

Cost-effective Pots

Anderson's NEW #5 Squat



This tough 100% recyclable pot features superior denesting to reduce your labor costs.





www.andersonpots.com • 503.654.5629 • info@andersonpots.com



Looking to grow? Let's get started.

Every new producer has to start somewhere. And it's far from easy. We help give young, beginning and small farmers and ranchers a leg up with special financing options, educational opportunities, and hands-on, strategic advice to help you get started.

So if you're ready to start cultivating your dream, give us a call. We'd be happy to help.

800.743.2125 | northwestfcs.com

Here to Help You Grow®

September 2022 vol. 66 No. 9





2022 Farwest Show recap

New Varieties Showcase and Best in Show winners, plus much more.



19 Resource development dries up

The Oregon Water Resources Department moves to limit groundwater resource development.

23 Hot, hardy hydrangeas

Heat resistant intros give gardeners confidence to push forward.

29 Retention through mentoring

With worker shortages rampant, these strategies can help reduce turnover.

33 Lean practices outdoors

Small changes can add up to a huge difference in profitability.

An integrated plan of attack

New strategic IPM plan identifies research and education priorities.

COLUMNS

- 7 President's Message
- 19 Legal Access
- 46 Director's Desk

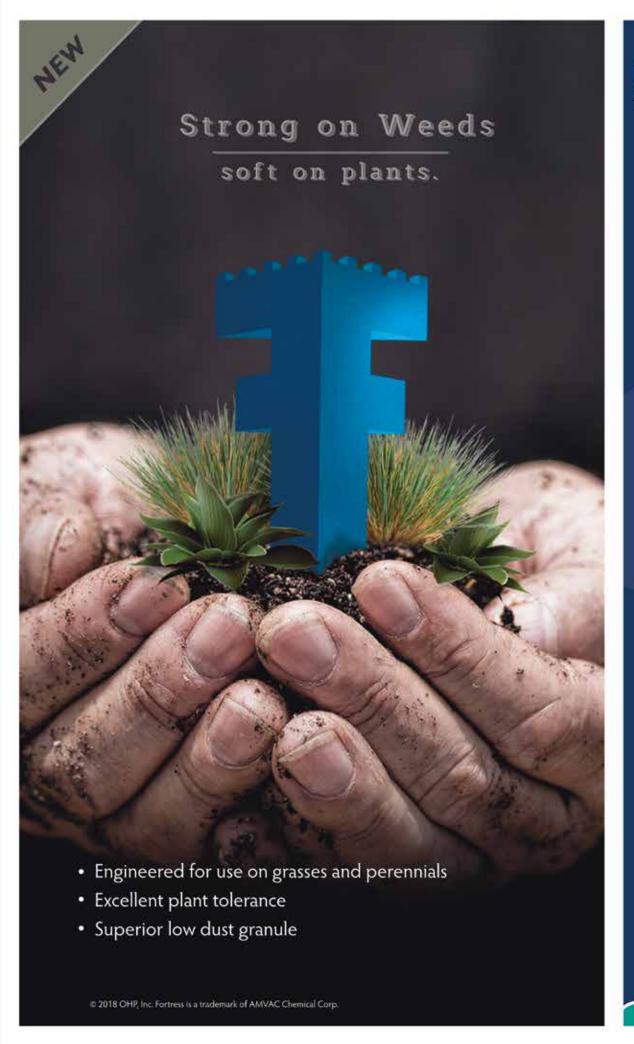
DEPARTMENTS

- 8 Calendar
- 15 Northwest News
- **36** Advertisers Index
- **37** Classifieds
- **39** Subscription Info
- 41 Growing Knowledge
- 45 Digger Marketplace



Printed in Oregon on domestic recycled paper when available.

