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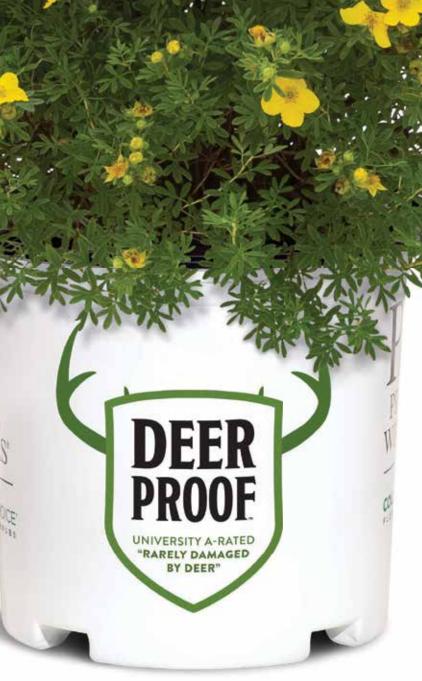
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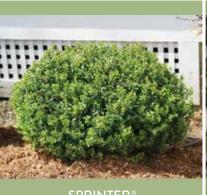


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# JUNE 2024 Vol. 68 No. 6

# III About Shrubs

Options that stay true to form

New offerings from nurseries won't outgrow smaller home lot sizes and postage-stamp front yards.

A 'heavenly' genus

Nandina has taken root with new cultivars and year-round

Not your typical rhodies

Species rhododendrons offer a different

take on the unusual.



#### SPECIAL Farwest Show **Planning Guide**

Check out this year's seminars, speakers and special events.

The next wave of automation

Oregon nurseries are at the forefront of using technology to save labor and improve efficiencies.

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Printed in Oregon on domestic recycled paper when available.

On the cover: Spring Meadow Nursery's Tater Tot® Arborvitae (Thuja occidentalis 'SMNTOBAB' PP30761 Can PBRAF) will grow two to three feet high and three to four feet wide, keep their rounded shape without pruning, and stay on the smaller side. Photo courtesy spring meadow nursery On this page: Left: Both leaves and flower petals are very narrow on Rhododendron linearifolium giving it an unusual look compared to other rhodies. Photo by MIKE DARCY Right: A manufacturer in California has taken input from the nursery industry and created Burro Grande, an autonomous towing vehicle capable of pulling up to 5,000 pounds. Photo courtesy burro

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# A little bit of mud never hurts

#### I have said it many times before, but I truly didn't see myself becoming a nurserywoman when I was younger.

In fact, if I was being completely honest, I see so much karma coming back and smacking me right across the face lately. When I was young and in school, my dad would regularly come pick me up. I would beg him not to bring his work truck with the "gas boy" in the back. But, more times than not, I would see him drive up in that muddy truck with empty pots and shovels in the back.

I would try to get in as fast as possible before people saw me climbing into this muddy mess, but it would always take a minute for him to move the box of irrigation equipment or other nursery paraphernalia from the passenger seat and smack the cloth seat to remove excess dirt before I could get in.

The truck always smelled like him ... coffee and irrigation pipe glue. I still can smell that smell just thinking of it ... and I love it.

The only thing that was potentially worse than that dirty truck was if he had to go into school to sign me out and he was rushed enough that he didn't change out of his muddy boots. I vividly remember seeing the caked mud flaking off as we walked down the hall towards the exit and wondering how hard could it be to just change shoes?

Well, I now know.

This past month, I was running late to pick up my kids from school after running errands for the nursery. As we were walking out of the school, I looked down and saw the tracks of mud from my boots I had made from going in a few minutes earlier. I was already embarrassed about the mess I was making when my 10-yearold said, "Maybe you should leave other shoes in the car that aren't muddy to change into, Mom - oh, never mind. You brought the truck again."

And my daughter quickly put in her two cents: "Uggghhh, the truck always gets my clothes and backpack all dirty."



Amanda Staehely

Oh my gosh! I have turned into my dad! How and when did this happen? It really is payback for all of those years.

I now am completely appreciative of that dirty truck that I used to ride in. And even more grateful for my dad having a job that allowed him the flexibility to come pick me up in that dirty truck. I can only imagine what he was doing on those days prior to picking us up. He was probably digging a last-minute plant for shipment, or fixing a broken irrigation pipe before he looked and saw it was time to pick us girls up.

So yes, appreciation for this incredible man this Father's Day. I am so grateful he encouraged me and has guided me as I entered this industry. He is a constant positive reinforcer and the perfect role model (like always). Against my will, he taught me that a dirty truck is not the end of the world. And neither is a collapsed shade structure, ice damage, or just bad years.

The good will always outweigh the bad in this industry and perseverance and hard work will help get you through.

I only hope that my kids think I smell as good as pipe glue and coffee.

So, June is to celebrate all of you fathers and father figures. For all of the fathers involved in any capacity within this industry, I hope you are celebrated and honored this Father's Day as much as I plan to celebrate mine.

amanda Sachely



#### **Calendar**

Get the word out about your event! Email details to Calendar@OAN.org by the 10th day of the month to be included in the next issue of *Digger*.

#### **VARIOUS DATES**

#### FIRST AID/CPR CLASSES AT OAN

Need a first aid/CPR certification renewal for yourself or one of your employees? The Oregon Association of Nurseries is holding sessions in English on June 18, July 18, September 18, and October 16, and sessions in Spanish on June 20, July 19, September 19, and October 17. Class times are 8 a.m.-12:30 p.m. The cost is \$60 per person. It's the same for first-time certifications as well as renewals. Certification is good for two years and includes instruction and a certification card. Classes are held at the OAN office, 29751 S.W. Town Center Loop West, Wilsonville, Oregon. Register at OAN.org/Page/CPRclass.

#### JUNE 6

#### 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, 14603 South Stoneridge Drive in Oregon City, Oregon. Reconnect with friends while supporting a strong nursery industry voice in Salem and Washington, D.C. Check-in begins at 7 a.m. Sponsorship packages begin at \$250, and many include complimentary playing spots. Go to OAN.org/Duffers for more information.

#### JUNE 7

#### OSU ORNAMENTAL PLANT BREEDING FIELD DAY

Oregon State University is hosting the 2024 OSU Ornamental Plant Breeding Field Day from 10 a.m.-1 p.m. on Friday, June 7, at the Lewis Brown Horticultural Research Farm at 33329 Peoria Road S.W. in Corvallis, Oregon to seek industry input. There will be some refreshments served. "Our best tool in the breeding process is industry input," said Ryan Contreras, professor and associate head, OSU Department of Horticulture. For more information contact Contreras at Ryan.Contreras@OregonState.edu. The event is free but RSVP is requested by May 31 by going to Bit.Ly/OSUFieldDay.

#### JUNE 14

#### AD DEADLINE FOR DIGGER FARWEST EDITION

Take advantage of the energy and excitement of the biggest green industry show in the West by advertising in the *Digger Farwest Edition* (published in August and distributed at the show). With an increased distribution of 10,500 copies, your marketing message will connect with motivated industry decision-makers before, during and after the 2024 Farwest Show. OAN members receive exclusive advertising rate discounts! For information go to **OAN.org/Ads**. Questions? Contact Curt Kipp at **CKipp@OAN.org** or 503-582-2008.



PHOTO COURTESY AMERICANHORT

#### **JULY 13-16**

#### **CULTIVATE'24**

Attend the green industry event that offers you countless opportunities to grow your business, build your network, and discover the latest industry trends. Cultivate'24 will be July 13–16 in Columbus, Ohio. Take your learning to the next level when you sign up for Saturday workshops and experience some of the industry's best practices up-close and personal with in-depth production tours. For more information or to register, go to CultivateEvent.org.

#### JUNE 18

#### OAN OPEN HOUSE/MEMBER SOCIAL

OAN members and their guests are invited to the OAN Open House, hosted at Little Prince of Oregon Nursery Inc! Please drop in between 3:30 -5:30 p.m., June 18 at 15868 N.E. Eilers Road, Aurora, Oregon. Learn more about terrific member benefits and programs, including Legal Access, health coverage, Guest Worker Services, Trucks to Trade Shows, fuel discounts, credit card processing, discounted Farwest Show booths. OAN advertising, and much more! Find out about our new Leadership and Professional Groups including NexGen, HR Professionals and the coming Hispanic Leadership Group and Grower Segments and how to get involved. Beverages and light bites will be served. Non-members are also welcome, and members are encouraged to invite them to attend so they can meet OAN members and learn about membership benefits.

#### **JULY 29-AUGUST 1**

#### NATIONAL PERENNIAL PLANT SYMPOSIUM

Get ready for an incredible experience at the 2024 National Symposium July 29-August 1 in Asheville, North Carolina. This event promises to be the ultimate gathering for perennial plant enthusiasts, featuring an array of exciting tours, educational sessions, and networking opportunities. Set in the vibrant heart of downtown, the symposium is carefully

curated to deliver an unforgettable horticultural experience: explore inspiring botanical gardens, see the incredible work that leading companies are undertaking, and learn from top experts in the field. For information or to register, go to PerennialPlant.org/Page/NationalSymposium.

#### AUGUST 6-7

#### THE GARDEN CENTER SHOW

Network with the industry's leading buyers and suppliers at The Garden Center Show for independent garden center owners and professionals, August 6–7 in Rosemont, Illinois. Participate in educational sessions and participate in one of the pre-event tours hosted on August 5 and visit Chicagoland's leading retailers on the Lawn & Garden Retailer Bus Tour. For more information, or to register, go to GardenCenterShow.com.

#### **AUGUST 12-14**

#### ISA 2024 ANNUAL INTERNATIONAL CONFERENCE

The International Society of Arboriculture (ISA) celebrates 100 years this year and the road to centennial culminates at the 2024 Annual International Conference in Atlanta, Georgia, where there will be a grand celebration. Join industry leaders from around the world and learn about the latest developments in equipment, technology, and research. For more information or to register, go to ISA-Arbor.com.



# $\overline{BLOOM \cdot ables}$





#### **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.

#### Ash trees removed west of Portland to stall emerald ash borer

Work crews in Forest Grove, Oregon (near Portland) removed dozens of infested ash trees as part of a state plan to slow the spread of the invasive emerald ash borer (EAB).

The metallic green beetle is only a recent arrival to Oregon, but has wrought a path of urban canopy destruction across the United States over the past two decades. It was first spotted in North America near Detroit, Michigan, in 2002, and has killed millions of ash trees throughout the East Coast, the Midwest and the South since then. Officials hoped it would never cross the Rockies to Oregon, but their hopes were dashed when the bug arrived in 2023.

The unique wrinkle in Oregon is that there's an ash species native to the Pacific Northwest, the Oregon ash. Although sightings so far continue to be limited to the Forest Grove area, experts can only hope to slow the spread of the EAB to the rest of the state.

Cutting down the infested ash trees and chipping them up into pieces that are at least 1-inch square is the first part of the state's plan to slow the invasion. Next month, officials plan to treat healthy ash trees in Washington County with injections of the systemic insecticide emamectin benzoate.

The Oregon Department of Agriculture imposed a temporary quarantine of all ash material in Washington County, where Forest Grove is located, to help control the spread of the EAB and recently made it permanent.



