

Digger

MAY 2023

The viability of **Sustainability**

17 Green online marketing

19 MEMBER PROFILE
Mahonia Nursery

25 Native plant sales shine

29 Spraying smartly

33 Remixing soil mixes

41 Oregon State University's
Integrated Pest
Management Center

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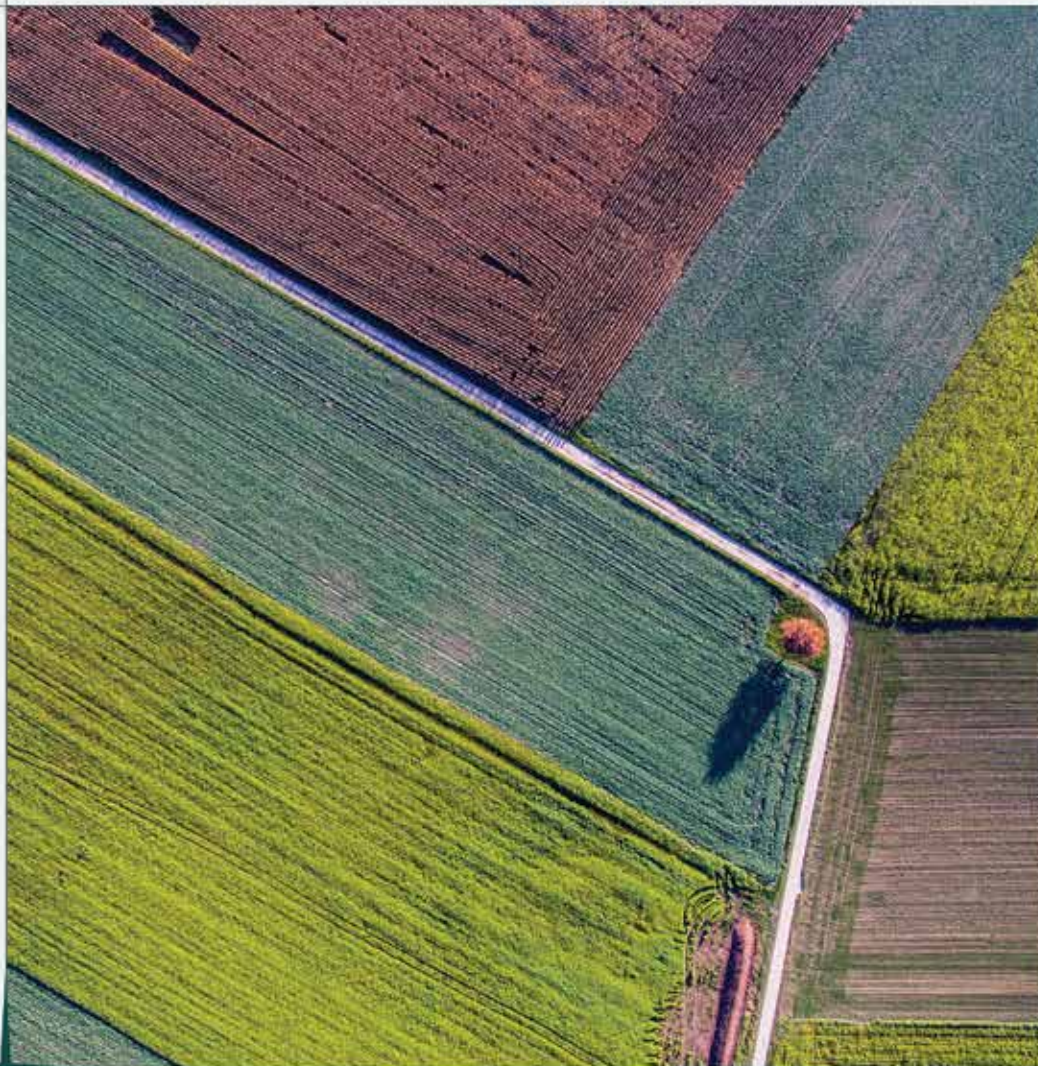
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19



23

The Sustainability Issue

19 MEMBER PROFILE: Mahonia Nursery

For more than 40 years, sustainability has guided this Salem, Oregon, grower of native plants. **By Peter Szymczak**

23 Natives shine on

Sales of drought-tolerant, pollinator-loving native perennials are enjoying their time in the sun. **By Kym Pokorny**

29 Spraying sustainably

So-called “intelligent” spraying systems can reduce pesticide use, save money and better manage crops. **By Jon Bell**

33 Remixing soil mixes

Sustainable alternatives to carbon-sequestering peat moss are entering into the planting media mix. **By Tracy Ilene Miller**

41 Learning, connecting, engaging

The Oregon IPM Center is a sustainable agriculture and integrated pest management hub. **By Silvia I. Rondon**

ON THE COVER: Also called “wild hollyhock,” rose checker mallow (*Sidalcea malvaflora* ssp. *virgata*) is native to western Oregon. COURTESY SEVENOAKS NATIVE NURSERY LLC

THIS PAGE, LEFT: Bioswales have become a fixture of environmental design and are a prime place to plant native plants. COURTESY WILDWOOD | MAHONIA

THIS PAGE, RIGHT: Native to California and Oregon, *Arctostaphylos viscida* (whiteleaf manzanita) is one of the most drought-tolerant manzanita species. COURTESY SEVENOAKS NATIVE NURSERY LLC

COLUMNS

- 7 President's Message
- 17 Digital Growth
- 46 Director's Desk

DEPARTMENTS

- 8 Calendar
- 10 Northwest News
- 19 Member Profile
- 37 Classifieds
- 37 Subscription Info
- 39 Advertisers Index
- 41 Growing Knowledge
- 45 Digger Marketplace



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PRESIDENT'S MESSAGE

Answering nature's challenges



Todd Nelson
OAN PRESIDENT

On October 17, 1989, the Oakland A's and San Francisco Giants assembled to battle it out in game 3 of the World Series. Then, an hour before the first pitch, a 6.9 magnitude earthquake rocked northern California. There were reported 3,700 injuries, 63 deaths and over \$6 billion in damages reported. The series was postponed for 10 days. When the games resumed, the A's were crowned baseball's champions.

Every once in a while, Mother Nature reminds us how little we actually control. She gives abundantly, but at rare and unexpected times, she takes away.

The past few months have reminded us of just that. In March, there were 244 preliminary reports of tornados touching down in Texas, the Midwest and the South, including 191 in just the last seven days of the month. This was triple the average amount during the same time period from 1990-2010.

California, which has been in an extended multi-year drought, saw one of its wettest winters since 1985. Through a dozen atmospheric rivers, California has received more than 78 trillion gallons of water. Their snowfall of 57 feet has nearly doubled their usual yearly amount of 30 feet. According to the U.S. Drought Monitor (www.Drought.gov), as of September 2022, 99% of California was experiencing drought conditions. As of April 1, 2023, that number had plummeted to less than 9%.

In Oregon, the average rainfall during April is around 3 inches. This year, in the first 10 days of April alone, we received 4.6 inches of rain. March also saw 6 inches of rain this year compared to our yearly average of 3.5 inches.

We love rain! Oregon's climate is a major reason we can grow a variety of plant material. However, this year's heavy rains have created challenging disruptions.

To put it in perspective, a gallon of water equals about 8 pounds. A typical 15-gallon potted container carrying plant material can weigh up to 90 pounds. It is estimated that potted soil can retain 1 quart of water for every gallon size. With consistent watering from rain, that

15-gallon container could increase in weight from 90 pounds up to 116 pounds.

This has a huge impact on freight cost and efficiency. For example, if a customer ordered 100 plants in 15-gallon containers, the weight of those plants could fall anywhere between 9,000-11,600 pounds.

Now imagine this scenario with a variety of plant sizes and 51 feet of truck space to fill. Quickly things will add up, making it a challenge to maximize freight capacity and save customers money.

For another example of weather-caused disruptions, **Wooden Shoe Tulip Farm** in Woodburn, Oregon, attracts tourists from all over to attend their spectacular annual Tulip Festival. The farm opens to the public from late March through early May. Typically, peak bloom is early April, but this year, the tulips bloomed three weeks later than normal, disrupting foot traffic, operations and sales.

There is an old saying that reads, "It's not about the cards you're dealt, but how you play the hand." We can only work with what we're given. We can control our processes, we can control how we interact with our team and our customers. We can be resilient, adaptable and teachable.

I was impressed one Thursday morning as our hard-working team gathered. It was cold and the rain was fast and heavy. Everyone was clad in thick hoodies, coats, rain gear and gloves, knowing their day was going to be extra challenging. Yet despite the harsh conditions, they were ready to face the day and get the job done.

Likewise, I have been impressed by the resilience shown by other nurseries and garden centers around the state. Their can-do attitude sets Oregon growers and garden centers apart.

Every day is a great day to have a great day. ☺

Todd Nelson



Calendar

Spread the word about your event!
Email details to Calendar@OAN.org.



MAY 6-7

SPRING GARDEN FAIR

Taking place the weekend before Mother's Day, this annual event began as a small fuchsia sale and has grown to a two-day event with more than 100 vendors and 8,000 gardeners attending each year. A fundraiser for the Clackamas County Master Gardener Association, the Spring Garden Fair funds projects that benefit the community, including free pH soil testing, "Ask an OSU Master Gardener" and other educational opportunities. For more information, visit www.SpringGardenFair.org.

JUNE 25

DIGGER: FARWEST EDITION

Display ad reservations for the 2023 Farwest Edition of *Digger* magazine are due June 25. More than 11,000 copies of this extra-large edition will be distributed to *Digger* subscribers, as well as exhibitors and attendees of the Farwest Show in August. To reserve your space, contact Curt Kipp at 503-682-2008 or Ads@OAN.org.

JULY 15-18

CULTIVATE'23

Presented by AmericanHort, Cultivate offers educational and networking opportunities and exhibits featuring technology, new products, services and plant varieties. Cultivate'23 will take place at the Greater Columbus Convention Center in Columbus, Ohio. For more information, visit www.CultivateEvent.org.

JULY 24-28

PERENNIAL PLANT SYMPOSIUM

Presented by the Perennial Plant Association, the annual symposium will be held this year at the Sheraton Fallsview in Niagara Falls, Ontario, Canada. The largest educational and trade show program devoted solely to herbaceous perennials in North America, the symposium recognizes those who have made a significant impact to the horticulture industry with the Special Recognition Awards, offers the opportunity to meet the Perennial Plant Foundation scholarship winners, and provides the chance to see the unveiling of the Perennial Plant of the Year®. Visit PerennialPlant.org for more information.

AUGUST 8-10

THE GARDEN CENTER SHOW

The Garden Center Show for independent garden centers will be held at the Wisconsin Center, 400 W. Wisconsin Ave., Milwaukee, Wisconsin. The trade show and networking



JUNE 9

ONPAC / DUFFERS CLASSIC GOLF TOURNAMENT

Registration is live for the Oregon Nurseries' Political Action Committee (ONPAC) annual golf tourney, teeing off at **Stone Creek Golf Club** in Oregon City, Oregon. Reconnect with friends while supporting a strong nursery industry voice in Salem and Washington, D.C. Take advantage of a \$15 discount by registering before May 31. Sponsorship packages begin at \$250 and many include complimentary playing spots. Visit www.OAN.org/Duffers for more information.

event includes an education program sponsored by Garden Centers of America (GCA). For more information, visit www.GardenCenterShow.com.

