to be.

Oregon hops to it when it comes to craft beer

Connoisseurs of fine beer locally, across the country, and around the world can be thankful for the Pacific Northwest. The great flavor of beer can be traced back to Washington and Oregon, which rank first and second respectively in US production of hops—the key ingredient in beer. The two states are responsible for about 90 percent of the nation’s hop production, which jumped 11 percent last year. The continued explosion in the number of craft beers, many of them brewed in Oregon, has helped boost that production.

There also are some revealing statistics from the 2016 hop season in Oregon to back the notion that beer consumption is on the rise. Last year, more than 1,000 additional acres of hops were harvested, and the 7,765 acres is a 43 percent increase over what was harvested in 2014. Production also jumped 16 percent in 2016 to nearly 12.4 million pounds. With a better price per pound, value of production last year stood at $65 million—nearly doubling 2015’s production value. All in all, it was a great year for Oregon’s 30 or so multi-generational family farms growing hops.

It takes two growing seasons for newly-planted Oregon hops to produce a crop. So last year’s increase in hops is a result of plantings in 2014 and 2015.

“aroma-type hop varieties,” says Michelle Palacios, administrator of the Oregon Hop Commission. “While overall acreage has increased, it is important to note that the acreage increase was primarily of varieties that contribute to the aroma and flavor of beer. Aroma-type hops are lower yielding in general, so bring a higher average price per pound.”

The growers themselves are happy to see the expanding world of craft beers.

“It’s all great news for Oregon agriculture and our brewing industry,” says Williamette Valley hop grower Gayle Goscich. “We have worked our way out of about six years of hop acreage decline to now and a fairly balanced supply between grower and brewer. The growth of the hops industry is directly connected to the growth of craft brewers in Oregon and throughout the world. You can’t make great craft beer without high quality flavorful hops.”

Oregon ranks second in the nation in hops production.

Oregon hops: Continued on page 7
From farm to science

By Liz Beeles

Food is a part of life that we all share, a common and familiar topic that doesn't need an explanation about its importance. As a result, it's also an ideal trailhead for teaching science. The latest collaboration between the Oregon Department of Agriculture (ODA) and the Oregon Museum of Science and Industry (OMSI) combines expertise to increase awareness of Oregon specialty crops, and enhance the public's interest in science and technology in everyday life.

The USDA Specialty Crop Block Grant Program (SCBGP) is administered by ODA. OMSI has been awarded several successful SCBGP grants in the past. Its newest project, "Farm to Science—Fairs and Festivals," continues to deepen and expand the ODA-OMSI partnership. The goal is to connect good food with science and technology while increasing awareness of the tremendous variety of specialty crops grown in Oregon.

"There is so much science involved with our food systems—and agriculture. This topic keeps us relevant, and it's easier to connect with a wider array of people over the topic of food," says Rebecca Reilly, Food Sciences Coordinator at OMSI. A former middle school teacher, she says she's excited to develop new activities around specialty crops and science.

"I don't have to remind people why food is relevant to their lives, says Reilly. Someone might say, 'I don't like chemistry, I don't get it;' but no one ever says that about food because it's really personal and we interact with it every day. That makes it a really nice doorway to talk about science."

OMSI wants to inspire curiosity and encourage people to ask more questions. Oregon agriculture is here to help. More than 100 specialty crops (fruits, vegetables, tree nuts, nursery crops) grown in the state allow for a tremendous amount of flexibility to create science-related activities. One visitor favorite uses Oregon berries. Anthocyanins, natural plant pigments found in fruits and vegetables such as berries, can be used as a pH indicator. Soak filter paper in berry juice and let it dry, and it becomes a pH strip. Draw on the paper with baking soda and it acts like "invisible ink," and turns blue.

Reilly enjoys the freedom provided by specialty crops to build science activities.

"Food science works really well to teach biology, chemistry, physics, and engineering; to talk about careers; and as a doorway to so much else, says Reilly. Food is a broad topic, so you can pull in nearly any science whether it's plant science, food processing, nutrition and physiology and how food affects our body, or the chemistry of how we change food when we cook it," Reilly says.

New statistics from the Oregon Brewers Guild underscore the meteoric growth of craft brewing:

- There are 230 brewing companies operating 261 facilities in Oregon, up from 73 brewing companies in 2009. Among locations, 70 breweries are in Portland, 26 in Bend, and 14 in Eugene.
- Oregon breweries craft about 1.7 million barrels of beer—twice as much as the amount produced in 2009. That's roughly 3.4 million kegs or 470 million bottles of beer.
- Oregonians consume about 650,500 barrels of Oregon-produced beer—nearly half of what is produced in the state and more than 22 percent of all beer consumed in Oregon.
- Oregon leads the nation in the percentage of dollars spent on craft beer.
- Oregon breweries employ 8,500 full and part-time employees.
- Consumers can still find a wide variety of national and imported brands in the beer cooler of their local grocery store in Oregon. But a large portion of the space now belongs to a tremendous selection of Oregon craft beers, which reflects the current craft phenomenon—something that now includes Ohio.
- "The Oregon beer culture has increased the number of people who are proud to source a local crop. We want to work with the commissions and the county fair organizers because they know about the areas we're visiting, they have baseline knowledge of the people there. We want to be sensitive to the communities we're visiting. We hope the activities will encourage curiosity about specialty crops, as well as help people to think about them more often, and understand how many different types there are," says Reilly.