The new Human Resources Leadership Group will become the OAN's second official Nursery Professionals and Leadership Group. These are aimed at creating networking, learning and leadership opportunities within different industry segments, interests or groups. ADOBE STOCK

#### OAN BEGINS LAYING GROUNDWORK TO FORM HR PROFESSIONALS LEADERSHIP GROUP

The Oregon Association of Nurseries is forming a new leadership group for human resources (HR) managers, staff members and owners responsible for HR functions at nurseries.

The new Human Resources Professionals group will become the OAN's second official Nursery Professionals and Leadership Group. These are aimed at creating networking, learning and leadership opportunities within different industry segments, interests or groups.

"We're very excited to begin laying the groundwork for the Human Resources Professionals group," OAN Executive Director Jeff Stone said. "This has been a goal of our President Amanda Staehely, to make sure that the organization is continually evolving and changing to meet the needs of its members and those who work in the industry."

The new HR leadership group is intended to foster collaboration and knowledge exchange among HR professionals in the nursery industry, thus collectively elevating industry standards among OAN members and promoting continuous improvement.

Group members engaged in HR functions at their companies will gain access to tailored resources, industry insights, and a supportive network of peers facing similar challenges. Additionally, their participation will offer valuable expertise that can directly impact your business' HR strategies, enhance employee retention efforts, and contribute to overall operational success.

Staehely, co-owner of **Columbia Nursery** (Canby, Oregon), has been the driving force behind formulation of the new leadership groups. "It's been one of my priorities as OAN president to make sure that the organization is responsive to the changing needs of the industry and those who work in it, and to also find ways to increase the engagement of current members and engage potential members," she said.

"Recognizing nursery professional and leadership groups like Human Resources Professionals group is an important step in that direction. Engaging HR professionals will help us improve operations at nurseries, improve retention and employee satisfaction, and elevate our industry standards."

The OAN's first leadership group was NextGen, covered in the March issue of Digger. Additional leadership groups will be announced and deployed in the coming months. Most are open to OAN members only; the NextGen Group is open to all. Those interested in joining any of these groups may fill out a form at OAN. org/Page/LeadershipGroups.



**Tom Fessler** Woodburn Nursery & Azaleas Inc. Farwest Exhibitor Frank Schmidt
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#### **Northwest News**

#### PORTLAND BOTANICAL **GARDENS BACKERS SECURE** OPTION FOR RIVERFRONT SITE

A nonprofit group hoping to build the new Portland Botanical Gardens has secured an option to buy a 59-acre site along the Willamette River, not far from downtown Portland.

The purchase and sale agreement gives the nonprofit, formed in 2020, a year to finalize a deal for the former site of the McCormick & Baxter creosote plant situated between Metro's Willamette Cove property and the University of Portland's Franz River campus. The former brownfield site was the subject of an EPA Superfund cleanup, which was completed in 2005.

The botanical gardens would include pavilions, outdoor pathways, offices and research facilities, as well as public access to a stretch of Willamette River beach.

"It's a bright, shiny project for Portland," said Sean Hogan, executive director of the botanical gardens group, owner of Cistus Design Nursery in Portland, and a longtime member of the Oregon Association of Nurseries. "We hope people are as excited about it as we are."

The project goal, Hogan said, is to open two-thirds of the property, currently privately held, to the public free of charge.

#### OAN MEETS WITH BOLI TO DISCUSS RECENT INSPECTION **ACTIVITY ON FARMS**

Oregon nurseries have reported an increased level of surprise inspections from the Oregon Bureau of Labor & Industry (BOLI), apparently aimed at ensuring grower compliance with the state's new agricultural overtime law.

OAN Executive Director Jeff Stone recently met with BOLI officials to learn more about the increase in inspection activity.

"BOLI believes they were given authority in 2022 by the Oregon Legislature to ensure that agricultural overtime was being observed," Stone said. "Making site visits is part of creating compliance by agricultural operators."



Backers hope to build the Portland Botanical Gardens in North Portland. GRAPHIC BY CURT KIPP

Oregon's ag overtime law requires that workers be paid time-and-a-half for any time worked in excess of 55 hours in a workweek. The overtime threshold will be lowered to 48 hours in 2025 and then to 40 hours permanently starting in 2027. The OAN is not seeking to overturn the law but is lobbying for modifications to accommodate the unique circumstances of agriculture.

Under federal law, states are allowed to exempt agricultural operations from overtime laws. Most do, but an increasing number don't, including California, Washington, and Colorado in addition to Oregon. All are phasing in a 40-hour threshold or have done so. Some states require agricultural overtime pay but set the threshold higher than 40 hours, such as Hawaii (48 hours) and New York (60 hours).

No complaint is required to trigger a surprise inspection. BOLI officials are allowed to inspect recordkeeping related to wages. The grower may request a delay if circumstances warrant — for example, if the nursery is in the middle of loading trucks.

During these inspections, employers may be represented by their accountants or attorneys and can request time to notify them.

"The OAN recommends that [growers] have both present," Stone said. "If there are any findings during the investigation, [growers] have a right to present additional facts. BOLI is to approach each operation at its office and not go on property without a filed complaint."

Stone said he asked officials if the inspections have been complaint driven. "The answer was largely no," he said. When asked how many operations have been deemed in violation since 2022, the answer was two."

OAN and its law firm, Jordan Ramis **PC**, asked BOLI officials questions about the process, including an informal questionnaire provided to operators that didn't have any agency insignia on it to confirm its legitimacy. The agency responded that the operator was never intended to fill out the questionnaire — it was the list of questions for the staff to ask.

Jordan Ramis also objected to many of the questions, saying they were outside of the authority of the agency. According to Stone, BOLI officials responded that they would train their workers better.

The OAN will continue to engage with BOLI. OAN members that are inspected by BOLI or have any questions or need assistance may contact Stone at JStone@OAN.org. The OAN offers its Legal Access program as a member benefit, which includes up to 30 minutes of legal advice per month. To use this service, members may contact Steve Shropshire at Steve.Shropshire@JordanRamis.com and have their membership number (available from the OAN office) handy.







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#### **Northwest News**

# OSU RESEARCHERS MAKE KEY ADVANCE ON REMOVING GLYPHOSATE FROM WATER

Scientists led by Oregon State University researchers have identified a material known as metal-organic framework (MOF) that can break down and remove the herbicide glyphosate (aka RoundUp) in groundwater, the university announced in a press release.

The MOF, one of four tested in a collaboration among scientists from OSU and Tiangong University in China, is based on scandium, chemical symbol Sc, and a carboxylate linker, TBAPy. When exposed to light for just five minutes, Sc-TBAPy eliminated 100% of glyphosate in water. Findings were published in Nature Communications.

# U.S. DEPARTMENT OF LABOR ISSUES FINAL RULE ON TEMPORARY AG WORKER PROTECTIONS

The U.S. Department of Labor has announced new rulemaking adding more protections for temporary agricultural workers. The new final rule, "Improving Protections for Workers in Temporary Agricultural Employment in the United States," is set to take effect on June 28, 2024.

The rule makes several changes to H-2A program regulations to bolster the department's efforts to prevent an adverse wage effect on workers in the U.S. The rule is intended to ensure that H-2A workers are employed only when there are not sufficient able, willing, and qualified U.S. workers available to perform the work.

The changes include:

- Empowering workers to advocate on behalf of themselves and their coworkers regarding working conditions;
- Improving accountability for employers using the H-2A program;
- Improving transparency and accountability in the foreign labor recruitment process;
- Requiring seat belts in most vehicles used to transport workers;
- Enhancing existing enforcement provisions; improving transparency



Scientists at Oregon State University have successfully used a meterial known as metal-organic framework to break down glyphosate in groundwater. COURTESY OREGON STATE UNIVERSITY

into the nature of the job opportunity by collecting additional information about owners, operators, managers, and supervisors to better enforce program requirements; and

• Clarifying when a termination is "for cause" to protect essential worker rights, and revising provisions and codifying protections that are outdated, unclear, or subject to misinterpretation in the current regulations.

The final rule also strengthens protections for temporary agricultural workers when employers fail to properly notify workers that the start date of work is delayed. It clarifies and streamlines procedures to prevent noncompliant employers from using the Employment Service.

## RISING INTEREST RATES IMPACTING NURSERIES

Rising interest rates could be a concern for growers in need of loans for operating, capital improvements or land acquisition.

"In the second quarter of 2022, the prime rate was at 3.5%. Today the prime rate is at 8.5%," said Katie Briggs, relationship manager at **AgWest Farm Credit**, an agricultural lender based in Spokane, Washington.

"It's impacted everyone," Briggs said. And the impacts are across the board, not just for short-term operating loans but for long-term loans. "Nursery growers, from what we've seen during the Covid-19 years, were very profitable and had minimum usage of their operating lines of credit. Nurseries are still profitable, but due to higher interest and input costs

it's impacting the bottom line," she said.
"Liquidity reserves for nursery producers will be the differentiating factor on how much rising interest rates impact their bottom line. Despite the impact in interest rates, most nursery producers are still performing well."

#### KOTEK PICKS VETERAN BUREAUCRAT TO LEAD OREGON WATER RESOURCES DEPARTMENT

Oregon Gov. Tina Kotek has picked Ivan Gall to lead the Oregon Water Resources Department, an agency where he has worked for more than 25 years, according to Oregon Public Broadcasting. He currently serves as the agency's interim deputy director.

The director of the Oregon Water

Resources
Department
is in charge
of regulating
water rights
as the state
grapples with
drought, climate change
and the consequences of its



Ivan Gall

permissive past, when regulators approved wells across the state that pump far more groundwater than nature recharges each year. The agency's proposed new rules on water permits are receiving strong pushback from agricultural groups, including the Oregon Association of Nurseries, and farmers.

In a statement sent to OPB, Kotek said "our state must prioritize policies that will build resiliency for Oregon's natural and working landscapes in the face of accelerating impacts from a changing climate," and that she believes Gall is "ready and committed to take on this charge."

The Oregon Association of Nurseries is a major player on water rights issues and works in collaboration with other water user groups, including municipalities and conservationists, to encourage sound policy and management of the limited water resource. "We welcome Ivan as the director of this important agency," OAN Executive Director Jeff Stone said. "The issues facing Oregon are serious and the nursery industry will roll up our sleeves and get to work."

#### **OREGON'S AGRISTRESS HELPLINE BUILDS MOMENTUM**

Oregon State University Extension is continuing to build funding for the AgriStress Helpline for Oregon, a resource offering mental health resource referrals for those facing the unique stresses of farming, ranching, fishing and forestry.

The Oregon Association of Nurseries joined with the Oregon Cattlemen's Association and a large coalition of natural resource groups to support Senate Bill 955, which allocated \$300,000 to create the helpline.

The voice line is available 24 hours a day, seven days a week. It can be accessed in up to 160 languages with the help of interpreters, and the text line services English, Spanish and Vietnamese. In the first six months of operation in Oregon, the Helpline received 25 calls from 17 of Oregon's 36 counties.

# **AgriStress**

for Oregon



The legislature established an endowment for OSU Extension to implement and operate the helpline in Oregon — the Rural Mental Health Endowment Fund at OSU Foundation. OSU continues to try and build the endowment to ensure this service remains available into the future.