AUGUST 9-11

NURSERY/LANDSCAPE EXPO

The Henry B. Gonzalez Convention Center in San Antonio, Texas, will again be the site of this annual expo showcasing the latest nursery and landscape products, presented by the Texas Nursery & Landscape Association. Visit www.NurseryLandscapeExpo.com for more information.

AUGUST 14-16

ISA INTERNATIONAL CONFERENCE

The International Society of Arboriculture (ISA) will host its annual conference and trade show in Albuquerque, New Mexico. Join industry leaders from around the world and learn about the latest developments in equipment, technology and research. For more information, log on to www.ISA-Arbor.com.

AUGUST 17

CNGA BUYERS EXPO

The Colorado Nursery and Greenhouse Association (CNGA) is hosting an outdoor Buyers Expo at Adams County Fairgrounds (9755 Henderson Road, Brighton, Colorado). The expo is designed for buyers and specifiers who are interested in purchasing or sourcing plant material, including retail nurseries, garden centers, landscape contractors, municipal parks and recreation departments, landscape architects, property management companies and other relevant industry professionals. Go to www.ColoradoNGA.org to register.

AUGUST 23-25

FARWEST SHOW

The biggest, greenest industry trade show in the West will take place at the Oregon Convention Center, 777 N.E. Martin Luther King Jr. Blvd. in Portland, Oregon. The show, produced by the OAN, attracts exhibitors and attendees from across the country and the world. For more information, log on to www.FarwestShow.com. ©



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Northwest News

OAN members and chapters are encouraged to send in relevant news items, such as new hires, new products, acquisitions, honors received and past or upcoming events. Email News@OAN.org.

TIME NAMES OREGON'S WILLAMETTE VALLEY A 'WORLD'S GREATEST PLACE'

Time magazine selected the Willamette Valley — Oregon's popular winemaking region and also the state's chief nursery production area — for its fifth annual list of the "World's Greatest Places." The magazine named an eclectic mix of 50 different places, from the ancient pyramids of Giza and Saqqara, to the famous food markets of Dijon,



France, to the ski slopes of St. Moritz, Switzerland. Only five locations in the United States made the list.

The magazine referred to the valley as a "pinot noir powerhouse" and noted that the number of wineries has exploded in the last two decades, from 135 then to more than 700 now. The wine world took notice when Champagne maker Bollinger made its first acquisition outside of France in 2021, purchasing Oregon's Ponzi vineyards.

New efforts to promote tourism hope to capitalize on Oregon's ascendance as

a premier winemaking region. It's also a prime location for growing hops for beer production, hazelnuts, and, of course, trees and shrubs for the backyards and campuses of America and beyond. More than $\frac{3}{4}$ of Oregon's nursery products are shipped out of state. The state sold nearly \$1.4 billion worth of nursery and greenhouse products in 2022, an all-time record.

"Oregon's agricultural prowess may not be well known, but it has hardly been a secret for nursery buyers," OAN Executive Director Jeff Stone said. "They know we grow trees and shrubs faster and better due to the valley's many advantages. Oregon has an ideal growing climate, with mild winter dormancy, a long growing season, ample water supplies and growers with the knowledge and dedication to take advantage of these prime conditions. It's really a case of 'Come for the wine and beer, stay for the shrubs and the trees.'"

OAN LEADS COALITION SUPPORTING TREES ACT

Nursery growers often feel like they are penalized for climate impacts, while being denied credit for the ecosystem benefits their products deliver. That's why the Oregon Association of Nurseries is leading an effort to secure formal recognition of the nursery and greenhouse industry as a carbon sequestering industry.

House Bill 3016, the Trees Restoring Economic and Environmental Stability (TREES) Act, came out of discussions between elected leaders, the Oregon Department of Forestry, environmental investment advocacy group Verde NW, and the nursery and greenhouse industry.

If passed, the bill would create a Community Green Infrastructure Grant Program at the Department of Land Conservation and Development to fund communities to develop projects that increase tree canopy, improve livability, and support water quality and conservation. Projects that are prioritized include school campuses, rights of way, projects with a workforce and economic development com-

ponent, and projects in areas with low tree canopy or rural and remote areas.

It also creates a partnership between nurseries and communities on green infrastructure projects through a Community Green Nurseries designation for nurseries that help prevent pests and diseases, use good labor practices, and partner to provide non-invasive nursery stock for community projects. HB 3016 also provides resources to address pest and disease threats such as emerald ash borer and sudden oak death. It establishes a technical and financial assistance program at the Department of Forestry to help communities proactively plan, mitigate, and recover from pests, diseases and both present and future threats.

"This type of collaboration ... should be lauded," OAN Executive Director Jeff Stone testified at a legislative hearing. "The groups gathered and got down to business about where the threats are to our communities and the state: improving heat island effect in our communities and downtown cores; the need to protect habitat and riparian areas; and the poor tree canopies in urban settings."

Stone noted that there are still issues to be solved with the bill. But he then went on to say that acknowledging the carbon sequestration benefits of plant material is something all the stakeholders agree on. Trees lower energy and maintenance costs, improve air quality, purify water in the environment, and many other benefits.

"The solution to many of our climate problems is big, grows to every part of the country, and is right in our backyard: the nursery industry," he said.

COOL, WET SPRING IMPACTS RETAIL SALES, SHIPPING

The cool, wet weather that has dominated the Northwest in recent weeks has impacted the nursery industry to varying degrees during a critical time for shipping and sales, according to an article in the *Capital Press* agricultural newspaper (Salem, Oregon).

March through May is the peak ship-

ping season when Oregon's nearly \$1.4 billion nursery industry transports about 75% of its stock out of state. Due to recent snowstorms in the Northeastern U.S., many buyers have delayed their orders, said Jeff Stone, executive director of the Oregon Association of Nurseries. Fortunately, these delays seem to be "mild" rather than "catastrophic," Stone said.

Noah Fessler of **Woodburn Nursery and Azaleas** said that although the weather has not been great, the nor'easters have had a limited impact on his operation. Overall, Fessler said, sales have been good. "Our demand right now has been really strong," he said.

Josh Robinson of **Robinson Nursery** said because of East Coast storms, his company's shipments were delayed by about a week, also delaying cash flow. Nevertheless, Robinson is optimistic about this spring's



The Bigej family of Al's Garden & Home held a ribbon-cutting ceremony at its Sherwood location in honor of Sip at Al's, a new wine and gardening event launched on April 6, 2023.

COURTESY AL'S GARDEN & HOME



weather, shipping situation and the availability of trucks and drivers. Several other growers also said there seem to be plenty of trucks available and reasonable freight prices.

In contrast, nursery retailers are concerned about this year's wet spring, saying that rainy, overcast weather week after week is depressing sales. Consumers tend to buy plants and work in their gardens when the weather is good. When it's rainy or snowy, sales drop.

"As a retailer, this sucks," said Mark Bigej, chief operations officer for **Al's Garden and Home**. "This rainy, cold weather is just brutal on us. We just can't seem to catch a break."

Bigej said sales for the first week of January through the third week of March 2023 were down 30% compared to the same timeframe last year, when the weather was drier. ➤

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AG OVERTIME MITIGATION PROGRAM GEARING UP

The state of Oregon is gearing up to take applications for its new Agricultural Overtime Repayable Award Program through the Business Oregon website (<https://www.oregon.gov/biz/>).

The loan program serves as a bridge between the state's new agricultural overtime requirement, which took effect January 1 with a 55-hour threshold for 2023 and 2024, and the employer's ability to actually take a tax credit to help mitigate any added overtime costs. The tax credits won't be available until 2024.

Program applications will be at the program's website. They will open April 26 and will close May 25. The program is funded in the amount of \$10 million. If the state has more repayable awards than there are funds to pay them, each award will be reduced proportionally. If there's more than \$10,000 in program funds left over after the first round of applications, another round will open.

Nurseries are eligible for the program, but employers with more than \$3 million in annual income are not. Labor contractors are not eligible, but farms that hire them as a labor source can be eligible if overtime costs are incurred. Farms can't use marijuana or psilocybin production to establish eligibility, as those are legal in Oregon but not federally.

WOTUS TAKES EFFECT, EXCEPT TEXAS AND IDAHO

The Biden administration's "Waters of the U.S." rule, which expands the jurisdiction of the Clean Water Act, officially took effect in late March. However, a federal judge in Texas put WOTUS on hold in two states, Texas and Idaho, pending a much-anticipated Supreme Court ruling later this year. Two separate lawsuits in the U.S. District Court for the Southern District of Texas had argued that the Environmental Protection Agency (EPA) and Army Corps of Engineers should have to wait for the upcoming *Sackett v. EPA*

decision, expected from the U.S. Supreme Court this summer, before implementing the new rule.

The new WOTUS rule was released at the end of December to replace a more narrow version finalized near the end of the Trump administration in 2020. It gives the EPA and Army Corps of Engineers new discretion to determine what streams or wetlands fall under federal jurisdiction. That will create uncertainty for some landowners.

The practical effect of the WOTUS rule taking effect is limited, because the EPA and Army Corps of Engineers are still figuring out how it should be implemented. The rule maintains exemptions for agricultural practices while scaling back an exclusion for prior converted cropland that was in the 2020 rule. The new rule also eliminates an automatic exclusion for ephemeral streams, which flow only when it rains enough.

In late March, Congress passed a resolution repealing the rule. However, President Joe Biden plans to veto the legislation, thus allowing the rule to continue.

GLOBAL CLIMATE CHANGES

After three years, La Niña — the weather phenomenon that increases Atlantic hurricane activity and worsens western drought — is over, according to a report from the National Oceanic and Atmospheric Administration (NOAA).

The globe is now in what's considered a "neutral" condition and probably trending to an El Niño in late summer or fall. This means that waters in the eastern Pacific have returned toward average, rather than being cooler than average as they have been the last few years.

Generally, American agriculture is more damaged by La Niña than El Niño. When the globe moves into El Niño, it means more rain for the Midwestern corn belt and Intermountain West, along with some potential flood events in Texas.

How fast the transition will occur from La Niña to El Niño remains to be

seen this spring. "It is possible that strong warming near South America may portend a more rapid evolution toward El Niño and will be closely monitored," according to the NOAA.

OSHA SUSPENDS COVID-19 WORKPLACE RULES

Last month, Oregon OSHA rescinded its COVID-19 Workplace Requirements for All Workplaces and Requirements for Employer-Provided Labor Housing. Additionally, the provisions that require employers to cover the costs associated with COVID-19, if testing is conducted at the employer's direction, will no longer be in place.

However, workers are still allowed to wear facial coverings if they choose, unless doing so creates or otherwise exposes the employee to a hazard. If employers require facial coverings, they must continue supplying these items at no cost to employees.

For any questions or concerns, please contact Greig Lowell, Oregon OSHA Policy Manager, at Greig.K.Lowell@DCBS.Oregon.gov or 971-352-1181.