One of OMSI's strategic priorities involves reaching outside of the Portland area to offer science education to more areas of the state. The upcoming two-year "Farm to Science" specialty crop block grant continues support for an annual OMSI Harvest Festival and farmers' market in Portland while adding OMSI events at three locations elsewhere in the state this summer. Joining the fun of county fairs in Jackson and Lincoln counties, as well as partnering with the High Desert Museum in Bend, OMSI will share more than 10 activities focused on agriculture and science with visitors. Two more locations will be added to the list in summer 2018.

OMSI stresses the importance of collaboration during this process, working with Oregon commodity commissions and county fair organizers to learn more about specialty crops, the areas they will be visiting, and the people who live there.

"We want to work with the commissions and the county fair organizers because they know about the areas we're visiting, they have baseline knowledge of the people there. We want to be sensitive to the communities we're visiting. We hope the activities will encourage curiosity about specialty crops, as well as help people to think about them more often, and understand how many different types there are," says Reilly.

While Oregon can expect to see additional new acreage come into production in 2017, the increase will be smaller than what was recorded last year. Most changes in production in the near future are expected to be in response to new and different hop varieties rather than increases in overall production.

For years, Oregon hops primarily were sold to large national breweries such as Anheuser Busch and its popular Budweiser brand. More hops now head to Oregon craft breweries, who are proud to source a local crop.

"We are the No. 1 state for craft brewing and the number one state for consuming craft beer per capita," says Oregon Department of Agriculture trade manager Theresa Yoshioka. "The craft beer demand and trend continues to grow across the nation and worldwide. With this growing demand for craft beer, there will be more demand for hops."

A strong outreach and education program already is established at OMSI, with representatives traveling throughout Oregon, Washington, Idaho, Nevada, Northern California, and Alaska. As the largest science center in the region, OMSI works to take a leadership role. The agriculture science activities created through the Farm to Science grant will live on in future county fairs, boosting the repertoire of activities used for outreach throughout the region, and in the museum as food science demonstrations led by OMSI volunteers. Learn more at: www.omsi.edu/ •

Students of all ages work on grafting plants during an agricultural sciences class at OMSI.

With its wide variety available to beer lovers, Oregon is the No. 1 state in craft brewing.

"Whether consumers choose packaged beer from the market, a growler filled at the tap house, or a pint at the brewery, their Oregon beer will likely include Oregon hops."

So every time you responsibly enjoy a cold brew in the months to come, raise a can, mug, or stein to Oregon hop farmers, who just happen to grow an essential ingredient to one of the most consumed beverages around—beer. •

Yoshioka. "The craft beer demand and trend continues to grow across the nation and worldwide. With this growing demand for craft beer, there will be more demand for hops."

"Whether consumers choose packaged beer from the market, a growler filled at the tap house, or a pint at the brewery, their Oregon beer will likely include Oregon hops."

So every time you responsibly enjoy a cold brew in the months to come, raise a can, mug, or stein to Oregon hop farmers, who just happen to grow an essential ingredient to one of the most consumed beverages around—beer. •

"Whether consumers choose packaged beer from the market, a growler filled at the tap house, or a pint at the brewery, their Oregon beer will likely include Oregon hops."

So every time you responsibly enjoy a cold brew in the months to come, raise a can, mug, or stein to Oregon hop farmers, who just happen to grow an essential ingredient to one of the most consumed beverages around—beer. •

"Whether consumers choose packaged beer from the market, a growler filled at the tap house, or a pint at the brewery, their Oregon beer will likely include Oregon hops."

So every time you responsibly enjoy a cold brew in the months to come, raise a can, mug, or stein to Oregon hop farmers, who just happen to grow an essential ingredient to one of the most consumed beverages around—beer. •

"Whether consumers choose packaged beer from the market, a growler filled at the tap house, or a pint at the brewery, their Oregon beer will likely include Oregon hops."

So every time you responsibly enjoy a cold brew in the months to come, raise a can, mug, or stein to Oregon hop farmers, who just happen to grow an essential ingredient to one of the most consumed beverages around—beer. •

"Whether consumers choose packaged beer from the market, a growler filled at the tap house, or a pint at the brewery, their Oregon beer will likely include Oregon hops."

So every time you responsibly enjoy a cold brew in the months to come, raise a can, mug, or stein to Oregon hop farmers, who just happen to grow an essential ingredient to one of the most consumed beverages around—beer. •

"Whether consumers choose packaged beer from the market, a growler filled at the tap house, or a pint at the brewery, their Oregon beer will likely include Oregon hops."