To find out more about the fund, or to contribute, go to Bit.Ly/ AgriStressDonate.







#### **Northwest News**

## COMPANY MAKING FERTILIZER FROM AIR, WATER, ELECTRICITY

Today, nitrogen fertilizer is made in fossil fuel-fired factories that can be thousands of miles from the nearest farms, but one California company has figured a way to produce fertilizer using solar power and air instead of natural gas, according to Capital Press in Salem, Oregon.

The company, San Francisco-based Nitricity, uses solar energy to produce "lightning" that splits nitrogen molecules from the air, just as Mother Nature does during thunderstorms. The nitrogen in turn reacts with oxygen and water to form nitric acid. Limestone is then added to make calcium nitrate, a fertilizer that can be injected into irrigation systems.

The technology has operated successfully in multiple field trials, and now the company is focused on scaling it up, said Nicolas Pinkowski, Nitricity's co-founder



A california company has figured a way to use solar energy to produce fertilizer. PHOTO COURTESY CAPITAL PRESS

and CEO.

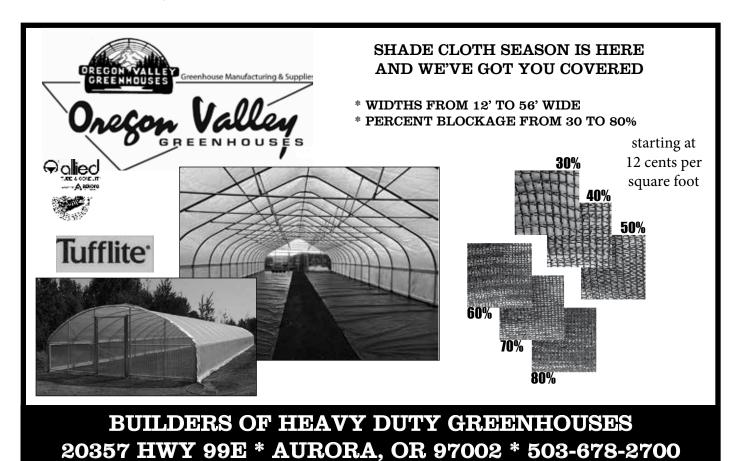
To read more, go to **Bit.Ly/ FertilizerFromAir**.

#### NEW MEXICO JAPANESE BEETLE COMPLIANCE AFFECTS OREGON NURSERIES

The Oregon Association of Nurseries has contacted the Oregon Department of Agriculture (ODA) to seek its assistance regarding new Japanese Beetle compliance regulations facing Oregon growers in the New Mexico market.

Colorado and New Mexico have a collaborative nursery program and Oregon will be working with the two states to provide data specific information to them. ODA has stated that this compliance is part of a larger issue.

- 1. The Colorado nurseries export to New Mexico and many of them purchase from Oregon. The Colorado nurseries are in Japanese Beetle compliance agreements with New Mexico.
  - 2. The New Mexico agreement allows



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only nurseries to re-export material to New Mexico if the origin nurseries can prove that they are Japanese beetle free as a result of negative trapping or that they do preemptive treatments.

Because of ODA's eradication plan, Oregon has held Category 1 pest free status, and has not required nurseries to trap/ treat. The ODA will provide the data that they can and will meet with New Mexico if needed to explain the extent of Oregon's trapping efforts. However, this is not a guarantee that New Mexico will not begin to require on-site specific trapping/treatment. "I was given the list of the nurseries New Mexico inquired about and they represent many big players in Oregon," OAN Executive Director Jeff Stone said.

#### **USDA RURAL DEVELOPMENT** HAS PROGRAMS TO ASSIST WITH FARM LABOR HOUSING

The U.S. Department of Agriculture Rural Development offers programs that may benefit agriculture stakeholders with their labor housing needs.

On-Farm Labor Housing Loans provides affordable financing to develop or rehabilitate affordable rental housing for very-low to moderate income domestic, migrant, and seasonal farm laborers; provides funding used to increase the supply of affordable housing for farm labor; and provides the producer the ability to offer affordable, decent, sage and sanitary housing for farm workers.

Eligible applicants include individual farm owners, family farm partnerships, family farm corporations, and associations of farmers. Loan terms include no loan minimum, and a loan maximum of 100% of the allowable total development cost. Loan interest rate is 1.0% annually; loan term will not exceed 33 years. For more information, go to **Bit.Ly/** FarmHousingLoans.

Off-Farm Labor Housing Direct Loans & Grants provides affordable financing to develop housing for yearround and migrant or seasonal domestic farm laborers. Eligible applicants include: broad-based nonprofit organizations;

nonprofit organization of farmworkers; federally recognized indian tribes; community organizations; states or local governments; limited partnerships with a nonprofit general partner. Loan terms include low interest, a payback period up to 33 years, a 1% fixed rate, and grants based on need not to exceed 90% of project costs. For more information, go to Bit. Ly/OffFarmLoans.

#### Announcements

#### J. FRANK SCHMIDT & SON CO. **RECEIVES AWARD FROM OSU**

J. Frank Schmidt & Son Co. of Boring, Oregon was among four firms and one individual honored at the Excellence in Family Business Awards presented May 7 by the Oregon State University College of Business, the university said in a statement.

The other honorees were Freres Lumber (Lyons, Oregon), Pacific Coast Fresh Fruit Company (Portland), Ale and Cider House (West Linn, Oregon) and OSU student Viri Rodriguez-Medrano (North Powder, Oregon).

J. Frank Schmidt & Son Co. received the Generational Development Award. Members of the Schmidt family have led the company since its inception more than 75 years ago.

#### SIMPLOT GROWER SOLUTIONS ANNOUNCES DISTRIBUTION AGREEMENT WITH VESTARON

Vestaron Corporation, a leading innovator in sustainable crop protection solutions, and Simplot Grower Solutions, a North American agricultural retailer, have officially announced a distribution agreement.

The collaboration brings together Vestaron's peptide-based insecticides and Simplot Grower Solutions' extensive network.

#### KAMRON NEWBERRY JOINS **AMERICANHORT D.C. OFFICE**

Kamron Newberry joins the AmericanHort Advocacy and Government Affairs team in Washington, D.C., as



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33740 SE Lusted Rd Gresham, OR 97080 the advocacy project coordinator.

Newberry will help develop and manage strategic advocacy projects for AmericanHort and its members.

#### In memoriam

#### BARBARA MAXINE HUPP SEPT. 20, 1936 - MAY 4, 2024

Longtime nurserywoman and Christmas tree grower Barbara Hupp passed away at her home on May 4, 2024. She was 87 years old.

Barbara and



Barbara Hupp

Delbert Hupp started their nursery, **Drakes Crossing** 

Nursery, in 1967 and began their Christmas tree farm, Hupp Farms, shortly after. Barbara and Delbert worked tirelessly as wonderful partners in business and marriage. Over the years, the farms grew and continue to be family-managed today. To her death, Barbara loved spending time out on the farm.

Barbara was preceded in death by her husband Delbert. Surviving industry family members include: her daughter Kathy LeCompte, and her husband Dave, of Brooks, Oregon; her son Jan Hupp, and his wife Cindy, of Silverton, Oregon; and grandson Jason Hupp, and his wife Steffanie, of Silverton.

Barbara spent the last few weeks of her life surrounded by many family members, farm team members, and friends. In lieu of flowers, donations can be made to the Drakes Crossing Volunteer Firefighter Association and the Oregon Nurseries Foundation.

A memorial service was held May 14 at The Oregon Garden Pavilion in Silverton.

#### CHRISTOPHER KELLER

The Oregon Association of Nurseries

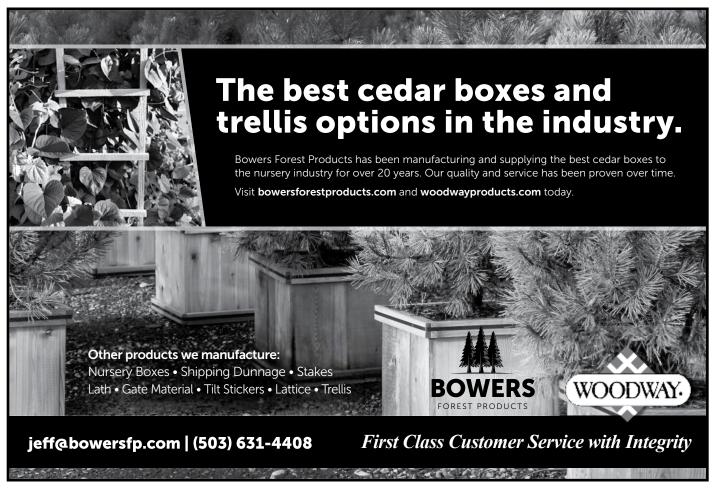
is saddened to report the passing of Christopher Keller, 63, on April 18, 2024 in Wallkill, New York, according to Legacy.com.



Keller was Christopher Keller

born in Houston, Texas and went on to open his own landscaping business. He then decided to go into nursery sales and handled sales for multiple nurseries including

Surface Nursery in Gresham, Oregon.



# **Rhododendrons: More** than meets the eye



Both leaves and flower petals are very narrow on the Rhododendron linearifolium and it is probably one of the most unlikely looking rhododendrons that most people have seen. PHOTO BY MIKE DARCY

HEN DRIVING THROUGH a neighborhood from early spring through mid-summer, sometimes even late winter, the likelihood of seeing rhododendrons blooming is very high. Whether it is an older established neighborhood, or a relatively new one, there will probably be some rhododendrons in the plant palette.

And why shouldn't there be? With their large colorful trusses of flowers, they can make quite a powerful statement in the garden.

The diversity of rhododendrons is vast. Not just their growing habits but their leaves, flowers, sun/shade locations, and fragrance can all be variable. There are, of course, rhododendrons with names that are popular and often even known to entry-level gardeners, probably because they have learned about a particular name from a neighbor. These well-known hybrid rhododendrons are good sellers at garden centers, especially when they are in bloom.

#### **Another option**

However, there is another classification of rhododendrons that is referred to as species rhododendrons. A quick botanical lesson reveals that the word 'species' refers to one plant or multiple plants. In botanical terminology, the word species is both singular and plural. Another quick fact is that all azaleas are technically rhododendrons. And as a final fact, there are native rhododendrons in the Pacific Northwest, primarily on the western slopes of the Cascades.

While there is certainly nothing wrong with planting a hybrid rhododendron, sometimes it can be interesting to get out of our comfort zone and plant something new. Species rhododendrons may not always have the spectacular flowers that many hybrids do, and while a species can give color interest with their flowers, they can also offer other features for garden interest such as colored or variegated foliage, indumentum (fine hairs), and variable growth habits.

Most garden centers carry predominately hybrid types, but there is a niche market for the species rhododendron, and it is surprising how many customers might gravitate toward a plant that was somewhat out of the norm.

Most, if not all, species rhododen-



Mike Darcy

Head "plant nerd," longtime speaker, host of gardening shows on radio and TV, and author of the In the Garden email newsletter. You can reach Mike, or subscribe to his newsletter, at ITGMikeDarcy@Comcast.net.

drons are not grown in a large quantity by wholesale growers and thus, might be difficult to find. However, having a small display that is devoted to species could be a unique opportunity for additional sales resulting from word-of-mouth inspiration from other gardeners that this choice is available. The following species rhododendrons are some that offer some unique qualities and should be available.