EPA APPROVES CALIFORNIA'S ELECTRIC TRUCK MANDATE

Oregon and several other states, including New York, New Jersey, Massachusetts, Washington and Vermont, are set to adopt California's mandate requiring an increase in sales of zero-emission heavy-duty trucks.

The Environmental Protection Agency (EPA) last month approved California's authority to set its own regulations requiring half of all heavy-duty trucks sold to be electric by 2035, according to a Reuters report. Under the Clean Air Act, California can set its own, more stringent standards than the federal government, but requires approval from the EPA to do so.

The California Air Resources Board (CARB) has noted heavy-duty vehicles greater than 14,000 pounds comprised 3% of vehicles on California roads, but

account for more than 50% of nitrogen oxides and fine particle diesel pollution. Transportation is the largest source of U.S. greenhouse gas emissions, making up 29% of emissions, and heavy-duty vehicles are the second-largest contributor at 23%.

Announcements

FALL CREEK PROMOTES AMELIE AUST TO EXEC BOARD

Fall Creek Farm & Nursery Inc.

has announced the promotion of Amelie Aust to executive chair of the family-owned blueberry breeding and nursery company's independent board of directors. She has served as the company's executive vice chair of the board since 2020, formerly served as co-CEO, and is a second-generation owner.



Amelie Aust,
executive
board chair,
Fall Creek

Aust succeeds her father, Fall Creek cofounder Dave Brazelton, who is now chair emeritus of the 10-member board.

"I attribute our ability for easy succession to my dad's mentorship – his ability to teach, listen, and make room to try new things gave me the latitude to have a

hand at board leadership before being in the role myself," Aust said. "Our independent board members are key. I always say that shareholders' dreams are bigger than our skills, and the board helps fill that gap so we can meet our true potential.

"Fall Creek now has strong global and regional leadership, with systems in place for high quality operations, which has allowed the board to elevate," she added. "We focus on fiduciary oversight and strategic growth, so Fall Creek can stay apace with the speed of industry change."

Brazelton will remain actively involved on the board and continue coaching Aust and the co-CEOs, Cort Brazelton and Oscar Verges. "Our family is fully dedicated to our customers, employees, and the worldwide blueberry industry," he said. "I'm proud of all we've built together and look forward to staying



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engaged with the board and leadership team to ensure a smooth transition and ongoing success.”

Aust joined Fall Creek in 2008 to manage the company’s intellectual property and licensing after receiving a Master of Laws (LL.M.) degree from the Munich Intellectual Property Law Center at the Max Planck Institute in Germany, where she was a Fulbright scholar. She earned a Bachelor of Arts degree in English literature with a minor in biology from the University of Oregon.

Fall Creek Farm & Nursery Inc. (www.FallCreekNursery.com) is the leading provider of genetic solutions to the blueberry industry with research and development centers across all chills levels and nursery operations in the U.S., Chile, Mexico, Peru, Spain, The Netherlands, and South Africa. Fall Creek breeds and delivers blueberry varieties, nursery stock, and grower support to commercial fruit growers throughout the world.

SEED COUNCIL DIRECTOR BEYER RETIRES

Roger Beyer, executive director of the Oregon Seed Council for the

past 15 years, announced his retirement on June 30. A search is underway for his replacement, the *Capital Press* reported.

Beyer came to the council after serving in the Oregon Legislature. He brought an experienced hand to the council’s lobbying efforts, and helped steer the council through some difficult times, including a recession that hit shortly after he started in 2008.

“Roger has been a great addition to the seed industry family,” said Bryan Ostlund, administrator of three Oregon seed commissions. “Just like in his legislative days, he’s great at strategy and building trusted relationships.”

During his tenure, Beyer helped launch *Oregon Seed Magazine*, started



Roger Beyer

an annual farm tour and reception for the Oregon Department of Agriculture to help officials stay abreast of issues facing the seed industry, and played a key role in helping coordinate industry response to export and import issues.

Beyer, along with Ostlund, also regularly lobbied federal lawmakers for funding for the IR-4 minor crop pesticide registration program during annual trips to Washington, D.C. Beyer and Ostlund were also instrumental in maintaining support for the USDA Agricultural Research Service’s Forage Seed and Cereal Research Unit in Corvallis, Oregon, which at one point was in danger of closing.

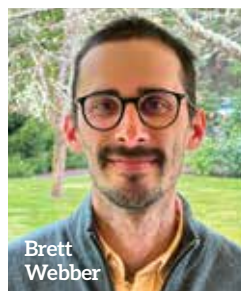
FALL CREEK PROMOTES THREE IN THE U.S. AND CANADA

Fall Creek Farm & Nursery Inc.

in Lowell, Oregon, announced the promotion of three employees to help lead the nursery’s operations and plant production in the United States and Canada.

Brett Webber was promoted to operations manager for the U.S. business and reports to Dave Daniel, general manager for Fall Creek U.S./Canada. Webber farmed for several years before joining Fall Creek as farm manager of its Pleasant Hill, Oregon, facility in December 2019. He played a key role in the company’s U.S. certification program. He earned a bachelor’s degree in sustainable agriculture and food systems from University of California, Davis.

Brent Barker, a 16-year Fall Creek employee, was promoted from farm manager to production manager for the region, reporting to Webber. Barker joined the company as production supervisor in 2007, was later promoted to farm man-



Brett Webber



Brent Barker



Eligio "Tito" Montes Cruz

ager of Fall Creek’s Windy Flat farm, and has also managed its Pleasant Hill and Home Place farms, all located in Oregon. He has been instrumental in all aspects of production, including crop health and the company’s Good Roots Initiative. He has been a member of Fall Creek’s safety committee since he first joined the company, and now serves as its chair. Barker earned a degree in business administration from the University of Oregon.

Eligio “Tito” Montes Cruz was promoted to assistant production manager, reporting to Barker. Montes Cruz began his career at Fall Creek in 2012 as a truck driver in the production department at the company’s headquarters in Oregon. Within one year, he became a production and shipping team leader, and from 2014 to 2019, was a team leader at the Pleasant Hill farm, supporting production and operations. Montes Cruz also has played a key role in important Fall Creek projects in other regions. In 2015, he traveled to

the Peru subsidiary to assist the team there in launching shipping and production practices; he did the same in 2016 in Spain and again in 2019 in The Netherlands. In mid-2019, he was promoted to farm manager at the Windy Flat nursery, where he helped to complete the process for organic certification and train team leaders in new software platforms. In his new role, he is responsible for field data collection and reporting that supports production and operations to improve quality control, production efficiency, labor usage and more.

“It’s been a privilege to work with these three talented, dedicated individuals over the years,” Daniel said. “They have the experience, skills and knowledge to lead our U.S. operations and production of high-quality blueberry nursery stock while ensuring our customers and employees are well supported. I look for-



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ward to many more years of innovation in our region with this team.”

SCHOLARSHIP WINNERS

Spring Meadow Nursery and the Horticultural Research Institute (HRI) announced the recipients of the 2022–2023 Spring Meadow–Proven Winners Endowment Fund scholarships. They are:

- Jacob Letmanski, undergraduate student studying Agronomy and Horticulture at Iowa State University
- Jack Schaefer, undergraduate student studying Horticulture at the University of Cincinnati



- Sophie Schmidt, undergraduate student studying Horticulture Research at Iowa State University
- Carolyn Krauss, graduate student in Plant Sciences at the University of Tennessee

The students were chosen from a competitive national applicant pool for their academic achievements, outstanding leadership abilities and commitment to pursuing horticulture careers.

Dale and Liz Deppe established the fund in 1999, believing that backing bright, well-trained, qualified people is essential to the green industry's protection and growth. Through HRI, the AmericanHort Foundation administers endowments that help students obtain the necessary education to pursue horticultural careers. ©

5 tips to tune up your green marketing online



Ron McCabe

Ron McCabe, president at Everbearing Services in Portland, Oregon, has been a technologist for over 35 years and an expert digital marketer for 13 years. Visit his website and subscribe to his newsletter at www.EverbearingServices.com, or email at: RMcCabe@EverbearingServices.com.

ANYONE WHO has been in the green industry for any length of time will agree that we have all had some strange times with an unprecedented influx of business.

The market is shifting for wholesalers and garden centers alike as they experience a shift to a new normal. This shift is requiring everyone to reassess what they are doing and make necessary changes.

Inflation and associated labor costs have increased production costs and limited clients' budgets. Interest rates are up, and money is no longer coming in from government programs and incentives.

So, what should we do? Now's the time to refresh, update and enhance your most effective online platforms.

Here is a list of priorities:

1. Determine what drove online leads before 2019

As the world shifts to a new normal, it might be good to review what worked in the past. Are there any things that worked previously but might have stopped because of supply chain or labor issues?

Also review activities that are not currently effective and see if they can be eliminated or revamped.

2. Update info and photos

Make sure your Google Business, Bing Places and Yelp profiles are accurate.

Check your phone number. This is a common thing that gets overlooked. You should also test your email contact.

For wholesalers who may not want retail customers, consider setting up a service area business to avoid retail clients on your site. If you have online retail sales, set up Google Merchant Center and link it to your business profile.

Eliminate any products or services you no longer want to provide. Make sure the products or services you do want to focus on are front and center on the home page or featured in your website navigation. Categorize plants, products or services with dedicated pages and detailed descriptions of your offerings.

Update photos on your website. Plants and other green goods are often visual purchases. If you wholesale plants or other products, be sure to update your digital marketing materials to reflect new plant photos and other updates to the marketing materials you provide your clients. Add descriptions to profile photos so that people better understand what kind of work you do.

Look at how you have provided your wholesale availability and see if there is a better way to provide this to your clients. Consider online pick lists to make ordering more convenient to your retail clients or consider a wholesale option if you have an online shopping cart. Remember, the easier you are to deal with, the more likely it is your clients will use your company as a resource.

3. Search for reviews and update on all platforms

Answer all your reviews, regardless of whether they are positive or negative. Potential clients know there are people out there that have issues with services no matter what. What your potential clients are looking for is how the management of your company responds to feedback.

4. Reach out for new reviews

Call your customers during the off-season and see how they are doing. If they are enthusiastic about what you've done for them, it is appropriate to see if they would be willing to write a positive review and send a link. Focus on getting a minimum of 10 new positive reviews on each platform each year. By the way, these calls often stimulate new projects. ➤

5. Review your social media and marketing plan for 2024

If your company is wholesale, supporting retailers by creating a supporting platform for your brand and retail clients. Be sure to make materials available for your retail clients' social media as well. If you are a retail garden center, set up your social media calendar with your customers in mind. Be sure to set things up so you can shuffle them if there are availability issues or delays.

It's also a good idea to prepare posts in advance for inclement weather or unexpected challenges; for example, when snowstorms, hard freezes or other events occur, your clients may need you to take immediate action.

If you have a newsletter, prepare topics in advance. You can adjust the order and priorities as the year rolls out and materials and supplies become available. It is much easier to adjust the order of topics



Update photos on your website and social platforms. Plants and other green goods are visual purchases.

than to come up with new subjects during the peak of your season.

If you are advertising, review your campaigns and make sure these are relevant to the services that you want to focus on:

Many advertisers just direct ads to the home page. This decreases the chances of converting responses to a sale by 70%. If you do not have specific landing pages for each advertisement, do it now. This will lower your advertising costs and massively increase your effectiveness.