On the cover: Endless Summer® BloomStruck® bigleaf hydrangea is a hardy option that thrives in Zones 4-9. Photo BY BAILEY NURSERIES On this page: Left: Let's Dance ; Arriba! hydrangea does well in Zones 4-9 as well. PHOTO BY SPRING MEADOW NURSERY On this page: Right: Growers make it an objective to retain workers by making jobs easier and more attractive. PHOTO BY BILL GOLOSKI





#fortress ||||||||



@OHPSolutions 399



ohp.com

(800) 356-4647



INSECTICIDES **FUNGICIDES** MITICIDES PGRS + HERBICIDES



Leonard Adams Insurance

Protecting you, your business and your employees





- Medical
- Vision
- Dental
- Life & Disability

- Auto
- Home
- Life

- Property & Casualty
- General Liability
- Workers Comp
- Farm



△ DELTA DENTAL



To receive information and a free quote, contact:

Randy Skinner or Kristi Charlton

Leonard Adams Insurance 503-296-0077 or toll free 866-907-1850 randys@lacoinsurance.com kristic@lacoinsurance.com

www.lacoinsurance.com



29751 S.W. Town Center Loop West Wilsonville, OR 97070

PH **503-682-5089** PORTLAND PH 888-283-7219 NATIONWIDE FAX 503-682-5099 MAIN OFFICE FAX 503-682-5727 PUBLICATIONS info@oan.org FMAII www.oan.org WFR www.diggermagazine.com NEWS BLOG

STAFF

Jeff Stone EXECUTIVE DIRECTOR

jstone@oan.org

Heather Cyrus EVENT & EDUCATION MANAGER

hcvrus@oan.org 503-582-2004

Beth Farmer COMMUNICATIONS &

bfarmer@oan.org 503-582-2013

WEB DESIGN MANAGER

ckipp@oan.org

Curt Kipp DIRECTOR OF COMMUNICATIONS & PUBLICATIONS

503-582-2008

Tana Klum OFFICE COORDINATOR

tklum@oan.org 503-582-2012

Allan Niemi DIRECTOR OF EVENTS

aniemi@oan.org 503-582-2005

Stephanie Weihrauch DIRECTOR OF FINANCE & ADMINISTRATION

sweihrauch@oan.org

503-582-2001

DIGGER

Curt Kipp EDITOR & DISPLAY ADVERTISING

ckipp@oan.org 503-582-2008

Beth Farmer

bfarmer@oan.org

E-DIGGER PRODUCER Trevin Swick

503-582-2013

CONTRACT PRODUCTION

trevin.pdx@gmail.com

Dr. Jay Pscheidt GROWING KNOWLEDGE SERIES COORDINATOR jay.pscheidt@oregonstate.edu

Oregon State University

Jon Bell, Mike Darcy. Erica Browne Grivas, Tracy Ilene Miller, Mitch Lies, Emily Lindblom, Kym Pokorny, Debbie Teashon CONTRIBUTING WRITERS

Copyright © 2022 by the Oregon Association of Nurseries (OAN). Digger magazine is an official publication and a member service of the Oregon Association of Nurseries, 29751 S.W. Town Center Loop W., Wilsonville, OR 97070.

REPRINTS AND SUBMISSIONS Digger allows reprinting of material with written permission; requests should be directed to the editor. We are not responsible for unsolicited freelance manuscripts and photographs. Contact the editor for contribution information.

SUBSCRIPTION AND CHANGE OF ADDRESS Circulation is controlled. Domestic subscriptions are complimentary to qualified U.S nursery industry members. Non-qualified U.S. subscriptions are \$42 Qualified foreign subscriptions are \$35 to Canada; \$45 to Mexico; and \$80 for all other countries. Single copy rate is \$6 while supplies last. Notify OAN Publications of change of address. Please allow 3-4 weeks for address change.

Postmaster: Change of address correction requested to above address.

ADVERTISING Contact OAN Publications at ads@oan.org for display and classified advertising rates. Deadlines are the $1^{\mbox{\scriptsize st}}$ of the month preceding the month of publication.