Let's start with Rhododendron macrophyllum, which is native from British Columbia through Northern California. The flower color of this plant ranges from rose to purple to shades of pink to white. It is the state flower of Washington. Mike Stewart, retired owner of Dover Nursery in Sandy, Oregon, and a rhododendron enthusiast, said, "This is a picture of Rhododendron macrophyllum and it has all three-color forms grafted on to one plant. The white form is one that my parents discovered in the 1960s and it is named 'Clackamas White'. The pink bloom is the normal native pink in the Cascades. The red one was discovered in Northern California years ago. There is even color variation in the plant in our local environment."

Rhododendron ponticum 'Variegatum' provides color in the garden all year with the creamy white edge around the margin of the leaves. In addition to the attractive foliage, the flowers are in trusses of lavender purple. There is a plant in my garden that is about 6 feet tall with an open growth pattern. Some of the leaves did get damaged with our January winter storm, but new growth is appearing, and it looks fine.

Both leaves and flower petals are



#### What I'm Hearing

very narrow on the Rhododendron linearifolium and it is probably one of the most unlikely looking rhododendrons that most people have seen. It will reach a height of about 3 feet and the flowers are so deeply divided that it is sometime referred to by the common name of spider azalea. The narrow leaves tend to have a reddish cast in the winter. This would be a good specimen plant for a rock garden.

There are several different forms of Rhododendron yakushimanum with 'Yaku Angel' being a favorite in my garden. This group of rhododendrons comes from Yakushima Island, Japan. They seem to be quite winter hardy, have excellent foliage, and superb indumentum, and very showy flowers. 'Yaku Angel' has pink flower buds that open to white.

Not only does Rhododendron sinogrande have the largest leaves of any rhododendron, but it is also probably one

of the most well-known of the genus. It is a magnificent plant in the garden with young new growth being a silvery gray. Older leaves have a silver-white indumentum underneath. The bell-shaped flowers are creamy white to pale yellow and very showy. This species requires some protection from the afternoon summer sun and extreme winter cold. Some plants were damaged in our January storm.

Rhododendron pachysanthum is an excellent foliage plant in all seasons and is often considered one of the best. The new leaf growth is a solid reddish brown with the underneath being a rusty brown. The new growth can almost be showier than the flowers. The bell-shaped flowers are light pink to white.

The rhododendrons featured here are just the tip of the iceberg as to what is available. Any of these would be a good starter plant for a customer wanting to



Rhododendron ponticum 'Variegatum' provides color in the garden all year with the creamy white edge around the margin of the leaves. PHOTO BY MIKE DARCY

experiment and try something new. For a garden center selling this for the first time, or even a garden center that has some experience with species rhododendrons, signage would be very important.

Customers would need to be directed to this area with some information as to what a species rhododendron is and what makes them special. It can be a unique opportunity to gain new customers. Gardeners talk, and word would soon spread.



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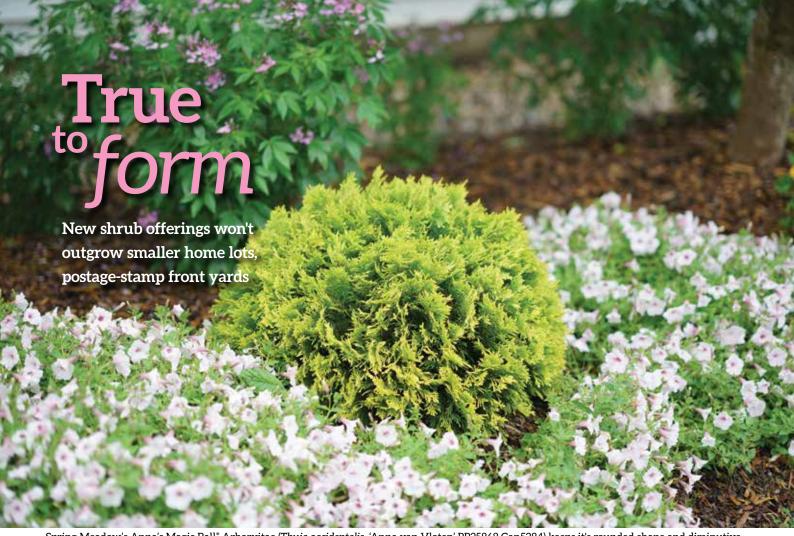
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Spring Meadow's Anna's Magic Ball\* Arborvitae (Thuja occidentalis 'Anna van Vloten' PP25868 Can5284) keeps it's rounded shape and diminutive size withoug pruning. PHOTO COURTESY SPRING MEADOW NURSERY

#### BY EMILY LINDBLOM

ANDSCAPE DESIGNERS FACE the challenges of smaller lot sizes and density of homes when choosing front-yard shrubs. Growers and nurseries are meeting these challenges with more shrub options that stay true to size and will not outgrow the spots where they are planted.

"I am more about plants growing in place for years to come, than I am about ripping them out because they got too big and putting in something new," said longtime residential designer Kip Nordstrom, owner of Kip Nordstrom Design in Lake Oswego, Oregon. "I feel it is my job as designer to pick plants for spaces that meet size, light requirements, soil conditions, and longevity."

#### What to look for

Georgia Clay, plant selections manager at multistate grower Monrovia Nursery (based in California with other farms in Oregon, Georgia and Connecticut), collaborates with breeders in new plant



One hydrangea that has been sized down to fit smaller landscapes more creatively is Tiny Quick Fire® Panicle Hydrangea (Hydrangea paniculata 'SMHPLQF' PP25136) grows 18 inches to 3 feet high and 2-3 feet wide. PHOTO COURTESY SPRING MEADOW NURSERY

#### True to form

trials and helps make decisions about which new plants ultimately make it to a garden center. When helping select frontyard shrubs to bring to market, she looks for ones that will stay compact and will branch well without much input from the gardener themselves.

She also considers whether or not they will have multiple seasons of interest, drought tolerance, disease resistance, and ease of maintenance.

"We look for bright, bold colors with interesting, unique forms and flowers," Clay said. "We're seeing a demand for dark foliage or variegated foliage."

Nicholas Staddon, company spokesperson at **Everde Growers** (based in Texas with other farms in Oregon, Florida and California), works extensively with landscape architects, designers and contractors on meeting their plant needs.

He said compact shrubs started to become more popular as the Baby Boomer generation began retiring and doing more gardening. Compact shrubs offer an opportunity to garden with less maintenance and offer a beautiful first impression of a house.

"Front areas of the house are absolutely crucial," Staddon said. "History shows if you're renovating a house for sale, you'll get a higher rate of return on dollars spent on the garden than a bathroom or kitchen."

#### A tasty compact option

New compact forms of blueberries are a good choice for front yard gardens, plus they provide a tasty summertime treat.

Blueberries from the Bushel and Berry® collection are a top choice for Staddon.

"There are numerous varieties that are evergreen year round, they're easy to maintain, self pollinating and fruiting," Staddon said. "There are beautiful colored leaves on smaller varieties and small com-



BerryBux® looks like a boxwood, but has the bonus of blueberries. Its boxwood-like foliage and compact habit make it perfect for planting as a hedge or in groups in the garden. PHOTO COURTSY BUSHEL AND BERRY®

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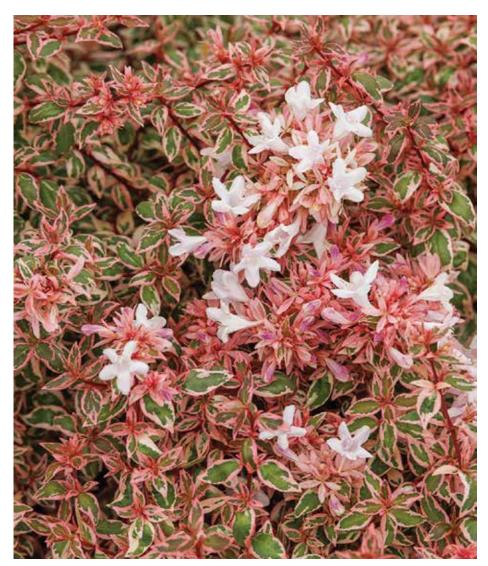
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Angel's Blush\* Abelia (Abelia × grandiflora 'ABL-PII' PPAF) grows 2 feet tall by 3 feet wide and has small green and white variegated leaves that take on a rose-pink hue in cold weather and its white summer blooms are loved by hummingbirds. PHOTO COURTESY MONROVIA

pact berries that are terrific for birds."

A few compact blueberry varieties from the Bushel and Berry® collection are the BerryBux® (Vaccinium 'BerryBux' PP25467) that resembles a boxwood and grows 2-3 feet high and the Jelly Bean® (Vaccinium corymbosum 'ZF06-179' PP24662) at only 1-2 feet high with a mounded shape, sweet berries and leaves that become amber in the autumn.

Staddon said the Peach Sorbet® (V. c. 'ZF06-043' PP23325) is an absolute winner, requiring only 300 chill hours and growing to 18 inches to 2 feet high in a mounded shape with green, orange and pink colored foliage.

Clay said Monrovia's Bountiful Blue® (Vaccinium corvmbosum 'FLX-2' PP19381) collection of blueberries does well at staying compact to 3 by 3 feet with beautiful foliage and berries.

"Bountiful Blue" has one of the blu-

est berries you can get so there's quite a lot of ornamental value," Clay said. "We partnered with breeders and Monrovia introduced them exclusively."

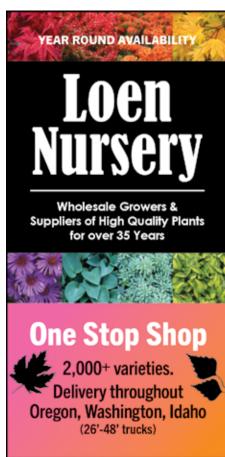
Clay said there's a compact female holly variety, LittleOne® Blue Holly (Ilex × meserveae 'MonWilde' PPAF) that's 3-4 feet tall and wide.

"That is a really unique size for a holly that will produce berries in the winter," Clay said. "It has beautiful foliage all year round and nice berries in the winter so it's a great option for the front yard." It was found in Ohio so it's zone 5 hardy.

#### Punch of color and texture

Newly developed cultivars of longtime favorites offer compact options that provide color and texture.

Heavenly bamboo 'Nana' (Nandina domestica 'Atropurpurea Nana') grows slowly to 2–3 feet, as does the *N. d.* 



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#### True to form



Monrovia's Summerlasting™ Crape Myrtles (*Lagerstroemia indica*) are bred to be compact shrubs without any pruning and come in three varieties: Strawberry (L.i. 'HOCH266' PP34124), Raspberry (L.i. 'HOCH631' PP33208), and Plum (L.i. '1605' PPAF). PHOTO COURTESY MONROVIA

'Fire Power', which Nordstrom said is useful for color in a front garden for size. She said the Cavatine Pieris (*Pieris japonica* 'Cavatine') is also a slow grower that gets to 2 by 2 feet in 10 years and works well to plant under a window because it won't be blocked over time.