If you want to increase your online lead generation, engage with an SEO (search engine optimization) expert or digital agency that knows landscaping and your market. These marketing experts can support you on all your other online lead generation needs. It also helps to employ a marketing expert who has green industry knowledge and understands the ins and outs of this industry.

If your team takes the time to review and update your online visibility and lead generation as outlined here, you will have made a lot of progress toward achieving your online business potential! ☺

The advertisement features a background image of a large greenhouse filled with rows of green plants. At the top, the logos for 'T&R LUMBER' and 'UFP INDUSTRIAL' are displayed, both with a tree icon and the text 'A UFP INDUSTRIAL COMPANY'. Below the logos, the headline reads 'Planting and harvesting is stressful enough.' followed by the text 'Let UFP Industrial alleviate some stress with our deep knowledge of agriculture and horticulture products. We have everything you need, including:'. A list of products is shown in two columns: 'greenhouse and nursery containers', 'bamboo', 'trellises', 'tree stakes', 'greenhouse film', 'shipping and retail ready racks', 'load gate solutions', and 'tilt sticks'. On the right side, there is a portrait of Kelsey Dean, a woman with long brown hair, smiling. At the bottom left, it says 'With good planning and communication, we help our customers stay ahead of supply chain shortages and lead times. We've also increased our inventory at our warehouse on key items for immediate shipping. For competitive pricing, and total confidence, call Kelsey Dean 503.951.3929'. At the bottom right, her email 'kelsey.dean@trlcompany.com' and phone number 'P 503.951.3929' are listed.

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MEMBER PROFILE



OWNER

John D. Miller



KNOWN FOR

Oregon white oak, Oregon grape,
native and drought-tolerant plants

PEOPLE

7 employees, including
Balta Lopez, nursery manager;
Deb Cozzie, business manager;
and additional staff at the nursery
and main office

CONTACT



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A 40-foot Oregon oak tree, rescued by and
nursed at Mahonia Nursery, is readied for
transporting and transplanting.

COURTESY WILDWOOD | MAHONIA



Mahonia Nursery

Founded: 1983 by John D. Miller

BY PETER SZYMCAK

MAHONIA IS A NATIVE plant species that plays an important role in Oregon's ecosystems. These hardy, evergreen shrubs were used extensively by Native American tribes — as a food source, as a natural dye for textiles, and as medicine to treat a variety of human ailments, from digestive problems to skin issues and malaria.

Mahonia also serves as cover for small animals, provides food for fruit-eating mammals and birds, and produces fragrant, early-spring blooming flowers for pollinators like butterflies and bees.

Those beneficial attributes make *Mahonia* an especially appropriate name for the nursery operation in Salem, Oregon, started more than 40 years ago by John D. Miller, a local planner/developer who has helped pioneer the modern field of sustainable urban and environmental design.

Since 1980, **Mahonia Nursery** has specialized in growing its namesake *Mahonia aquifolium*, better known as “Oregon grape” — the state flower of Oregon — as well as *M. compacta* (compact Oregon grape), *M. nervosa* (dwarf Oregon grape), *M. repens* (creeping Oregon grape) and a few dozen other native plants of the Pacific Northwest.

“The nursery is an important part of our overall business, which is a family of companies that does lots of different things,” Miller said. “The nursery is sort of a green thread that goes through all of it.”



MEMBER PROFILE

MAHONIA NURSERY

Adjacent to the nursery is Miller's other grape-growing venture, Mahonia Vineyard, with its rows of Pinot noir, Pinot gris and Chardonnay vines. Nearby is Woodscape Glen, a community of multi- and single-family homes that Miller has planned, designed and developed since the 1970s. There's also Schoolhouse Corner, an award-winning, mixed-use development of retail shops, office and restaurant spaces housed in a historic schoolhouse, the former Pringle Elementary School.

The latest addition to Miller's sustainable legacy is Mahonia Crossing, a 313-unit residential complex by Community Development Partners that broke ground in March of 2023. Opening in stages starting this November, Mahonia Crossing will provide affordable housing for residents of all ages who earn 30–80% of the area median income (in Marion County, that's \$23,730 to \$63,280 for a family of four).

The development received \$25.2 million in Wildfire Direct LIFT funds from the state of Oregon, as well as state Agricultural Worker Housing Tax Credits designed to create housing for agricultural workers. A portion of Mahonia Crossing units will be prioritized for people who lost homes during Oregon wildfires and for agricultural workers and their families.

Mahonia Crossing occupies one of the final pieces of Miller's masterplan for the 160-acre swath of land in south Salem he purchased in the 1970s. "I had saved this site for senior and/or affordable housing but realized that I did not have the expertise, resources or time to do the site justice, so I began to search for someone who did. I finally found Community Development Partners, who are a great match with their community values, proven abilities and environmental stewardship, all woven into a great design approach," Miller said.

How it began

Miller started Mahonia Nursery in 1983, largely because he had difficulty finding ample supplies of the native plant material he wanted for Woodscape Glen, which he'd designed to be one of the first "green" multi-family developments in Oregon. "I laid



Above: An aerial view of the 13-acre site that will be Mahonia Crossing, an affordable housing complex in south Salem. The site is part of a 160-acre parcel of land that John D. Miller, owner of Mahonia Nursery, has planned and developed since the 1970s. Right: An architect's rendering of the finished Mahonia Crossing.

COURTESY WILDWOOD | MAHONIA.
COMMUNITY DEVELOPMENT PARTNERS



it out with a hand compass and a machete, wearing a rubber suit because of the poison oak – pre-GPS tools!" Miller said.

While Miller knew how to plan and build homes, thanks to his master's degree in environmental design from Stanford University (1971), propagating and growing native plants was another matter, so he consulted with Mark Krautmann of **Heritage Seedlings & Liners**.

"John's early focus on Pacific Northwest natives was so prescient," Krautmann said. "Many people flippantly dismissed Willamette Valley natives as a landscape fad back then. Not so, John. He staked his faith, funds and Mahonia Nursery's future on our native trees, shrubs, ferns and wildflowers. Having gotten to know him rather well over 30 years, I feel confident to note that in his quiet but principled humility, John's our unsung nursery hero."

While siting homes for Woodscape Glen, Miller made it a priority to save as

many of the native species as he could to preserve the natural woodland setting. This practice kickstarted the tree rescue program that has become a signature of his.

For Miller, sustainability includes preserving Oregon's natural heritage by rescuing native oak trees that are destined for destruction. Under the direction of nursery manager Balta Lopez, oak trees are relocated to the nursery and carefully monitored for over a year before becoming available to others who share Miller's passion for these majestic trees. Dozens of native oak trees were removed for the development of Mahonia Crossing and are now being nurtured for replanting at the building site once it is completed.

"We recently shipped a 40-foot, 12-inch diameter oak to Alaska Airlines' new headquarters in Seattle," Miller said. "We've gotten pretty good at taking trees out of harm's way, and we've been able to increase our survival rate to almost 90%."

Bioswales are another example of



Mahonia Nursery owner John D. Miller (right) and Nursery Manager Balta Lopez stand next to one of several dozen oaks saved from the building site of Mahonia Crossing. The tree will be nursed until it's able to be replanted at the site after construction is completed.

COURTESY WILDWOOD | MAHONIA

oriented projects.)

Instead of bulldozing native oaks to prepare land for new vineyards or other development, Oak Accord signatories have pledged to preserve and enhance the ecosystem. It's a small but vital way to save what's left of the remaining 2% of Oregon white oaks that still stand today.

"The Oak Accord is becoming a real nursery-oriented program, because so many of the wineries are doing really elaborate tasting rooms and they buy nursery products for those," Miller said. "In the old days, you just didn't save the oaks. They thought there would be oak root fungus and birds landing in the trees, eating the grapes. Oaks and the grapes like the same dirt, same exposure, same soils, but now there's a real harmony that actually is good for the wineries and the oaks ... The fine wine consumer appreciates sustainability — in fact, they pay *extra* for it."

Miller has also advocated for sustainability measures as a past-chair of the Oregon Sustainability Board, which oversees statewide efforts that enhance the environment, economy and communities. In addition, he's chaired the board of SOLVE, an Oregon nonprofit that removes litter from neighborhoods and beaches, and plants native trees and shrubs for watershed restoration projects.

Currently, Miller serves on the advisory board of Portland Botanical Gardens (PBG). Co-founded by Sean Hogan of **Cistus Nursery**, the organization's mission is to build a premier botanical garden in Portland, Oregon — one of the only major U.S. cities without such a destination. PBG's vision for the botanical garden includes an accredited gardening school with horticulture and arboriculture certification programs, and biogeographic trial gardens.

"John is an amazing advocate for the environment," Hogan said. "He has done so much for so many environmental causes and as an advocate for the nursery industry, native plants and the land around us."

Miller believes in the ability of nature to improve physical and mental well-being. He is involved with and



Miller's pioneering work in environmental design. Miller designed one of the first bioswales in Salem, located in the Woodscape Glen development.

"With our first bioswale we had quite a time convincing the city that this was better than putting the stormwater in underground pipes. Later, for stormwater retention to reduce peak runoff flows, we made landscaped bioswales, which also serve as attractive water-cleansing features," Miller said.

The present and beyond

Building bioswales was cutting-edge environmental design back in the 1970s, but it's a common feature of urban development today — and one that growers of native plant material can partially thank Miller for.

"Bioswale work has become a way to sell plants," Miller said with a smile.

Miller's practice of saving established oaks trees has caught on, too. He's one of almost 60 signatories of The Oak Accord, a consortium of Willamette Valley vineyards and other landowners who have vowed to retain oaks and enhance native habitats. (Miller is a founding member and past president of the Willamette Partnership board, which oversees The Oak Accord and other sustainability-

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MEMBER PROFILE MAHONIA NURSERY

Two grapes are better than one. In addition to growing Oregon grape (*Mahonia*), Mahonia Nursery has a sibling venture, Mahonia Vineyard, where Pinot noir, Pinot gris and Chardonnay grapes are grown. The berries and foliage of *Mahonia* are featured on the labels of the estate bottlings of Pinot noir, Chardonnay, Pinot gris and rosé. COURTESY MAHONIA VINEYARD

helps fund research that is developing data that shows that time in nature can improve human health. “Although we all know this is true, data can lead to a better understanding of why it is so and lead to more investment in our green infrastructure,” Miller said.

Miller has been inspired by the work of Japanese garden designer Hoichi Kurisu, who supervised construction of the Portland Japanese Garden and designed the Memorial Healing Garden at the Oregon State Penitentiary in Salem, Oregon. Miller is now involved with Kurisu’s latest project at the Coffee Creek Correctional Facility for women in Wilsonville, Oregon. “It’s another example of using nature to create benefits that extend beyond the prison walls,” Miller said.

Plants have played a major role throughout Miller’s personal life and professional endeavors, and he’s more optimistic

than ever about their ability to inspire positive change. “Green activities are more profitable now — solar, wind, wave energy, working *with* the land instead of *on* it,” Miller said. “There are financial incentives now connected to what we should have been doing all along. That gives me optimism.”