2021-2022 **EXECUTIVE COMMITTEE**

Josh Robinson PRESIDENT Robinson Nursery Inc. P.O. Box 100 Amity, OR 97101 josh@robinsonnursery.com 877-855-8733 FAX 503-835-3004

Todd Nelson PRESIDENT-ELECT Bountiful Farms Nursery Inc. 17280 Boones Ferry Rd. N.E. Woodburn, OR 97071 info@bountifulfarms.com 503-981-7494

Amanda Staehely VICE PRESIDENT Columbia Nursery 29490 S. Jackson Road Canby, OR 97013 amandastaehely@gmail.com 503-810-2598

Kyle Fessler PAST-PRESIDENT Woodburn Nursery & Azaleas Inc. 13009 McKee School Road N.E. Woodburn, OR 97071 sales@woodburnnurserv.com 503-634-2231

Wes Bailey TREASURER

Smith Gardens Inc. 23150 Boones Ferry Road N.E. Aurora, OR 97002 wes.bailey@smithgardens.com 503-678-5373

FAX 503-634-2238

Ben Verhoeven SECRETARY Peoria Gardens Inc. 32355 Peoria Rd SW Albany, OR 97321 beny@peoriagardens.com 541-753-8519

Patrick Newton MEMBER-AT-LARGE

Powell's Nursery Inc. 5054 SW Boyd Rd. Gaston, OR 97119 powellnursery@gmail.com 503-357-0631

BOARD OF DIRECTORS

Tom Brewer HC Companies Inc. ProCal tbrewer@hc-companies.com ASSOCIATE MEMBER 503-686-8448

Adam Farley CONTAINER GROWER

Countryside Nursery afarley@countrysidenursery.com 503-678-0511

Ron Kinney

Monrovia

CONTAINER GROWER

rkinney@monrovia.com 503-868-7941

Joe Dula

CONTAINER GROWER

Moana Nursery ioed@moananurserv.com 503-266-8170

Jesse Nelson FIELD / BARE ROOT GROWER

Hans Nelson & Sons Nursery Inc inelson@hansnelson.com 503-663-3348

Chris Robinson FIELD / BARE ROOT GROWER

Robinson Nursery Inc. chris@robinsonnursery.com

877-855-8733

Jay Sanders FIELD / B&B GROWER

KG Farms Inc. jsanders@kgfarmsinc.com 503-678-3245

Lorne Blackman GREENHOUSE Walla Walla Nursery Co. Inc. lblackman@wallawallanurserv.com 509-522-9855

Tyler Meskers GREENHOUSE

Oregon Flowers Inc. tyler@oregonflowers.com 503-678-2580

Gary S. English

Landsystems Nursery gary@landsystemsnursery.com 541-382-7646

Where the lessons are

Appreciate the moment.

As August comes to a close, there's a collective sigh of relief around the nursery. It is brief, however, as things quickly shift to fall shipping and the many tasks that come along with it. The peak growth of the trees is slowing, so the constant shuffle of labor to different varieties begins to subside. Yet, there is something magical about that moment.



Josh Robinson

Keeping up with growing plants is difficult. To get it done right requires a shifting strategy and an insane time commitment. And timing. The bottom line of the business is a direct reflection of the right work getting done on time.

Such questions can weigh heavy on the mind. One might decide to focus on taping a maple that could wait a week, only to realize that the redbud must be done today, or it will have defects. It's easy to find yourself wondering if you are making the best decision at that moment.

One of the sayings that always comes up in the green industry is that if you aren't working from behind, something is wrong. I do agree with the heart of that message, which is that it's impossible to get everything done on time. It boils down to priorities. What needs attention right now?

However — if we take this mentality too far, we end up working too much and feeling stressed out. It feels like we will never catch up. That can take a toll on our overall health.

I've witnessed this personally. One of my dear friends needed open heart surgery. Another is awaiting diagnosis on a tumor. Various others have struggled with health issues at a younger age — young enough that it made me stop, think and reflect.