Staddon recommended Japanese laurel varieties like Gold Dust (*Aucuba japonica* 'Gold Dust') and Mr. Goldstrike (*A. j.* 'Mr. Goldstrike') with their emerald green and gold variegation.

Angel's Blush\* abelia (*Abelia* × *grandiflora* 'ABL-PII' PPAF) is one of Clay's favorite shrubs and it grows two 2 tall by 3 feet wide. It has small green and white variegated leaves that take on a rose-pink hue in cold weather and its white summer blooms are loved by hummingbirds.

"A lot of abelias on the market send off wild shoots, whereas Angel's Blush" stays tight so it is nicer for a gardener to keep up with, without a lot of pruning," Clay said. "In the cooler months there's a pink cast over it and it looks nice and holds its variegation without reverting." She added the Angel's Blush\* holds its foli-

age longer in the winter than most Abelias.

A new introduction from Monrovia in 2024 is the Golden Child<sup>™</sup> Arborvitae (*Thuja occidentalis* 'Mirjam' PP20127) with a hardiness zone 4 and no maintenance required to grow into a 2 by 2 foot rounded ball of golden foliage.

"What we love is its amazing sun tolerance," Clay said. "A lot of *Thuja* will burn in full sun and heat and Golden Child™ has been amazing in those scenarios."

#### **Smaller versions of larger shrubs**

Newer cultivars of popular ornamental shrubs provide smaller shapes and rounded forms.

Natalie Carmolli is the media and public relations specialist at **Spring**Meadow Nursery in Grand Haven,
Michigan, the grower of the Proven
Winners ColorChoice brand for ornamental shrubs. She said her company grows hundreds of varieties of shrubs that stay true to size.

Spring Meadow's varieties include Anna's Magic Ball® Arborvitae (*T. o.* 'Anna van Vloten' PP25868 Can5284) and Tater Tot\* Arborvitae (*T. o.* 'SMNTOBAB' PP30761 Can PBRAF), both of which have hardiness zones three through eight and grow 2–3 feet high and three to four feet wide.

"These two rounded arborvitae keep their shape without pruning, stay on the smaller side, and offer distinctly different foliage colors," Carmolli said.

One of Nordstrom's favorite plants in a landscape is false cypress (*Chamaecyparis*), especially Soft Serve\* (*C. pisifera*), which makes a fluffy statement and can be easily maintained to hold its size and shape. Koster's Hinoke false cypress (*Chamaecaparis obtusa* 'Kosteri') is slow growing to reach 4–5 feet by 3–4 feet and can be pruned as an evergreen focal point.

#### **Pollinator-friendly options**

There's also a cultural shift from front yards with grass toward front gardens with fruiting shrubs and other perennials that are more beneficial for pollinators, Staddon said.

He recommended fragrant ever-



green shrubs such as *Daphne* that can make an impact year-round without taking up too much space in a front yard.

Blue Mist Spirea (*Caryopteris* × *clando-nensis*) is another of Staddon's favorites, growing about 2–3 feet high and wide.

"It's rounded, compact and during the summer months it has a dazzling display of sky blue flowers and it's a magnet for bumblebees and other pollinators," Staddon said.

Spring Meadow's Landscape Shrub of the Year is Fizzy Mizzy\* Sweetspire (*Itea* virginica 'SMNIVMM' PP33549, Can PBRAF), a native species with bright white flowers that stays at about 3 feet.

"It's zone five to nine in full sun to shade, so it's super adaptable and in different areas and very rounded," Carmolli said. "One thing that makes it different is that its flower spikes stick straight up on the plant like exclamation points.



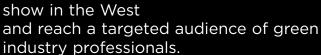
Japanese laural variety Mr. Goldstrike (A. j. 'Mr. Goldstrike') is compact with emerald green and gold variegation. PHOTO COURTESY MONROVIA

# Reach green industry professionals



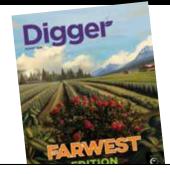
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#### True to form

Pollinators love it and it's very adaptable," Carmolli said.

Staddon said another excellent choice is a new variety of bottlebrush called Light Show\* Red Bottlebrush (*Callistemon Viminalis* 'LJ23' PP27547) that grows 3–4 feet, has a long blooming season with fire engine red flowers, and is drought tolerant.

Other options include the 'Soft Caress' Mahonia (*Mahonia eurybracteata* 'Soft Caress'), an evergreen that only grows to 3–4 feet with rich green leaves, and Flower Carpet\* Amber Rose (*Rosa* × 'NOA97400A' PP17098), a groundcover rose that grows 2–3 feet high and about 30 inches across.

Monrovia's Summerlasting<sup>™</sup> Crape Myrtles (*Lagerstroemia indica*) are also bred to be compact flowering shrubs at 3 by 3 feet without any input from the gardener and come in various colors. These are known for their early blooms and repeat blooms over the summer season, as well as their disease resistance.

#### **Dwarf hydrangeas**

"Hydrangeas are always a good choice for showy front yard placement and dwarf hydrangeas stay neat and tidy for front of the bed placement," Carmolli said.

Invincibelle Wee White Smooth Hydrangea (*Hydrangea arborescens* 'NCHA5' PP30296) is only 1 foot to 2½ feet high and wide.

"Its flowers have a light blush of pink and white and its leaves are a nice jade green color," Carmolli said. "It's small and easy to grow."

Tiny Quick Fire\* Panicle Hydrangea (*Hydrangea paniculata* 'SMHPLQF' PP25136) grows 18 inches to 3 feet high and 2–3 feet wide, and Fire Light Tidbit\* Panicle Hydrangea (*H. p* 'SMNHPK' PP32512) is 2–3 feet high and three feet wide. She said these hydrangeas are traditionally plants that people know and love but are sized down to fit smaller land-scapes more creatively.

Landscape designers can "put them in a container or border or tuck them into an already established garden," Carmolli said. Tiny Quick Fire\* blooms earlier than other hydrangeas and transitions its color sooner from white to pink as the season progresses. Fire Light Tidbit\* is known for its deep red color once it reaches the end of the summer.

"These three hydrangeas set their buds exclusively on new wood, so they are super easy to grow and maintain," Carmolli said.

With the many varieties of compact shrubs that growers are producing, nurseries are able to meet the demand from landscape designers and homeowners for smaller, compact shrubs to fit in a front yard.

Emily Lindblom is an Oregon-based freelance journalist covering business, environmental and agricultural news. She has a background in community reporting and a master's degree in multimedia journalism. Visit her website at EmilyLindblom.com or reach her at Emily@EmilyLindblom.

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After talking to nurseries and getting feedback, Burro developed Burro Grande, with a longer range and greater towing capacity than its first product. PHOTO COURTESY BURRO

#### BY MITCH LIES

ONATHAN BUSWELL IS LOOKING to incorporate an autonomous vehicle to move products from the canning shed to the field at Monrovia Nursery in Dayton, Oregon. Trent Morrison is looking to use robots to gather inventory at John Holmlund Nursery in Boring, Oregon. Other Oregon nurseries could soon be looking to the sky to count inventory.

As labor costs soar and the need for efficiencies increases, Oregon nurseries are embracing technology like never before.

Just in the past year, Burro, a farmequipment manufacturing company based out Philadelphia, Pennsylvania, with a West Coast office in Visalia, California, has introduced an autonomous towing vehicle to meet the needs of nurseries. Moss robotics, a company based in Pittsburgh, Pennslvania, has introduced a robot that can compile inventory in nurseries more accurately and more efficiently than humans. And HarvestWise Drone Solutions out of Oregon City, Oregon, has implemented agricultural software in its drones and is looking to work with nurseries on counting inventory from the sky.

This technology renaissance is coming at a time when labor costs are skyrocketing with the rollout of Oregon's agricultural overtime law. The law requires farms to pay agricultural workers timeand-a-half after 55 hours in a workweek this year. The threshold goes down to 48 hours in 2025 and 2026 before settling out at 40 hours in 2027 and beyond. And it comes at a time when adding efficiencies to operations is critical to the long-term health of the industry.

#### **Autonomous vehicles**

Buswell, director of automation for Monrovia, is among those looking at utilizing autonomous vehicles in their operations. He and others have been working with Burro to revise its initial autonomous vehicle to better meet the needs of nurseries, and Burro has developed a new iteration of its vehicle. Called the Burro

Grande, the new vehicle comes with increased towing capacity and the option of an advance navigation system, which replaces the need to manually instruct a vehicle's path to train it where to go.

"With the addition of the Atlas Navigation System on the Burro, we are able to utilize our drone mapping and our RTK (Real Time Kinematics) systems and get very accurate mapping of the nursery and implement that into the Burro's brain essentially," Buswell said. "And then we can draw the paths on a tablet in a matter of seconds as opposed to have it follow a human or a pickup around to train its pathway."

The tow capacity of the autonomous vehicle, meanwhile, was increased from 2,500 pounds to 5,000 pounds, a feature Buswell saw on display in December.

"The Burro Grande prototype was out here just before Christmas, and we were able to pull three fully loaded trailers with 15-gallon pots up our steepest grade. It was pretty impressive," Buswell said. "It just pulled the trailers right up without any issues."

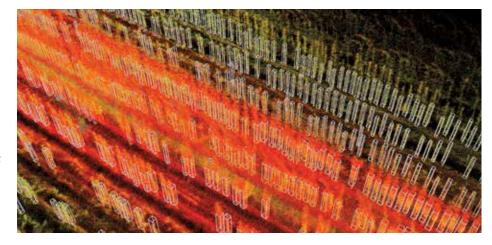
#### **Next wave of automation**



moss, a new robotics company, is developing an autonomous robot that can count plant inventory (above) and becuase it scans the entire plant in three dimensions, it can also extract the height of the trees and potentially the caliper as well (below). PHOTO COURTESY MOSS

Mitchell Jacobson, engineer at **Gold Family Farms** (Hillsboro, Oregon), who also has seen the Burro Grande at work, said he too was impressed with the new tow weight. "We have some pretty good hills here and tons of gravel, and one of our biggest worries was stopping it, because it's towing 3,000, 4,000, 5,000 pounds coming down a hill and this thing is only 4-feet-by-5-feet and probably 3 feet tall, but it stopped no problem," Jacobson said. "I was impressed."

Gold Family Farms was looking at the Burro Grande as part of a comprehensive plan to get more out of its skilled labor force. "We were looking for things that could be easily done by machines that don't really need a person's touch," Jacobson said, "and it seems like transportation, just driving back and forth is kind of a waste of human capital. Instead of having a highly skilled person driving back and forth from the potting shed to the field, we figure we could utilize their time more efficiently."



#### Harvest aid

Chris Thiesen, head of California sales and services for Burro, said the company initially designed Burro as a harvest aid for grapes and blueberries, where harvest crews would transport blueberries or grapes on the Burro platforms from the field to drop-off points. In blueberries, Thiesen said farms were able to see a 15–20% bump in productivity when using the machines.

Burro started designing the machines for nurseries in 2020, starting with a citrus nursery. Here again, the Burro worked as hoped, providing a 28% increase in throughput for the nursery by replacing a conveyor-belt system to move plants and reducing the operation's manpower from four to two.