His optimism is tempered by environmental challenges: “The increases in droughts, floods and fires — they’re all related to climate change,” Miller said. “I think the nursery industry is an important tool in increasing our resilience.... We won’t be able to reverse a lot of things that we’ve done, but if we can make our forests, farms and cities more resilient, we can mitigate some of what we’ve caused.” ☺

Peter Szymczak is managing editor and art director of Digger magazine. Email him at PSzymczak@OAN.org.



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Natives shine on

Thanks to climate change, sales of drought-tolerant, pollinator-loving native perennials are enjoying their time in the sun

BY KYM POKORNY

With its pink flowers and delicate fern-like foliage, Pacific bleeding heart (*Dicentra formosa*) is adored by pollinators and gardeners. This elegant native perennial likes partial shade but will surprisingly take quite a bit of sun. It's drought-tolerant in shade, deer resistant and hardy in USDA Zones 4–8.

COURTESY SEVENOAKS
NATIVE NURSERY LLC

CONCERN FOR the environment and pollinators is inspiring gardeners to add native plants to their landscape. At the same time, climate change is driving an ongoing increase in demand for heat- and drought-tolerant natives.

Sustainable landscaping with native plant species not only improves the environment for pollinators, but also reduces the need for irrigation, fertilization, pesticides and maintenance.

Many nurseries are reaping the benefits of the sustainable trend with sales of natives rising year over year. They include Paul Stormo, owner of **Champoeg Nursery** in Aurora, Oregon. “Sales have increased every year,” he said. “There was a noticeable surge in the spring of 2020 and most of this demand has been from homeowners and retail nurseries.”

As summer temperatures rise because of climate change, so does the public's desire for drought-tolerant natives. The record-breaking heat dome of 2021 caused major damage to Northwest stalwarts such as hydrangeas and rhododendrons. The summer of 2022 wasn't much better. Gardeners began to turn their attention to dry-loving plants like *Arctostaphylos*, *Ceanothus* and asters. Many natives fit the low-water bill.

“We have a lot of drought-tolerant natives in Oregon,” said Joni Shaffer-Elteto, owner of Native Landscapes NW LLC in Hillsboro, Oregon. “And we're going to see changes. The palette is expanding. Looking at the future, you can expect the migration of plants. But it takes a long time, and we don't have a long time. We have to quit planting things that won't be alive in 20 years and pick substitutions that will work, like the incense cedar (*Calocedrus*) popping up in the Willamette Valley.”

Summer flowerers

Stormo suggested two natives that thrive in hot, dry climates, like Oregon summers have become. One is Oregon iris (*Iris tenax*), with its easy-to-recognize flowers in purple, lavender, yellow or creamy white, can have 10 or more large blooms on a mature plant. It's a non-aggressive clumper that grows 8–14 inches tall, needs little attention and is hardy in USDA Zones 5–9.

The other, Oregon sunshine (*Eriophyllum lanatum*), also known as woolly sunflower, makes up for its diminutive size with a blast of brightly shining yellow, daisy-like flowers from late spring to mid-summer. Its native habitat is dry, sandy sites, making it emi-



NATIVES SHINE ON

nently suited for low-water situations in well-drained soil. Its cushion-like silvery green foliage hugs the ground, though it can grow to 2 feet with water. A banquet for bees and butterflies, Oregon sunshine is immune to deer and hardy to USDA Zones 5–8. It works well at the front of a bed or border, or in a rock garden.

Scott Anderson, co-owner of **Sevenoaks Native Nursery LLC** in Albany, Oregon, said Pacific bleeding heart (*Dicentra formosa*) may be the prettiest drought-tolerant native, with its gracefully nodding pink flowers and delicate fern-like foliage. It is short at only 6–12 inches tall and adored by pollinators.

Pacific bleeding heart spreads slowly from rhizomes and can make a nice patch, though it can easily be pulled to be kept in a smaller space. This elegant native perennial likes partial shade but will surprisingly take quite a bit of sun too. It's drought-tolerant in shade, deer resistant and hardy in USDA Zones 4–8.

A native for every plot

Nationwide, nearly 44 million Americans bought at least one plant in 2020 due to the fact that it was native to their area, according to a National Gardening Association survey.

At the same time, there's been a surge in wildlife habitats certified by organizations like the National Wildlife Federation that require at least 30% native plants in a defined landscape. Certification of backyard habitats, which increased 50% in 2021 over 2020, required the purchase of millions of plants around the nation, many coming from Oregon.

"People recreating outdoors seem to be more curious about the plants they are seeing and want to incorporate those plants into their landscapes," Stormo said. "I think the biggest attraction is the desire to create spaces for pollinators, birds and other wildlife, as well as provide ecosystem services such as water filtration and climate change mitigation."

Figuring out which plants are native can be confusing. Some definitions are more limiting than others. In Oregon,

Sidalcea virgata

COURTESY SEVENOAKS
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Below is a list of native plants mentioned in this article:

- *Arctostaphylos*
- *Ceanothus*
- *Aster*
- *Calocedrus*
- *Iris tenax*
- *Eriophyllum lanatum*
- *Dicentra formosa*
- *Festuca idahoensis* var. *roemerii*
- *Achillea millefolium*
- *Sidalcea*
- Douglas aster
- Washington lily

Go to www.NurseryGuide.com and type in all or part of a common or botanical name into the "Search" area. You'll find the growers who sell the plant you're searching for and in what form, along with contact information for those growers.

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native range could be the coastline, Willamette Valley or the Rogue Valley, or extend to larger areas like central Oregon, western Oregon or even all of Oregon or the Pacific Northwest.

Linda Harrison, director of the native plant website OregonFlora.org and the three-volume reference book "Flora of Oregon," said native plants are defined by place and time.

"We talk about the geo-political boundary of Oregon and the time prior to Western settlement," she said. "If you look at those two components and if a plant existed in the state of Oregon before Europeans arrived, we call it a native."

As climate changes, plants from California and Nevada may migrate to Oregon, compelling those plants to be categorized as native, according to Harrison.

Protecting pollinators

Along with climate change, gardeners are turning to native plants to help save pollinators, which are declining at an alarming rate.

In Oregon, a dramatic bumble bee die-off in a Wilsonville parking lot in 2013, caused by misapplication of a pesticide, set off a cavalcade of concern and prompted the Oregon Legislature to mandate a pollinator health specialist for the state. Since then, interest in bees, butterflies and other insects has grown exponentially.

After having evolved together for thousands of years, native plants are naturally friendly to pollinators — not just bees, but also butterflies and other insects. Planting natives provides a "native flyway or corridor" so insects and birds can move from one habitat to another, providing food for them all along the way. It's a grassroots way to create habitat.

"Urban areas are bare of natives," Anderson said. "Wildlife need food, so making a corridor for them to find nourishment is important. If everyone planted just 30% natives in their landscape, it would make a big difference to support our birds and pollinators."

To offset climate change-generated drought and help wildlife,



Douglas aster
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NATIVES SHINE ON

Sheila Klest, owner of **Trillium Gardens** in Eugene, Oregon, would design a pollinator-friendly corner of Oregon sunshine and the evergreen grass Roemer's fescue (*Festuca idahoensis* var. *roemerii*), which was once a common plant in the Willamette Valley oak savanna.

Klest also suggested white-blooming yarrow (*Achillea millefolium*), a tough plant that grows in any situation, and checker mallow (*Sidalcea*), a pretty perennial with pinkish-white flowers beloved by pollinators. Then for fall, Douglas aster (*Aster subspicatus*) bursts with purple flowers from July through September, providing sustenance when many plants have bloomed out for the season.

Anderson recommended Washington lily (*Lilium washingtonianum*). Native to the Cascade, Klamath and Sierra Nevada mountain ranges of Oregon and California,



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Achillea millefolium
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this lily was named after Former First Lady of the United States Martha Washington (not the state), according to renowned botanist Albert Kellogg.

Washington lily displays huge, fragrant white flowers with tiny purple spots in mid to late summer. Washington lily can have 30 flowers on a stem that gets 3–7 feet tall and is hardy in USDA Zones 6–9. With a native habitat of chaparral to conifer forest, it can thrive in dry soil in full to partial sun.

Anderson also likes western hound's tongue (*Cynoglossum grande*), which has blue, borage-like flowers in early summer and makes gardeners happy with its resistance to deer browsing. It can get up to 3 feet and 1 foot wide, is hardy in USDA Zones 7–10 and prefers difficult-to-design dry shade. Hummingbirds and butterflies find western hound's tongue irresistible.

Right place, right plant

As with any planting, Harrison strongly advises finding the right plant for the right place and allowing it to grow naturally. No pruning into balls, please. “Let them be their natural form,” she said. “Let there be a little bit of wildness. Let there be interaction with nature. That’s so much better than a sterile landscape. You might as well put in plastic plants.”

When choosing a plant, Harrison said gardeners should think first of where it’s going in the landscape and then choose an appropriate plant. Just because a plant is a native, she noted, doesn’t mean it will grow anywhere in a garden. Not all drought-tolerant natives grow in sun. Consider how the plant grows in the wild and translate that to your garden. If it grows in hot sun, plant it in hot sun. If it wants partial shade, that’s where it should go. ➤



Lilium washingtonianum
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NATIVES SHINE ON

Soon, there may be more non-native plants that drift into Oregon from California, Nevada and Idaho, where a newly hotter climate allows them to flourish like they do in their native habitats.

“With climate change, we’re seeing shifts of where plant populations occur,” Harrison said. “As Oregon becomes drier and hotter, things that were limited to the Siskiyou or southern Oregon we are now seeing in habitats in other parts of the state.”

Paying attention to plants and where they come from means more success at growing them. It also gives gardeners a sense of place and history.

“Natives let you know where you are,” Harrison said. “They root you in your local place If I can look out and see plants that grow in Oregon — not things that would appear in a parking lot in Milwaukee or a garden in Boca Raton — then I know

*Arctostaphylos
columbianum*
COURTESY SEVENOAKS
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and I think to a lot of people.”

As climate change continues, so does the challenges it presents to gardeners and the nurseries that grow and sell their plants. Planting appropriate natives is something everyone can do. Drought-tolerant plants create a habitat, look beautiful and thrive with very little or no water or fertilizer.

“People are getting educated about climate change and feeling an urgency to do something,” Shaffer-Elteto said. “They see the changes in their climate and they really want to do something. This is their solution.” ☺

Kym Pokorny is a garden writer with more than 20 years’ experience writing for The Oregonian (Portland, Oregon) and other publications. She is currently a communications specialist with Oregon State University Extension Service.



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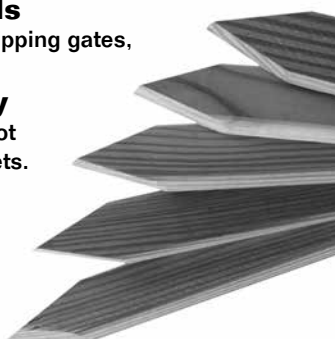
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Spraying sustainably

An intelligent spraying system can help growers reduce pesticide use, save money and better manage their crops

BY JON BELL

Above: Pak-Blast 50-gallon sprayer, made by Rears Manufacturing Company in Eugene, Oregon, retrofitted with an Intelligent Spray System to better control the distribution of pesticides — improving its efficiency by 50% and more.