They all have one thing in common — that they work too much.

A lot of people wear their overwork as a badge of honor, and understandably so. It feels good to work hard and see the results of that.

I recently chatted with a nursery owner who lamented that the new generation takes too many vacations. I asked what that meant. What's too many? He elaborated that it was weekend trips here and there throughout the year. I asked him, do they get all their work done? The answer was yes. What's the problem then?

When he was earning his stripes as a nursery owner, people were working more than 10 hours a day, seven days a week. That was all just part of the recognized formula for success.

It doesn't have to be like that.

How's your work/life balance? Is there much life? Enough to even things out? Life is too short and too precious not to stop and smell the roses.

I recently had a birthday party for my son William, now 4. I took off a little early from work to rent a water slide. The times spent on the slide on a Saturday became a point of pure joy for my family. What that meant for me was like that magic moment at the end of August, when a task is complete and a new one begins.

It made me consider my perspective in life. I questioned whether my values and time commitments were in alignment.

Surround yourself with good people — they are out there. It allows you to find a balance. Slide out of work and into life. Hug those close to you. Things can get scary in a heartbeat.

John Robinson



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*.

SEPTEMBER 11

END-OF-SUMMER BARBECUE

Farmers and farm supporters from Multnomah and Clackamas counties in Oregon are invited to take part in an end-of-summer social barbecue with food, drinks, stories and games. It will take place from 4-7 p.m. Sunday, September 11 at Rossi Farms, 3839 N.E. 122nd Ave., Portland, Oregon. Sponsors are the Multnomah County Farm Bureau, Clackamas County Farm Bureau, the Mt. Hood Chapter of the Oregon Association of Nurseries, and the East Multnomah Soil and Water Conservation District. There will be free dinner, drinks, music, a cornhole competition and a disc golf competition. Socializing and beverages will start at 4 p.m., followed by dinner at 5. Space is limited to 300 participants. Those attending must RSVP no later than Friday, August 29 by contacting multnomahfcb@gmail.com or 206-595-5078.

SEPTEMBER 12-14

ISA INTERNATIONAL CONFERENCE

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

SEPTEMBER 13

The OAN Willamette Chapter will host a lunch social from 11 a.m.-1 p.m. at Wooden Shoe Tulip Farm, 33814 S. Meridian Road, Woodburn, The cost is \$10 per person including lunch (catered by North Keizer BBQ) and a drink ticket (sponsored by Columbia Bank) to the Wooden Shoe bar. Please RSVP at www.oan.org by Wednesday, September 7. Half of the cost of the meal is being subsidized by past sponsors Brooks Tree Farm, Columbia Bank, Dayton Bag & Burlap, Decorative Bark, Ernst Irrigation, F & L Lumber ,Growers Nursery Supply, Heritage Seedlings and Liners, Leonard Adams Insurance, Marion Ag, Northland Express Transport, Northwest Shade Trees, Nutrien Ag, PacWest Transport and Wilbur-Ellis..

SEPTEMBER 14

OSU CLIMATE-READY FIELD DAY

Oregon State University's North Willamette Research and Extension Center (NWREC) A Climate-Ready Landscape Plant Field Day from 10 a.m.-2 p.m. will showcase field irrigation trials evaluating landscape plants with the potential to be good performers in low-water-use gardens. These trials are part of a western regional collaboration. For further details, contact Dr. Lloyd Nackley at NWREC, lloyd.nackley@oregonstate.edu.





SEPTEMBER 13

MT. HOOD CHAPTER TACO TRUCK SOCIAL

The Oregon Association of Nurseries Mt. Hood Chapter will host a taco truck dinner social starting at 5 p.m. Tuesday, September 13 at J. Frank Schmidt Arboretum, 9500 SE 327th Ave., Boring, Oregon. The cost is \$5 per person. The social gathering will start at 5, followed by dinner at 5:30, and there also will be activities such as cornhole and disc golf. For more details and to RSVP, contact Scott Ekstrom at scott_ekstrom@yahoo.com.