Then last year, after talking to additional nurseries and getting feedback, the company began working on a bigger tow-

ing capacity. "We found pretty quickly that we needed to be able to offer the market something more substantial than our base Burro," Thiesen said. That led to the development of the Burro Grande, which has a 15 mile range per charge and a charge time of around 10 hours for its 11.4 horsepower engine. "You can plug it into a normal 120-volt circuit, and it charges overnight," Thiesen said.

Burro, which has more than 350 systems in operation around the world, makes the machines available for purchase or lease, and Thiesen said the company can turn over an order in a matter of weeks.

#### **Robotic counters**

While some nurseries are looking to move plants with autonomous vehicles, others like John Holmlund Nursery are looking at automation for compiling inventory, in part to improve product forecasting.

"We've always had good guestimates on what we're going to have available to sell, but anytime you can have more accurate data and the sooner we can have that data. the better off our sales team will be," said Morrison, program manager at Holmlund.

Better inventory data also can improve the nursery's understanding of how to maximize throughput, Morrison said. "Having this kind of data, we can start analyzing the metrics of what works where, and if I can start gathering data on weather and water and count for this variety in this field, that can be extremely helpful.

"A lot of our farm managers know intuitively how this works, and that's great," Morrison added, "but it is also quite a risk for farms to rely on single individuals to have that kind of institutional knowledge."

A robot also tends to be more accurate than a human when it comes to conducting inventory, Morrison said. "If you put me out in that field to do inventory, I'm going to be bored out of my mind in about two minutes," he said. "I'm probably going to get sloppy. So, this is just ripe for automation."

Also, Morrison said, with a robot, the nursery can count inventory several times a year, versus once a year when using

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#### Next wave of automation

manual labor. "If we can get more information and better information more often, we just think that is something we need to be taking a look at."

One company offering a service that has piqued Morrison's interest is moss, a robotics operation started by recent graduates of Carnegie Mellon University's Robotics Institute.

CEO Di Hu said that they started looking into robots to count inventory after realizing that the precision-agriculture technology being used in herbicide applications could also be used for counting plants. And to date, it appears they are correct. Initial tests show the robots can scan and count trees quicker and more accurately than a human. "And because we scan all the 3D information about it, we can extract not just that the tree is there, but also the height of the tree and also potentially, the caliper of the tree," Hu said.

The company has modified a sensor kit that guides the autonomous robot with a backpack setup, and it has a vehicle-mounting setup so a nursery can mount it on an ATV or tractor, providing it the kind of flexibility that Hu hopes will attract widespread attention from nurseries.

Another method for counting inventory that nurseries may be using in the future involves the use of drones. As a DeForest, of HarvestWise Drone Solutions, said he has implemented existing software into drones for providing inventory and crown potential in a



HarvestWise Drone Solutions has implemented software into drones for providing inventory and crown potential in a Christmas tree operation and hopes to apply the technology to nurseries. Photo by VIC Panichkul (ABOVE) Photo Courtesy Harvestwise Drone Solutions (BELOW)



Christmas tree operation, and he believes the method has a tremendous upside in nurseries, as well.

DeForest said he was able to fly a 62-acre Christmas tree field in about 35 to 40 minutes, and that it takes 24 to 48 hours to have the data analyzed. "It's

pretty slick," DeForest said. "Now that I know I can do it in Christmas trees, I'm confident I can do it for nurseries, too."

In addition, HarvestWise is working on a functionality that will provide information on the height of the trees in a stand and a height distribution of the counted trees, a functionality expected to be available in January of 2025.

He is now looking for nurseries interested in trying the system.

Oregon nurseries have long utilized cutting edge technology in their adoption of automated greenhouse systems and other leading edge technology in agriculture. Today, with their eyes on robots, drones and autonomous vehicles, nurseries are leaning even further into the future.

Mitch Lies is a freelance writer covering agricultural issues based in Salem Oregon. He can be reached at mitchlies@comcast.net.



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Bailey Nurseries worked with the University of Georgia on the Cool Glow® series of Nandina, including this Cool Glow® Peach (N. d. 'Zhnan26' PP32397). In addition to its shades of peach and apricot in the fall and winter, it has compact habit and a sparse seed set. PHOTO COURTESY BAILEY NURSERIES

#### BY JON BELL

HEY CAN BE A FIERY RED, a pretty pink or a deep, dark burgundy. Some are golden or amber depending on the season, while others nearly glow in soft peach tones.

But when Debbie Lonnee, product development manager for Bailey Nursery, comes to Oregon in the summer, she sees them at Bailey's locations on Sauvie Island and in the Willamette Valley at their tamest. They are the leafy shrubs commonly called Heavenly Bamboo or Sacred Bamboo (Nandina domestica).

"I usually go to Oregon in the summer," Lonnee said, "when Nandina is boring and green."

That's not really a knock on the plant, however. In fact, one of Nandina's most attractive traits is that is offers yearround color, whether it's the more vibrant hues present in the late fall and winter or the milder greens of spring and summer.

"They look good year-round," said Jim Simnitt, co-owner of **Simnitt Nursery** (Canby, Oregon), which grows five different varieties of Nandina. "They show color change, some of them have berries so they add interest, and they're not deciduous, so they don't go away in the fall and turn to sticks."

#### A good luck plant

Native to China and Japan, Nandina made its way to Europe and North America by way of introduction in the early 1800s. According to information from the University of Arizona's Campus Arboretum, it was named by Swedish naturalist Carl Peter Thunberg in 1781, who named it after *nanten*, the common Japanese name, which means southern

sky. The Japanese word also has the same pronunciation as the word meaning "problems that turn for the better," which has given Nandina an association with good luck.

Though its common name refers to it as a bamboo, Nandina is similar to bamboo only in appearance. In reality, it is a broadleaf evergreen shrub that can grow to between 2 and 4 feet wide and 6 to 8 feet tall. They are hardy from zone 6 to 9 in North America and are ideal for foundation and mass plantings.

Cindy Ferguson is a certified production horticulturalist for Sidhu & Sons **Nursery** outside of Vancouver, British Columbia, Canada. She said the attractive shrub is ideal for a wide range of uses, as well as being versatile in the garden and happy in full sun to partial shade.

"Nandina is a staple in many plant-

#### 'Heavenly' genus



Bright yellow to lime green fall and winter color distinguish this *Nandina*. Cool Glow<sup>®</sup> Lime has lacy dark green foliage throughout the year with a compact habit and sparse seed set. It grows well in a range of soil types, including dry conditions. Photo COURTESY BAILEY NURSERIES

ings, as its new flush of foliage in the spring stands out and the showy fall and winter foliage allows this evergreen to stand out during the drab winter months," Ferguson said.

And while *Nandina* prefers slightly acid soil, it's easy to grow, will tolerate most growing conditions and requires little pruning or maintenance.

"Heavenly Bamboo is an excellent specimen or accent plant," Ferguson said. "It works well by adding height to container plantings. It also makes an eyecatching border or small hedge. The finely textured leaves set it apart from other trees and shrubs. It's also sought after for city or urban plantings, as it's tolerant of drought and urban conditions once established."

#### **Cultivating colors**

Some cultivars of *Nandina* have been designated as invasive in certain states, as some of the plants have a tendency to spread and crowd out native species. And the berries of some *Nandina* have proven to be toxic to birds, who feast on the fruit late in the season once other food sources have been depleted. Experts recommend that home gardeners who have *Nandina* that produce berries simply prune the fruit as it appears.

These characteristics, along with a desire to come up with even bolder colors, have led to the creation of hundreds of *Nandina*. The UA Campus Arboretum notes that at one time, there were more than 200 cultivars developed in Japan alone.

Lonnee said Bailey Nursery and its

breeding arm, Bailey Innovations, have worked with breeders in North America and around the world on a range of new cultivars, including *Nandina*. The nursery worked closely with breeders at the University of Georgia to introduce three popular ones as part of its First Editions collection of licensed plants: Cool Glow® Pomegranate (*N. d.* 'Zhnan53' PP32422), Cool Glow® Peach (*N. d.* 'Zhnan28' PP32397) and Cool Glow® Lime (*N. d.* 'Zhnan102' PP32470).

In addition to their unique colors, the Peach and Lime cultivars are described as having "lacy dark green foliage that is incredibly attractive throughout the year with a compact habit and spare seed set," the latter attribute meaning they don't



spread as much as some others might. All three also grow well in a range of soil types, including dry conditions, which has made them especially popular in the South.

"I was born and raised in Minnesota, and we don't grow that many broadleaf evergreens there," Lonnee said. "In the South, that's what gardeners want in their landscape. They want foliage all year long. That's exactly what *Nandina* gives them."

She said commercial landscapers are also big fans of *Nandina* for medians, parking areas, hospitals and other locations.

**Kraemer's Nursery**, a wholesale nursery in Mount Angel, Oregon, is licensed to grow Bailey's First Editions Nandina. It also grows some others, including *N. d.* 'Tuscan Flame' PP21940 — a drought-tolerant shrub with bright red foliage — and *N. d.* 'Gulf Stream', which has foliage that transforms from red in the spring to blue-green in the summer before white flowers appear.



#### 'Heavenly' genus

#### Hot sellers

Chris Ames, operations director for Kraemer's, said the nursery propagates its *Nandina* via cuttings that are placed in flats with pumice and peat moss in September. By February, they are ready to go into liner pots, and by the following August, they're transplanted into two-gallon pots. It then takes another year for them to finish. The entire time they're under cover, first in a mist house, then in a polyhouse that has side walls that can be raised and lowered as necessary to increase airflow and maintain temperatures.

Ames said *Nandina* typically grow well, the only main concern being too much water. And the shrubs always sell well, largely in the fall but also in spring, another testament to *Nandina's* yearround coloring.

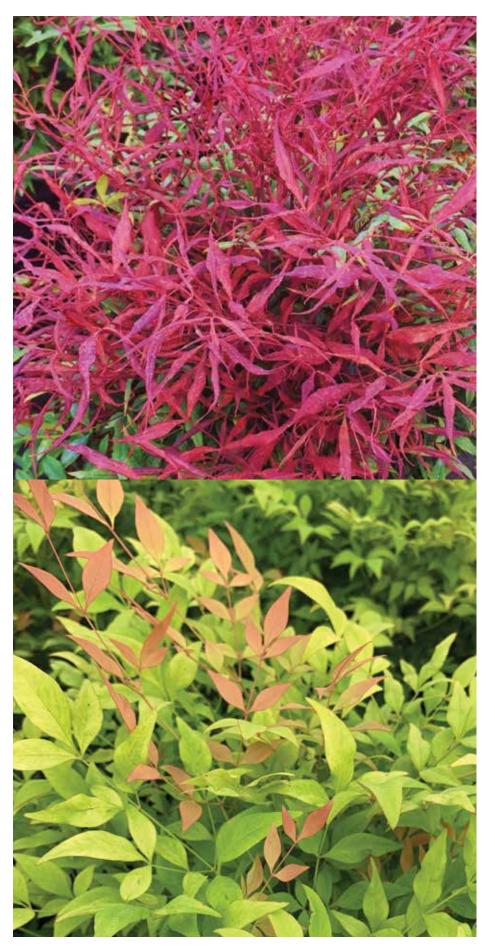
"When they're ready, they sell," Ames said, noting that Kraemer's customers are largely big box stores and independent garden centers. "They're the kind of item that will sell year-round. A lot of them have really nice fall color and will sell then, but also they're nice in the spring too. If I looked out there now, there's hardly any left. We love that."