PHOTO BY BRENT WARNEKE / OREGON STATE UNIVERSITY

UNTIL ABOUT six or seven years ago, **Hans Nelson and Sons Nursery** in Boring, Oregon, would apply standard pesticides to its roughly 150 acres of shade and flowering trees using traditional air-blast sprayers. The sprayers, used throughout the industry, do a pretty good job of dispersing pesticides, but they have their limitations.

For starters, many air-blast sprayers spray at one constant rate. They spray the same amount of pesticide no matter how big the trees are and no matter the season. That can lead to over- or under-spraying.

Air-blast sprayers are also notoriously inefficient; in fact, researchers have found that it's not uncommon for air-blast sprayers to have losses to the ground of 30% to 50% and between 10% and 20% in air drift.

But thanks to Hans Nelson and Sons' long-time relationship with the USDA's Agricultural Research Service (ARS), the nursery became one of a handful selected to try out a budding technology. That technology, known now as the Intelligent Spray Control System, uses Light Detection and Ranging (LiDAR) lasers, which scan the crop canopy and use that data in real time to adjust

individual nozzles on a sprayer and accurately control how much pesticide is being applied.

The average results of using an intelligent sprayer: 50% less pesticide use, 93% less chemical runoff, up to 87% less airborne drift and a 50% reduction in the amount of water used. "We've seen savings across the board," said Jesse Nelson, general manager at Hans Nelson and Sons.

He added that the nursery has two intelligent sprayers, one of the early ones developed by the USDA and a newer one from the company that has commercialized the technology, the Indiana-based Smart Apply. "You can control and change and see everything right on a wireless tablet that is super easy to use," Nelson said. "We use them across the board. They work on everything from seedlings to big trees."

Planting the seeds

The development of the technology that would become the Intelligent Spray Control System began back in 2012. That's when Heping Zhu, an agricultural engineer and inventor with the USDA-ARS in Wooster, Ohio, and his team began working on the system. "Specialty crops use too many pesticides, more than



traditional row crops like corn and soybeans,” Zhu said. “The goal was to find a way to reduce pesticide use for crops.”

Traditional sprayers didn’t consider the variations in different crops and their structures, including their height, how mature they were and what stage of the growing cycle they were in. So, for example, shade trees would get the same amount of spray throughout the season, when really what they needed was less in the spring and more once the canopy had leafed out. The traditional sprayers also didn’t account for spaces in between plants.

“Plant structures change during the growing season. There are young plants and mature plants in the field. And there can be lots of space in between trees,” Zhu said. “Sprayers don’t consider this variability, so there is a lot of pesticide wasted.”

LiDAR technology, like that employed on the Intelligent Spray Control System, allows for precise scanning of foliage density and volume, as well as detection of the spaces in between plants and rows. The nozzles on a sprayer automatically adjust to account for the variations, thus reducing the amount of pesticide being used — and wasted.

“A sprayer will have 20 to 30 nozzles, each one of which is individually controlled based on what the laser sees,” said Brent Warneke, a faculty research assistant at Oregon State University, where experts have been conducting tests and using the Intelligent Spray Control System since 2018. “It’s a real-time system, so it’s collecting data and adjusting in real time automatically. If you were doing it manually, you’d have to turn off certain

nozzles for shorter plants, then open them for taller ones. This sprayer does that all automatically so you can just keep cruising, which helps a lot.”

Zhu said the LiDAR technology is much more advanced than other kinds of sensors, including ultrasonic sensors. Those are another tool that has been used to try to bring more efficiency to pesticide application, but Zhu said they’re not very accurate. Ultrasonic sensors create scans based off just five or 10 different points; LiDAR uses at least 50.

Even better is the fact that the Intelligent Spray Control System was designed to fit on most existing sprayers, so growers don’t have to invest in new equipment to use it. “It adapts to just about any sprayer you have for what you are growing,” Nelson said.

A Pul-blast 100-gallon tower sprayer, made by Rears Manufacturing Company, retrofitted with the Smart Guided Systems Intelligent Spray Control System. This combination has been proven in studies to improve pesticide use, insect control efficiency and disease control by 50% and more.

COURTESY BRENT WARNEKE / OREGON STATE UNIVERSITY



Hol Spray Systems' AgXeed autonomous sprayer with Intelligent Spray Application system.

PHOTO BY AMANDA DOONEY



Benefits and beyond

The benefits of using the Intelligent Spray Control System go beyond just the reduction in pesticides, which averages about 50% depending on the size of the operation. Because it uses less pesticide, nursery employees don't have to stop and refill the tank nearly as often as before.

In a research publication worked on by Warneke and others at OSU, an example illustrates how a grower could save money on labor through smart spraying. A 100-acre orchard would normally take about 83 hours to be sprayed with an air-blast sprayer. Using the intelligent system, the same task would take about 20 hours less, saving the operation at least \$315 in labor costs alone. Intelligent spraying also cuts down on driver fatigue, reduces wear and tear on tractors, and leads to lower fuel costs. ➤



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The Intelligent Spray Control System can be pricey, however, and may only make sense for larger operations. Warneke said Smart Supply dealers provide custom quotes to growers depending on each operation's unique needs. Zhu noted that, despite the cost of the system, many growers have been able to pay off their investment in a single growing season.

An additional benefit of the intelligent system is that it collects data and stores it in the cloud every time it's used. That allows growers to analyze their crops, see what's growing well — and where — and produce accurate maps of their fields, and more.

Earlier this year, Smart Apply released the second generation of the system, called Generation 2 (Gen2) Intelligent Spray Control System. According to the company, the new iteration is "more impervious to the rigors of the field as well as easier to install and maintain."

The electrical system has been improved, and the control board can now control up to 40 nozzles. The new system offers expanded data collection of chemical application rates, tractor speeds, chemical volumes applied and savings, and operator performance. It also has new job management features that let growers program daily spray schedules, assign boundaries and operators, designate start and end days, and document chemicals used each session.

In a release for the Gen2, Smart Apply CEO Jerry Johnson said the new version can make life easier for all kinds of growers.

"Today's growers face rising costs; mandates on chemical and water use; verification requirements from government agencies, export partners, brands, and consumers; and their own desire to be better stewards of the land," he said. "Smart Apply Gen2 is a transformational tool that enables corporate to privately owned growers alike to meet these challenges head on while making their operations simpler, more profitable and sustainable." ©

Jon Bell is an Oregon freelance journalist who writes about everything from Mt. Hood and craft beer to real estate. His website is www.JBellInk.com.



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Remixing soil mixes

Sustainable alternatives to carbon-sequestering peat moss are entering into the planting media mix

BY TRACY ILENE MILLER

Among the materials for container-growing substrates, the growing list of sustainable alternatives to peat moss includes:

- Coconut coir
- Compost
- Biochar
- Wood materials
- Digested dairy fiber

ADOBE STOCK

AMID GROWING international concerns about the environmental impacts of depleting and permanently damaging peat bogs, a movement is underway to ban or restrict the sale and use of peat moss — a nonrenewable resource that takes thousands of years to form. When left intact, peat moss is an important carbon sink.

The United Kingdom has set a target date of 2024 to phase out peat sales to retail users, and by 2030 to commercial horticulture. In Germany, 2025 is the target year for commercial operations to start marking their products with a “responsibly produced peat” label.

While some countries are moving toward a ban of peat extraction, Canada has stepped up its production as well as its management programs of peat bogs to continue harvesting.

Canada, the home to 27% of the world’s peatlands, was also the world’s largest exporter of peat in 2021, accounting for 30% of total worldwide exports, of which almost all is shipped to the United States. In Canada, public-private efforts have yielded partnerships to conserve untouched bogs, restore harvested bogs and employ techniques to minimize damage of bogs slated for harvest.

As countries move to restrict or ban peat

moss, consumers are starting to seek out and ask for alternatives. Anticipating this market shift, green industry entrepreneurs have been investigating the viability of replacing peat moss with various substrate materials.

The options that are now dominating discussions are reviewed here.

Coconut coir

Coconut coir is billed as the most direct replacement for peat moss. “Coir is a little bit cleaner [than peat moss] and doesn’t break down as much,” said Miles Andrews at **Pro-Gro Mixes** in Sherwood, Oregon. It’s easy to adjust coir’s pH, he added, as it has a similar nutritional profile as peat moss.

Salt can be a problem, but only with cheap coir, Andrews said. “When it’s triple-washed, there is little issue with salt.” Multiple washings bring its pH close to neutral as well as the cation exchange capacity to below 1 millisiemens per centimeter (mS/cm), eliminating the need to buffer it. Coir producers should provide a profile that confirms salt values and other information about the product.

On the retail side, coir has operated as a replacement for peat, and it has been



REMixing SOIL MIXES

Top: Coconut coir adds to the absorbency, water retention and drainage of potting soil mixes and can also be used for mulching and decorative purposes. ADOBE STOCK

Below: Consumer-grade composters such as the Lomi transform food scraps into compost, which in turn can be used as a growing medium or soil amendment. PHOTO BY PETER SZYMCAK / COURTESY LOMI

adopted by some larger nurseries, Andrews said, but its use is still not as widespread on the wholesale side.

For some, the water it takes to process coir, its carbon footprint and the salt pollution it leaves behind in countries of origin are issues of concern. India is the largest exporter, followed by Sri Lanka, Indonesia, Malaysia, Philippines, Thailand and Vietnam.

Overall, approximately 86% of coir and coir products are shipped from 15 countries of the Asia-Pacific region. The distance coir travels to reach the U.S. obviously affects its price and offsets any gains in reducing carbon footprint.

“If coir prices went down to a price that made sense, I can see it making it a pretty close replacement [for peat],” Andrews said. “But this isn’t a high-margin industry, and that makes it a tough sell.”

Andrews said that last year, by the time coir reached Oregon, its cost was double the price of peat moss. And yet, the United States is the third largest importer of coir after China and South Korea, according to a global trading report. Coir is projected to have a compound annual growth of 8.1% between 2023 and 2028, increasing its market value from \$370 million to \$525 million.

Increasing technological advances in mechanical processing of coir, plus high demand in agriculture, home gardening and hydroponics, are expected to accelerate coir’s ascent as a global product, which could stabilize prices over time.

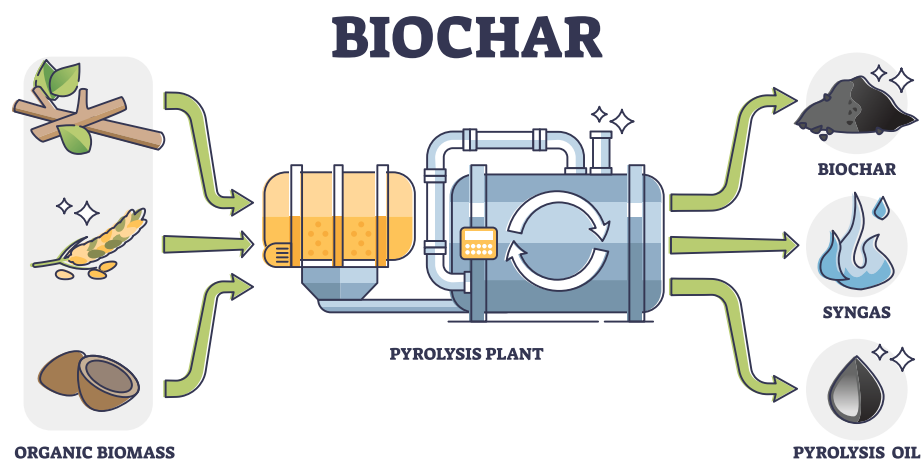
Compost

Studies have demonstrated that compost — from municipal waste compost to animal manure compost — functions as an effective partial substitution or replacement for peat. In one study conducted at Berea College Farm in Kentucky, researchers found that potting media composed of 75% to 100% compost performed as well as fertilized, peat-based media in growing organic vegetable transplants.