So every time you responsibly enjoy a cold brew in the months to come, raise a can, mug, or stein to Oregon hop farmers, who just happen to grow an essential ingredient to one of the most consumed beverages around—beer. •

"Whether consumers choose packaged beer from the market, a growler filled at the tap house, or a pint at the brewery, their Oregon beer will likely include Oregon hops."

So every time you responsibly enjoy a cold brew in the months to come, raise a can, mug, or stein to Oregon hop farmers, who just happen to grow an essential ingredient to one of the most consumed beverages around—beer. •

"Whether consumers choose packaged beer from the market, a growler filled at the tap house, or a pint at the brewery, their Oregon beer will likely include Oregon hops."

So every time you responsibly enjoy a cold brew in the months to come, raise a can, mug, or stein to Oregon hop farmers, who just happen to grow an essential ingredient to one of the most consumed beverages around—beer. •
Oregon Ag Fest celebrates 30th anniversary

For three decades, Oregon Ag Fest has been helping kids learn where their food, fiber, and flora come from. The interactive two-day event will celebrate its 30th year from 8:30 a.m.–5:00 p.m., Saturday, April 29 at the State Fairgrounds in Salem. Children 12 and younger are admitted for free (parking also is free). Admission is $9 for ages 13 and over.

More than 20,000 people attend Ag Fest annually to touch, taste, and experience the incredible world of Oregon agriculture in a fun-filled, festive environment. Ag Fest draws tourists as well as residents from all over the state and is sponsored in part by the Oregon Department of Agriculture and many other organizations and businesses.

Experience life on the farm at Ag Fest 2017.

State Board of Agriculture
• Barbara Boyer, vice chair
• Pete Brentano, chair
• Stephanie Hallock
• Bryan Harper
• Tracey Liskey
• Sharon Livingston
• Laura Masterson
• Marty Myers
• Tyson Raymond
• Luisa Santamaria
• Dan Arp (ex-officio)
  Dean of Agriculture
  Oregon State University
• Alexis Taylor (ex-officio)
  Director
  Oregon Department of Agriculture

Board members may be contacted through the Oregon Department of Agriculture Director’s Office at: 503-986-4558

Find Board of Ag info online
www.oregon.gov/ODA/AboutUs/Pages/BoardAgriculture.aspx

Find all ODA public meetings online
www.oregon.gov/ODA/AboutUs/Pages/Calendar.aspx

The Agriculture Quarterly Spring 2017, Issue 405

The Agriculture Quarterly (ISSN 0897-8-7143) is published quarterly and distributed free of charge by: Oregon Department of Agriculture 635 Capitol St NE Salem, OR 97301-2532 Periodical postage is paid at Salem, OR.

Postmaster
Send address changes to the address listed above, attention Information Office.

Department Director
Alexis Taylor
Director of Communications
Bruce Pokarney 503-986-4559
Publications and Web Coordinator
Liz Beales 503-986-4560

Distribution or reproduction of stories from this publication is encouraged. Please give credit to the publication as the source. Check with the Publications and Web Coordinator if you have questions. The use of product or company names in this publication does not imply an endorsement of any sort.

In compliance with the American with Disabilities Act, this publication does not imply an endorsement of any sort.

Find the Ag Quarterly online
www.oregon.gov/ODA/AboutUs/Pages/Publications.aspx

Confined Animal Feeding Operations (CAFO) Advisory Committee meeting
Date April 13, 2017
Time 1:30 pm–3:30 pm
Location Oregon Department of Agriculture, 635 Capitol St NE, Salem Third Floor Conference Room, Room 331
Contact Wym Matthews, (503) 986-4792
Website www.oregon.gov/ODA/programs/NaturalResources/Pages/Meetings.aspx

Oregon Ag Fest
Date April 29 & April 30, 2017
Time 8:30 am–5:00 pm & 10:00 am–5:00 pm
Location Oregon State Fairgrounds
2330 17th St NE, Salem, OR 97301
Website http://oragfest.com/

Soil and Water Conservation Commission (SWCC) meeting
Date May 1, 2017
Time 12:00 pm–4:30 pm
Location 304 SE Nye Ave, Pendleton
Contact Manette Simpson, (503) 986-4715
Website www.oregon.gov/ODA/programs/NaturalResources/Pages/Meetings.aspx

Oregon State Board of Agriculture
Date May 10–12, 2017
Location TBD, Salem, OR
Contact Kathryn Walker, (503) 986-4558
Website www.oregon.gov/ODA/AboutUs/Pages/BoardAgriculture.aspx

Pesticide Analytical and Response Center (PARC) Board meeting
Date May 17, 2017
Time 9:00 am–12:00 pm
Location Oregon Department of Agriculture, 635 Capitol St. NE, Salem Basement Hearing Room
Contact Theodore Bunch Jr., (503) 986-4562
Website www.oregon.gov/ODA/programs/Pesticides/Pages/PARC.aspx

Find all ODA public meetings online
www.oregon.gov/ODA/AboutUs/Pages/Calendar.aspx