Although they do sell well for Kraemer's, Ames said *Nandina* are a small percentage of what the nursery sells annually. It may grow more than 5,000 *Nandina* shrubs each year, but it also grows more than half-a-million roses annually.

"It's a small amount, but we like having that variety," Ames said. "And the colors are so interesting on them."

Ferguson said Sidhu & Sons' *Nandina* offerings include  $N.\ d.$  'Gulf Stream',  $N.\ d.$  'Harbour Dwarf' and  $N.\ d.$  'Fire Power', plus its own trademarked introductions of Bonfire<sup>TM</sup> ( $N.\ d.$  'Nansid6' PP29798) and Goldstream<sup>TM</sup> ( $N.\ d.$  'Nansid11' PP34614), all of which are offered in liner size, quart and container #1, #2 and #3 pots.

"While the regular varieties are requested for orders, our most popular by far is our introduction 'Nansid6' Bonfire<sup>TM</sup>," she said. "With its unique slender twisty leaves and fiery new growth, this shrub continually sells out and is in high demand."



Sidhu & Sons' trademarked *Nandina* introductions of Bonfire<sup>™</sup> (N. d. 'Nansidó' PP29798, top photo) and Goldstream<sup>™</sup> (N. d. 'Nansid11' PP34614, bottom photo). COURTESY SIDHU & SONS

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#### **Heavenly colors**



One of the Nandina's that Kramer's Nursery in Mount Angel, Oregon, grows includes N. d. 'Tuscan Flame' PP21940, a drought-tolerant shrub with bright red foliage throughout the year. PHOTO COURTESY BAILEY NURSERIES



#### Sprouting up

In addition to the cultivars it already offers, Ferguson said there are a couple other introductions of *Nandina* currently being trialed at Sidhu & Sons. That means there may be even more options to choose from in the not-too-distant future.

The same goes for Bailey Nurseries. Lonnee said the company is hoping to come up with additional Nandina selections for its First Editions collection that would be more drought tolerant and amenable to the changing climates in California and Arizona. Bailey has worked closely with the University of California, both at Davis and Irvine, in the past on coming up with new cultivars of other plants that are more drought tolerant. It's planning to do the same with Nandina in the coming years after first spending more time on the breeding end of the process. The goal there is to come up with Nandina that have even better colors than they already do.

"We're trying to improve the colors," Lonnee said. "The reds are so popular with customers, so we're looking into some that have even better red and then some with a great burgundy color."

Once they identify the cultivars with the best colors, they'll move on to drought testing at various sites around the country.

"If we know they work in California, that's where we'll be able to market them in a distinctive way," Lonnee said. "We would like to have First Editions in all our stores in the country. We needed to find more plants for California and Arizona, and I think the *Nandina* work we're doing will fit the bill."

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

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The Oregon Association of Nurseries is the community dedicated to the long-term success, profitability and excellence of Oregon's nursery and greenhouse industry.

## GROWING KNOWLEDGE

Series content is coordinated by Dr. Lloyd Nackley, associate professor of nursery production and greenhouse management at Oregon State University in Corvallis, Oregon.





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Figure 1. Diagnostic symptoms of boxwood blight include (A) defoliation, (B) leaf spots, and (C) black streaks on stems. Photos COURTESY OF CHUAN HONG

## **Boxwood blight**

#### New tools to forecast infection risk in Pacific Northwest nurseries

BY BRITTANY S. BARKER AND LEONARD COOP

OXWOOD BLIGHT, also known as box blight, is an emerging disease of boxwood (*Buxus* spp.), a major evergreen shrub crop and iconic landscape plant. This disease is caused by two invasive ascomycete fungi, *Calonectria pseudonaviculata*, and *C. henricotiae*.

Minimizing the spread of the pathogen in Oregon is critical because this state is the largest producer of boxwood in the nation. To date, boxwood blight has been confirmed at more than 12 locations (mostly in nurseries) in six different counties in western Oregon.

Both pathogen species can infect and blight boxwood foliage, resulting in rapid plant death (Fig. 1). In the United States, *C. pseudoniculata* has spread to at least 30 states since it was first detected in 2011, where it has caused serious economic damage to the ornamental horticultural industry.

#### The imporance of monitoring

The protection of boxwood in Oregon depends on precise timing of surveillance, monitoring, and management of boxwood blight infections. Scouting for boxwood blight immediately after weather conditions were suitable for infection can increase the likelihood that *C. pseudonaviculata* is detected and treated before it can spread to additional locations. Additionally, applying fungicides prior to the onset of favorable conditions for infections can help prevent boxwood blight outbreaks. Forecasts that quantify the degree to which upcoming weather conditions will be suitable for infection have the potential to support timely decision-making.

In this article, we present updates to risk modeling tools for boxwood blight that are part of the **USPest.org** decision-support system, which is managed by the Oregon Integrated Pest Management (IPM) Center at Oregon State University.

For more than 10 years, USPest.org has maintained a boxwood blight risk model that can be linked to weather stations to provide early warning systems to inform decision makers about potential high-risk situations where action may be needed. This model was recently adapted to produce maps of infection risk, which may allow decision-makers to track areas of relative risk, assuming that susceptible cultivars and disease inoculum are both present at a given location.

#### **Growing Knowledge**

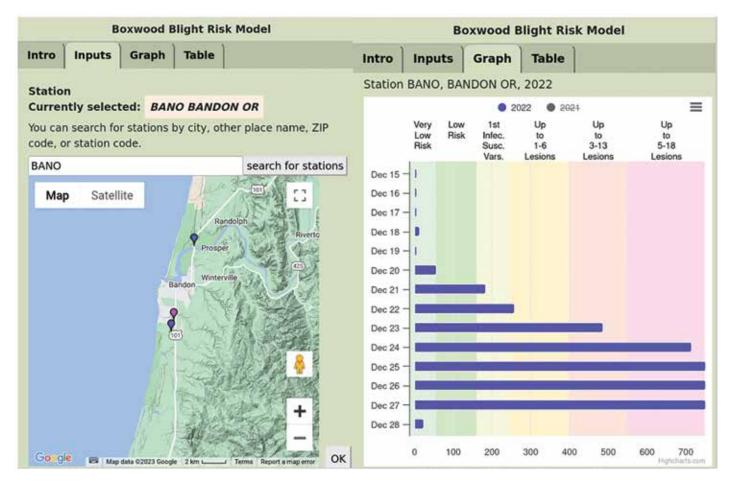


Figure 2. Inputs and outputs of the boxwood blight site model run for Bandon, Oregon, for December 15–28, 2022 (left and right panel, respectively). The infection risk index gradually increased over the selected time frame due to cool temperatures (53–61 F) and near continuous moisture due to steady rains and high relative humidity, a common weather pattern in coastal regions of the Pacific Northwest. IMAGE COURTESY OREGON STATE UNIVERSITY

Figure 1 (previous page). Diagnostic symptoms of boxwood blight include (A) defoliation, (B) leaf spots, and (C) black streaks on stems.

#### How the models work

The boxwood blight risk models use information on the range of temperature and moisture conditions that *C. pseudo-naviculata* needs to complete the steps in the infection process. These steps include spore germination, mycelial tube growth (the step often cited to be stopped by fungicides), penetration of host plant tissue, and colonization of plant cells.

The speed of development depends primarily on temperature, but free moisture must also be present on the leaves or other surfaces of a susceptible plant. This can come in the form of high humidity leading to dew formation, or rainfall. The presence of moisture is, as a measurable or estimated factor, known as "leaf wetness."

The models are designed to identify the precise time when infection can occur. If conducive weather conditions continue for longer than this initial threshold, then risk keeps increasing and the relative amount of inoculum required for outbreaks reduces accordingly. If left unchecked, this may cause multiple compounding infection cycles. Risk levels in the models include "very low risk," "low risk," "1st infection of susceptible varieties," "up to 1–6 lesions," and "up to 5–18 lesions."

These levels were delineated based on laboratory studies of boxwood blight infection rates on American and English boxwood. Documentation that describes modeling methods and assumptions can be found at the model websites.

Forecasts for single sites

The boxwood blight site infection risk model at USPest.org (**TinyURL.com/BoxwoodApp**) was first reported in the Growing Knowledge section of *Digger* in October 2014 (Coop, 2014). Since then, it has been updated several times to include an easy-to-use web app (Fig. 2), and to reflect new research results from numerous plant pathologists.

In particular, it was shown that infections can occur at temperatures as low as 44 F (6.7 C), over the course of several days as long as the environment is continuously wet or at least moist. As these conditions can happen most anytime during the long rainy season (October to May) in regions west of the Cascades in the Pacific Northwest, the updated model can indicate these high-risk intervals much better than the earlier model.

For example, in Fig. 2, the risk index at the Oregon Coast (Bandon) gradu-

ally built up over 4–5 days and remained at maximum for another three days in December 2022, with temperatures averaging 55 F and total rainfall exceeding 3.5 inches. The near continuous wetting interval allowed multiple infections to complete, albeit slowly, which corresponded to "very high risk" or "up to 5–18 lesions" ratings for each day between December 24–27.

The original model, which was based on data from European studies only, used a higher threshold and so would not have correctly alerted users to these high levels of risk. Long cool and wet periods also take place in the interior valleys of Oregon and Washington, where boxwood nurseries are abundan, though less frequently than on the coast.

Figure 2 (Page 42). Inputs and outputs of the boxwood blight site model run for Bandon, Oregon, for December 15–28, 2022 (left and right panel, respectively). The infection risk index gradually increased over the selected time frame due to cool temperatures (53–61 F) and near continuous moisture due to steady rains and high relative humidity, a common weather pattern in coastal regions of the Pacific Northwest.

At the website for the site model, end-users can sign up to receive automated email delivery of the disease risk index outputs displayed in the app, which include both tabular and graphical formats (e.g., Fig. 2). USPest.org also offers a synoptic risk map for boxwood blight that shows current risk conditions for all available weather stations for the continental U.S. (TinyURL.com/BoxRiskMap).