In comparing greenhouse bedding plants, another study published in the Texas Journal of Agriculture and Natural



Biochar is produced by heating biomass such as stalks, leaves or husks, in the total or partial absence of oxygen. Pyrolysis is the most common technology employed to produce biochar. Besides biochar, bio-oil and gas can be collected from modern pyrolysers. ADOBE STOCK



Resources explored how plants performed in mixes with 25% or 50% of either dairy manure compost or peat combined with 25% perlite and 25% vermiculite. At the end of the study, the plants grown in compost had the same weight and nutrient levels as the plants grown in peat.

The Institute of Agriculture and Natural Resources at the University of Nebraska–Lincoln reported that compost can be used in a 1:1 substitution for peat moss. While peat-based mixes for greenhouse growing may add lime to raise the pH of the growing media, compost substituted for peat in potting soils precludes the need to add lime since most compost pH values are near neutral to slightly alkaline. However, compost-based mixes still require the same fertilizer application rates used in mixes based on peat only, because the nutrient base of the compost is not high enough to sustain the plants.

Because compost is sourced locally, or even produced on-site, it has a smaller carbon footprint. Furthermore, compost mixed with coir, as a substitute for peat, can make buffering of coir unnecessary.

Biochar

“Biochar is produced by thermal decomposition of organic material (biomass such as wood, manure or leaves) under limited supply of oxygen (O₂), and at relative-

ly low temperatures (< 700° C),” according to the International Biochar Initiative.

The list of plant-based materials that can be turned into biochar is expansive, including other organic materials such as rice hulls, nut shells and corn cobs.

The outcome of the thermal decomposition process is a charcoal with a high surface area and deep porosity to absorb water like a sponge — up to six times its weight — while also holding nutrients and encouraging greater microbial populations.

“The charcoal, instead of being optimized for fuel, has been optimized for water and nutrient-holding capacity,” said Karl Strahl of Oregon Biochar Solutions in White City, Oregon. Biochar is coming into its own as a soil amendment, most often to improve soil health, remediate contaminated soil, improve soil water and nutrient retention, and as a composting accelerator.

Mike Taylor at Hilton Landscape Products in Central Point, Oregon, has been using biochar for close to 10 years, in firsthand applications for farming, in soil mixes, and most recently in compost-finishing trials. “We’ve used it for years with zero negative results,” he said. “The key to biochar is you’ve got to charge it. It will absorb just about any nutrient. Those that charge it correctly, their nutrient bills have been reduced with the same results.”

An easy way to charge biochar is to

season it with compost, which lowers its pH. But biochar may also be used raw. Like most amendments, the form and amount used depends on the specific application and uses for the product.

“Peat and other mined products are chosen because they have high water- and high nutrient-holding capacity,” Strahl said. “Biochar can do the same, and in many cases, it is carbon-negative. Carbonized wood is a good way to remove CO₂ from the atmosphere.”

Carbon sequestration is part of the attraction of biochar. Like compost, the feedstocks can be sourced regionally in the Pacific Northwest. Currently, the U.S. Forest Service is working in partnership with the Bureau of Land Management on a trial program to turn forest fire debris and slash, normally burned into large piles, into biochar to disperse and revive the soil in burned-out areas.

“Right now, we are at the early adopter phase. Innovators or smaller companies looking for an edge are taking this product and incorporating it into their soil media and appreciating the benefits,” Strahl said.

As more companies see the benefits and pass them along to their customers in the form of plants that are more hardy or resilient because of the holding capacity of biochar, Strahl expects other companies will follow suit.

Engineered wood fiber

Probably no other material has received more examination and trialing during the past 20 years than engineered wood fiber as an amendment to mixes to reduce the amount of peat. Much of the research has been conducted by Brian E. Jackson, co-director of the Horticultural Substrates Laboratory at North Carolina State University. Jackson asserts that engineered wood fiber is an amendment, not a complete replacement for peat, in his studies. According to Jackson, up to 30% wood fiber by volume in a mix with peat and coir is the “sweet spot,” beyond which pH adjustments are greater, as is nitrogen immobilization.

Engineered wood fiber has other considerations, like adjusting to its



REMIXING SOIL MIXES

bulk and how it affects automated flat-filling or plug transplanting, and its differing drying characteristics, which affects watering schedules.

Digested dairy fiber

According to the USDA Census of Agriculture, there are over 2.5 million cattle and calves in Washington, Oregon and Idaho combined, and each dairy cow produces 80–120 pounds of manure per day.

Turning manure into a reusable resource has been made possible by an Italian company, Cri-Man S.p.A., with a machine called a hygienizing biocell, or aerobic digester, that squeezes the dairy manure fiber to get it to a certain moisture content, then heated to ensure weeds and pathogens are destroyed. Hygienizing also helps to reduce odor, improve nutrient availability, and increase the organic matter



Drained peatlands in Estonia. Peatlands are terrestrial wetland ecosystems in which waterlogged conditions prevent plant material from fully decomposing. When peatlands are drained, turning them from carbon and nutrient sinks into respective sources, the result is diminished water regulation capacity and biodiversity loss. ADOBE STOCK

content of the treated manure.

Del McGill has been making products for the nursery industry for over 30 years, but gave up compost to become a broker of the West Coast production sites for NuFiber. “NuFiber is the closest fiber to peat moss and coco coir that I have come across,” McGill said.

NuFiber’s advantage is its consistency. Compost is inconsistent, its input materials — leaves, grass, stalks and more — change every season. Whereas dairy fiber has con-

tent collected on-site with standardized feed stock. The result?

“The analysis of this product stays very consistent on a year-round basis,” McGill said. “And as I deal with buyers, what they like is a consistent product and analysis, texture, moisture and appearance.”

Pro-Gro has always used dairy fiber in its mixes as an inoculant, “but NuFiber offers better performance and nutrition than composting straight dairy manure,” Andrews said.

Additional advantages of NuFiber: it’s a regionally produced product, and it processes material that would otherwise wind up as waste. NuFiber is certified organic and is only made from flush dairies, where water moves the manure away from the cows to keep it sanitary.

Studies have shown that incorporating digested dairy fiber into soilless mixes can improve plant growth and yield, compared to traditional mixes. With its enhanced nutrient retention, NuFiber retains and slowly releases nutrients such as nitrogen, phosphorus and potassium. NuFiber has an N-P-K profile of 1-1-1, and it’s lightweight, about 660 pounds per yard, McGill said.

Conclusion

As countries limit peat moss use and extraction, adopting alternative materials in soilless mixes can help maintain the nursery production standards while reducing dependency on peat.

As peat moss alternatives become more viable and mainstream, new sustainable substitutes are also sure to arise. ©

Tracy Ilene Miller is a freelance writer and editor who covers several topics, including gardening. She can be reached at TMillerWriter@Gmail.com.



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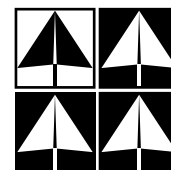
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Figure 1. Oregon IPM Center goes out in the field, shown here connecting with biological control practitioners in Wenatchee, Washington, in 2022.

Learning, connecting, engaging

Oregon's Integrated Pest Management Center serves as
an innovative pest management hub for growers

ARTICLE AND PHOTOS BY SILVIA I. RONDON

SINCE THE EARLY 1960s, the Oregon Integrated Pest Management (IPM) Center has accumulated a rich history of leading and coordinating multistate research and outreach programs to help a broad audience in the agricultural and urban sectors.

It is our intention to focus on core initiatives that are relevant to the current century, including decision support systems, ecological foundations, response to invasive species, and purposely connecting

with pest management researchers, practitioners and clients (Figure 1).

Although we hope that the term “IPM” resonates with everyone, it probably does not have the same effect as if we are talking about bees or pollinators. However, in the urban and agricultural worlds, the concept of plant protection started as early as the domestication of plants or crop farming started.

In general, we are all constantly struggling to keep pests at low levels to

minimize damage and maximize production, whether that means the produce in our backyard or in acres of any given crop. Regardless, the use of a series of researched control methods recommendations, with time, became the foundation of the IPM core concept.

Currently, we know that the IPM concept is complex, since many key players must communicate, coordinate and agree upon recommendations for pest control while satisfying the high demands of



buyers, distributors and consumers. In the center of it all, pesticides have been a powerful tool in our fight against pests (Figure 2).

Pesticides and IPM

Pesticides are one of many tools to control pests. Pesticides can be used in conjunction with other control methods in an integrated manner.

One of the foundational ideas is to use pesticides when needed and to rotate modes of action to reduce the development of pesticide resistance. To be able to rotate pesticides, a different mode of action must be available. However, some key pesticides (e.g., chlorpyrifos) are being removed from the market, causing growers to scramble to find alternatives.

Chlorpyrifos was one of the most widely used active ingredients in agricultural insecticides in the world. It is a



Figure 2. Spraying pesticides by plane over crops in eastern Oregon as part of IPM programs.

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Figure 3. Corn earworm (*Helicoverpa zea*) is a key pest of hemp. Damage is caused by the larva (caterpillar) that tunnels through and destroys maturing buds.


broad-spectrum organophosphate insecticide that has been registered for over 40 years. Until recently, over 50 insecticide products containing chlorpyrifos were registered for use in Oregon alone. These products were used in an extensive variety of specialties and other crops grown, including ornamentals, grass seed, fruits and vegetables. In these systems, it was considered critical to use this pesticide for the management of insect pests ranging from aphids and beetle larvae, to maggots and lepidopteran worms (Figure 3).


Results of several trials show mixed results of alternative modes of action that can reduce a pest problem. Several working groups across Oregon and the Pacific Northwest are initiating a cross-commodity collaborative research effort to identify viable options as alternatives for chlorpyrifos and others. As other pesticides may have the





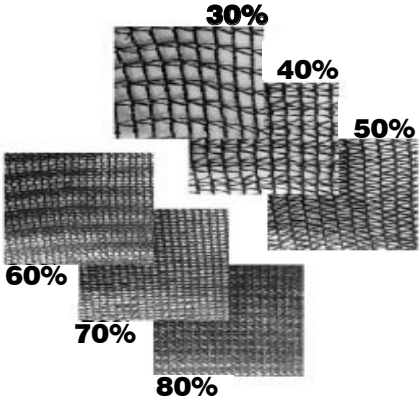








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same fate as this product, further collaborative research efforts should be considered.

Decision support tools

IPM is much more than pesticides. Since the late 1990s, the Oregon IPM Center has been developing and maintaining weather and climate-driven decision support for pest management. Currently, the center hosts more than 150 predictive pest and disease models to help growers know when and where to act.

The Degree Days Risk and Phenology (DDRP) event mapping is a platform that helps decision-makers plan ahead for new invasive threats, management actions and much more. The general goal is to provide a free and comprehensive tool, nationwide IPM resources, more accurate models and plenty of on-demand features that help our audience make better management decisions. This platform will help growers make choices that can potentially reduce the unnecessary use of pesticides.

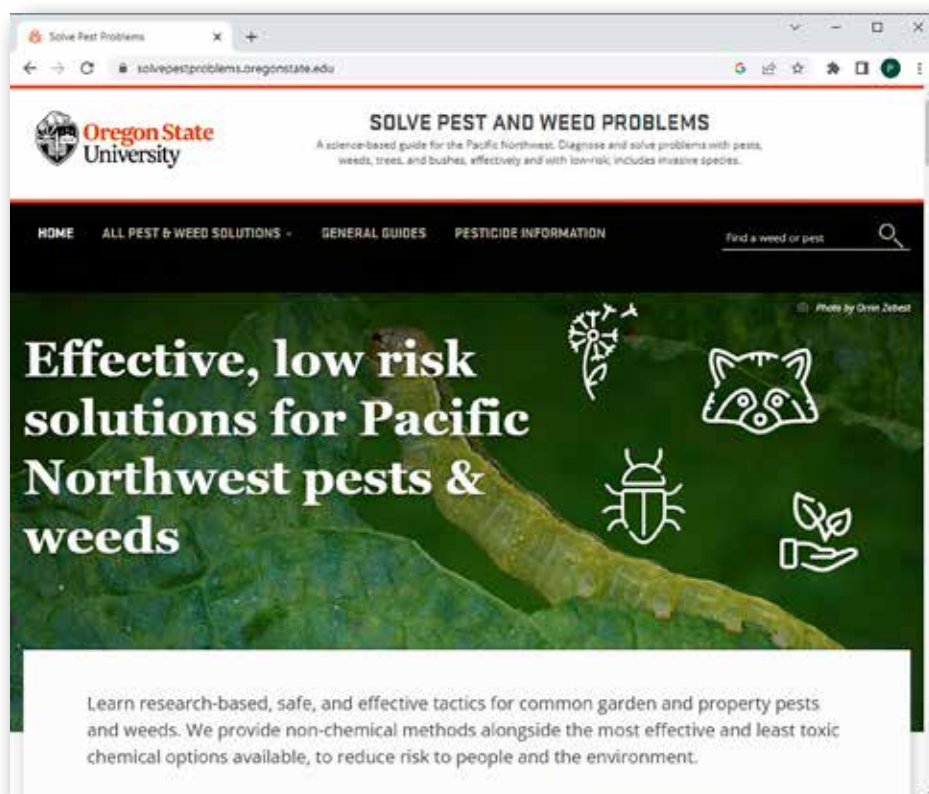
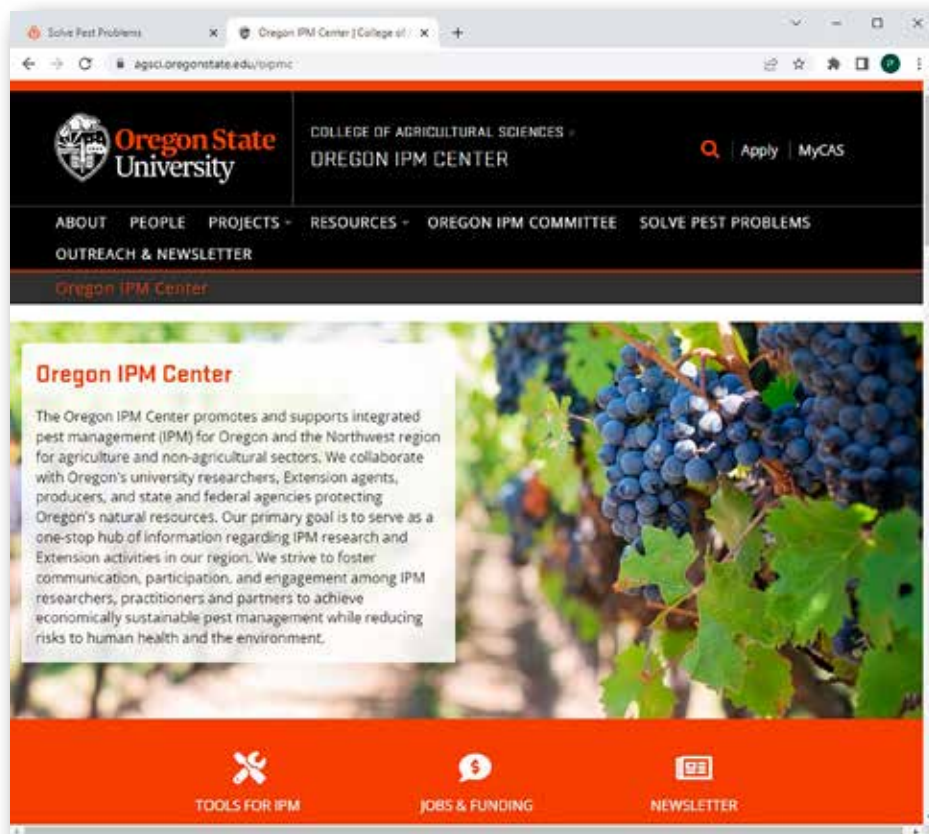
Identification of promising alternatives, knowledge gain, cost-benefit data and providing training on practical alternatives are a few of many pieces of a pest management program. Our hope is that more growers will commit to IPM.

How will we accomplish that goal? By gaining growers' trust in research-based information and the experience of IPM practitioners. By connecting and engaging. And by sharing knowledge and experience through learning.

The Oregon IPM Center serves as a hub of information and connection, bringing much-needed resources that can help us leverage more sustainable IPM practices. The center teaches, engages and connects homeowners through the Solve Pest Problems website and producers through the OIPMC website. Our mission is to encourage all growers to maximize the benefits of planning workable integrated pest management programs. ☺

Silvia I. Rondon is an entomologist and director of Oregon State University's Oregon Integrated Pest Management (IPM) Center in Corvallis, Oregon. Email her at OIPMC.Info@OregonState.edu.

For the most up-to-date information about the Oregon IPM Center, go online to AgSci.OregonState.edu/OIPMC and SolvePestProblems.OregonState.edu.

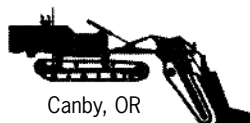




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Sustainable industries need sustainable solutions

Every year, when I try to come up with a column topic for the month of May, my tendency is to focus on labor. This year's May issue of *Digger* is focused on sustainability, and that only leads me to an angering paradox.

Many things about the nursery industry are sustainable — but our labor situation isn't one of them. In order for our family businesses to survive long-term, we need a sustainable and willing workforce. For the span of 12 years as your executive director, our situation has been comparable to Sisyphus, the man from Greek myth who was condemned to roll a boulder up to the top of a mountain, only to have it roll back to the bottom, again and again.

Our boulder is immigration reform. Trying to pass common sense legislation has been like a task of eternal punishment. We put in the effort, but never quite get there.

A new age of technology

Our nursery and greenhouse industry is a mature one. We continually refine and improve our production processes. The rise of the industry in Oregon is proof positive that God blessed this fertile state with soil, water and a favorable climate, but we always must do more with less of everything, including land, labor and water.

Well, almost everything. We do get more government regulation, and more pressure to urbanize our irreplaceable farmland. But despite these challenges, nobody produces nursery stock better than Oregon growers.

Technology seems to advance at a frenetic pace, and we can only hope to keep up. A few decades ago, GPS planting, smart sprayers for pesticides and controlling greenhouses at the touch of smartphone app would have been laughed off.

Look around now at other industries. The apple industry has mechanized pickers.

What's next for us? Artificial Intelligence is coming to everything, and it will hit like a freight train when it arrives. Mechanization and AI can assist in production, but nothing replaces the grower's knowledge, adaptability, vision and the hand-crafted work that needs to be done.

The five-point plan

When OAN leaders went to Washington, D.C. back in March, we had a

real “a-ha” moment. U.S. Rep. Cliff Bentz, a friend to the industry and conservative Republican representing Eastern Oregon, cut to the chase and told us that a single bill incorporating everything the industry needs is not going to happen. It's folly to expect it. Instead of protesting, I had to concede he was right.

We've tried the same dang thing over and over for 37 years, and it has not rendered anything of substance. Hoping for Lucky Number 38? Hope is not a strategy.

So now, we have a five-point plan. Let's do what we need to do, however it can happen. Two bills, five — hell, eight. Let's get moving and get the elements done.

Adjustment of status for those in the United States. The association used to tie its immigration policy to citizenship for all immigrant workers. We did this because it is what we thought the workers wanted. The ugly truth is that the broken immigration system, over three plus decades, has created a dynamic where the worker may be authorized but other family members may be undocumented. Let's clear the slate and adjust the status of all residents.

Keep and update the current H-2A and H-2B visas. The U.S. economy has regional needs and dynamics. Some work visas work. H-2A and H-2B have challenges and need to be flexible for returning workers, but if growers like a program, any reform packages should allow these programs to continue.

Create a new visa system. If we are to fix the labor supply issue, let's actually fix it. The solution is not a mystery. Create a new class of visas and include a renewable five-year rollover process. The visa would require that the worker be employed, with no criminal record, but the program needs to be flexible enough to let workers return to their home country and come back to the States. The beauty of this visa type is that it can expand and contract with the U.S. economy. When the nation needs more workers, the visa numbers can meet the labor need.

Create a sensible “touch back” provision. It is costly for an undocumented



Jeff Stone
OAN EXECUTIVE DIRECTOR

American resident to go to their country of origin strictly to meet a bureaucratic requirement at a consulate or embassy. That's especially true if they have been in the U.S. for decades. Estimates I have pulled together say that the State Department would need to triple its budget to accommodate the influx of applicants. There are trust issues as well. Workers may not comply out of concern the federal government might not allow them back. Instead of all that, why not let people apply to U.S. Customs at their nearest international airport, and “enter” the U.S. legally there? This will certainly have a fiscal impact, but it should be a lot less since it will be spread out across the United States.

Once 1–4 are enacted, then E-Verify. Workers are not the only ones with trust issues. The OAN would accept electronic verification going forward if all workers, not just those in agriculture, can be put through the system.

Oregon's congressional delegation gets it. Oregon is in a good position to get to yes with our bipartisan congressional delegation. They have heard from dozens of OAN leaders that their inability to resolve the labor problem is an artificial cap on the industry's growth.

You want to talk sustainability? Our industry supplies trees and plants to sequester carbon and help address climate change. To do that, we need a labor supply, and for that, we need immigration reform.

It is in everyone's interest to make this happen. Oregon will be vocal, but I call upon the other sectors of agriculture to put aside differences and help change the trajectory of our industry. My mother used to say, “Get the hook out of your heinie and get to work.” It's time Congress listened to my mother. ©

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