#### **Spatial forecasts**

A newly developed mapping app (TinyURL.com/OSUBoxApp) provides near-term (up to four days) forecasts of boxwood blight for all areas in western Oregon and Washington (Fig. 3). Thus, the output of this spatial model is a map rather than a plot or graph of results for a single site. Risk maps are updated on a daily basis to provide real-time decision support on where and when to expect potential outbreaks. Maps may be panned

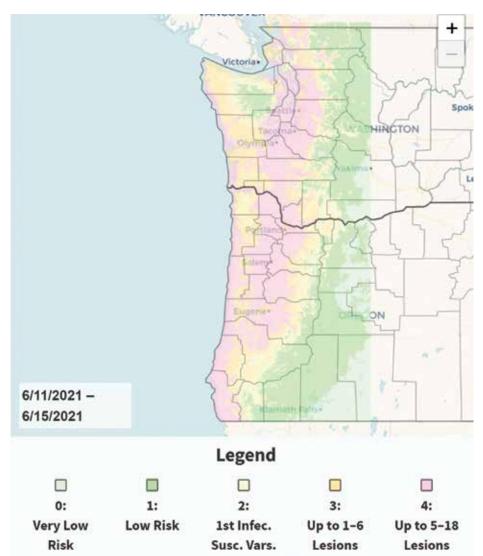
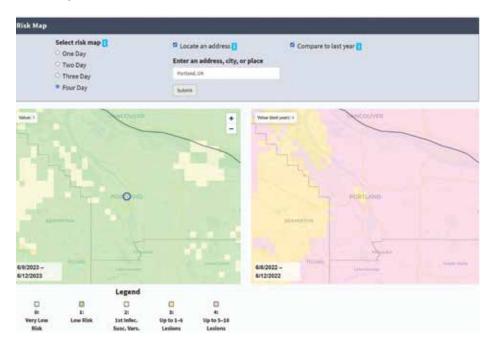


Figure 3. A four-day infection risk map for boxwood blight for western Oregon and Washington for June 11, 2021. IMAGE COURTESY OREGON STATE UNIVERSITY

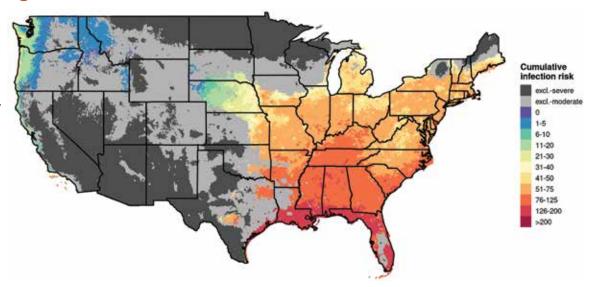


**Figure 4.** Four-day risk maps for Portland, Oregon, for June 8 in 2023 (left map) and 2022 (right map). IMAGE COURTESY OREGON STATE UNIVERSITY

#### **Growing Knowledge**

Figure 5. Spatial forecasts of establishment risk and vear-long (cumulative) infection risk for boxwood blight for 2021. Gray shading indicates that climatic conditions are unsuitable for establishment. The eastern U.S., in general, has climates that are more conducive to both infection and symptom expression than is the Pacific Northwest.

IMAGE COURTESY OREGON STATE UNIVERSITY



and zoomed, and an address can be submitted to zoom to an area of interest (Fig. 4). Additionally, the cursor can be hovered over a location to extract the corresponding risk level.

Figure 3 (Page 43). A four-day infection risk map for boxwood blight for western Oregon and Washington for June 11, 2021.

Figure 4 (Page 43). Four-day risk maps for Portland, Oregon, for June 8 in 2023 (left map) and 2022 (right map).

The mapping app also provides an option to compare present-day and historical risk maps for the same dates (Fig. 4, Page 43). For example, four-day risk maps for the Portland, Oregon, area indicate that infection risk was lower on June 12, 2023 compared to June 12, 2022, which suggests that temperature and moisture conditions were less optimal for disease development between June 8–12 in 2023.

#### Regional infection risk

Thus far, we have presented apps that provide forecasts of short-term infection risk for single locations (site model) or for western Oregon and Washington (spatial model). In addition to this work, we have modeled climatic suitability for *C. pseudonaviculata* at regional and global scales to assess establishment risk (Barker et al. 2022).

Maps of infection risk and establishment risk can be integrated in our spatial model for boxwood blight, although an app for this model is not yet available. As an example, Figure 5 depicts a forecast of establishment risk and year-long (cumulative) infection risk for the continental

U.S. for 2021. Most of the western U.S. is unsuitable for the survival of *C. pseudo-naviculata*, which is mostly due to arid conditions. In areas where establishment is possible, year-long cumulative risk tends to be much lower compared to risk in the eastern U.S. Climates in the eastern U.S. are generally more favorable for boxwood blight infections owing to fewer gaps in precipitation, high dewpoints, and thus high humidity over the year combined with warm-to-hot summer temperatures.

Climatic differences between the Pacific Northwest and eastern U.S. may help explain why shipments from this region can appear symptomless when shipped, but are nevertheless not disease-free, and result in observable disease after just a few days or weeks in more favorable climates.

We recommend that nurseries take whole plants or cut stems with six or more leaves that are suspected to be diseased, and to set them up in disease-conducive environments to further elicit symptoms before making major shipments out-of-state. Plant materials can also be sent to a qualified plant disease diagnostic clinic, such as the one run by Oregon State University (**Bit.ly/OSUClinic**).

Figure 5 (above). Spatial forecasts of establishment risk and year-long (cumulative) infection risk for boxwood blight for 2021. Gray shading indicates that climatic conditions are unsuitable for establishment. The eastern U.S., in general, has climates that are more conducive to both infection and symptom expression than is the Pacific Northwest.

#### Potential sources of error

Several factors that are not considered by the boxwood blight risk models may influence the incidence and severity of disease, such as local inoculum levels, site-specific environmental conditions, dispersal, and the relative resistance of the numerous boxwood cultivars. For example, nurseries in the Pacific Northwest may inadvertently create ideal humidity levels for infection by using shade netting and overhead irrigation system during the summer.

Susceptibility to blight infection is known to vary across *Buxus* species and cultivars. Most *Buxus sempervirens* cultivars are moderately to very highly susceptible to boxwood blight. However, most Asiatic species (*B. microphylla*, *B. sinica* and *B. harlandii*) cultivars range from low to moderate susceptibility. *Buxus microphylla var. japonica* 'Morris Midget', however, tested as very highly susceptible. An integrated ranking of *Buxus* cultivars to boxwood blight is available at **TinyURL**. **com/BlightRank**.

#### Conclusion

The boxwood blight risk models at Oregon State University can help decision-makers determine where and when to conduct close inspections for disease, and when fungicide applications may be needed for control of outbreaks.

Detecting infections early may help reduce the spread of *C. pseudonaviculata* to new locations in Oregon. However, models are just one of several methods for reducing the threat of boxwood blight. Production nurseries, retailers, and land-scapers can create less conducive environ-

ments for infection by implementing best practices such as using less dense plantings, limiting shade cover, and exclusively make use of drip tape or underground irrigation. Additionally, they can use certified planting stock and choose resistant boxwood varieties.

We refer readers to the "Boxwood Blight Resources" webpage at Oregon State University (TinyURL.com/ BoxResource) and the Pacific Northwest Plant Disease Management Handbook (TinyURL.com/PNWHandbook) for more information on symptoms, diagnosis and management options for boxwood blight. Additionally, a publication by Virginia Cooperative Extension provides details on best management practices boxwood blight (Bush et al. 2016).

The work reported here was funded in part by the Oregon Department of Agriculture Nursery Research Grant program and by the USDA APHIS Cooperative Agreement No. 20-8130-0282-CA. 🗢

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## A gateway to the future

The annual spring meeting of the Nursery & Landscape Association Executives of North America (NLAE) provides tremendous value to the OAN and our sister associations across the states and provinces.

For two days, we gather and collaborate, problem solve, and build long-term relationships to serve our great industry.

The NLAE began in 1947. Oregon has hosted the event previously. This year we were in the Gateway City of St. Louis, Missouri.

#### A symbol of westward expansion

The Gateway Arch is the signature symbol of St. Louis. It highlights a city that provides quality barbecue, major sports venues, and the awe-inspiring Cathedral Basilica. To answer a question — yes, we went up inside the arch to the top. Built as a monument to the westward expansion of the United States and officially dedicated to "the American people," the arch, commonly referred to as "The Gateway to the West," is a National Historic Landmark.

#### **Coming together**

Stephanie Collins (formerly Weihrauch) of OAN and I represented Oregon. NLAE's president this year is a dear friend and one of my favorite execs in the industry, Cassie Larson from the Minnesota Nursery and Landscape Association (MNLA).

A big focus was member engagement. Sessions led by Florida, New Jersey and Landscape Ontario provided an effective perspective paired with renowned keynote speaker Amanda Kaiser, who gave strategies for creating a thriving member community. The OAN is undergoing its own member engagement effort under the direction of OAN Marketing Director Beth Farmer and Marketing Coordinator Tess Chapman. I am excited to take some lessons learned at NLAE and plug it into our own efforts in 2024.

Many of the state associations are examining their revenue streams, including the OAN. Over a two-year period, the OAN Board has pushed for a wholesale examination of how we pay for the highly regarded programs and services available to the membership. The OAN Revenue Restructuring Task Force, chaired by past president Todd Nelson (**Bountiful Farms**), will make recommendations to the membership at the annual convention in Salishan (November 15–16, 2024).

Andrew Bray, senior vice president of government relations and membership for the National Association of Landscape Professionals (NALP), outlined how they are differentiating between member types and crafting a scalable dues structure.

Wes Trochill of Effective Database Management took NLAE into the deep bowels of data management and provided 10 tips to make sense and streamline the myriad of information sources deployed within any trade association.

Inside the belly of the OAN, this is a big undertaking and is something the membership will see improvements over time. We are also in the midst of retooling and relaunching a significant upgrade in our online **NurseryGuide.com**. NLAE's program will directly assist us in these efforts in 2024.

#### One industry, shared political issues

I was asked by NLAE to craft and moderate an international discussion on legislative and regulatory challenges. I was joined by Victor Santacruz (executive director of the Canadian Nursery and Landscape Association), Matt Mika (vice president of advocacy and government affairs of AmericanHort), and the above-mentioned Andrew Bray from NALP. I wanted to shorten the perceived gap between national and individual state/provinces political challenges and demonstrate that we have far more in common than we may think. It was a success.

National updates: CNLA, AmericanHort and NALP all provided their national perspectives. Labor, environmental issues, and business climate quickly rose to the top of the list. Outcome: When your national association requests a fly-in on issues, it is a call to action for engagement and it is important.

Many voices and common ground: In order to get everyone talking, I split the



Jeff Stone
OAN EXECUTIVE DIRECTOR

groups into the West (ish) — we count Texas — led by Matt Mika; East (big time ish), led by Andrew Bray; and the provinces, led by Victor Santacruz. The West: Top Issues: labor and workforce (current, future flow, H2A and H2B, cost, understanding). Environmental and water regulation (state/federal; EPA; overreach, local regulations) and business climate (gas to electric policies emerging through the states, plastics, over restrictions). The East: Common themes included labor (cost and availability), invasive species and the regulatory environment, and real time impact of policies enacted of conversion of landscape and production agriculture equipment from gas to electric. The Canadian Provinces: Common concerns include labour (the spelling is for you my Canadian friends), environmental issues such as snow, pest and diseases and water policy, and economic policy and inflation.

Outcome: Over the coming year, Oregon will work with NLAE to engage in specific policy discussions and work together on solutions.

Training and engagement: Oregon is known for its advocacy training program and will train any state or province that is willing. Telling your story is the most effective tool any member has at their disposal and NLAE will also provide tools toward media training for execs and members during 2024-25. Outcome: Become effective and make a difference through training.

As an industry we can take great solace that there is a huge effort to coordinate, collaborate and make a difference for the industry, from the national level to the smallest state or province.

M. B

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