SEPTEMBER 14-15

GROW WEST COAST

The B.C. Landscape & Nursery Association's CanWest Horticulture Expo has been rebranded as the Grow West Coast show. Western Canada's premier horticulture show will be presented as an outdoor market trade show experience at the Surrey Civic Plaza, 13450 University Drive, Surrey, British Columbia. Landscape professionals, municipalities, garden centers, suppliers and wholesale nursery and greenhouse growers from across the region will exhibiting, following provincial and health guidelines. To register, go to www.growwestcoast.com.

SEPTEMBER 23

NWREC HARVEST DINNER

The annual Harvest Dinner at Oregon State University's North Willamette Research and Extension Center (NWREC) in Aurora, Oregon, is an event to celebrate the success of various research and extension programs. NWREC faculty, staff, OSU leaders, elected officials, and stakeholders join this popular event to appreciate and celebrate efforts to address stakeholder needs, contribute to thriving local economies, and promote healthy communities and environment. Cocktails and appetizers begin at 5:30 p.m., followed by dinner at 6:30 p.m. Cost is \$75/person. Details and tickets: https://tinyurl.com/nwrecharvest22.

OCTOBER 7-9

FALL HOME & GARDEN SHOW

Taking place at the Portland Expo Center, 2060 North Marine Dr., Portland, Oregon, this show will entertain and inform homeowners about the freshest garden designs and themes. There will be a plant and nursery marketplace, container garden competition, and an Oregon tree display Visit http://homeshowpdx.com for details.

OCTOBER 26-29

NATIONAL FFA CONVENTION & EXPO

The 95th annual Future Farmers of America (FFA) Convention & Expo will take place in Indianapolis, Indiana. FFA members and guests from across the country will participate in general sessions, competitive events, educational tours, leadership workshops, an expo and shopping mall, volunteer activities and more. The full schedule was to be posted soon. Early bird registration opens September 14, followed by standard registration on October 5. Housing registration is already open; September 8 is the last day to cancel. For additional information, log on to www.convention.ffa.org.

OCTOBER 28-29

OAN ANNUAL CONVENTION

Save the dates for the annual Oregon
Association of Nurseries Convention, which
will take place over a long weekend at
Skamania Lodge, 1131 S.W. Skamania Lodge
Way, Stevenson, Washington. Save the date
and watch for details. Contact Allan Niemi
at aniemi@oan.org or 503-682-5089 for
information about sponsorship opportunities.



Image 1: The Fawest Pub Crawl gave people a chance to wind down and make connections. Image 2: Keynote speaker Greg Bell inspired listeners to invest in their careers, businesses and relationships. Image 3: Brigitte Norby of J. Frank Schmidt & Son Co. visits with an attendee. Photos BY CURT KIPP.

PARWEST PORTLAND 2022

Exhibitors and attendees make crucial connections at Farwest

BY CURT KIPP

T'S ALL ABOUT THE INTERACTIONS, and the 2022 Farwest Show, held August 24-26, helped nursery professionals connect with each other, whether as exhibitors, attendees or — given the nature of the nursery industry — oftentimes both.

"This year's Farwest Show was upbeat," said Allan Niemi, events director for the Oregon Association of Nurseries, which produces the show. "People told us they had positive conversations on the floor, met new people, learned at the seminars and had a good time."

Derry Breeden started Breeden Family Farms in Lebanon, Oregon last year and was exhibiting at just his second Farwest Show. He found the event valuable as an exhibitor, and as an attendee as well.

"I think that really what's been most important to us is being able to get name recognition, to meet the players who have been just the powerhouses in the industry on a personal level," he said. "And when we're all here together as nursery owners, we're really able to connect and network on a level that isn't possible outside of this event."

As an exhibitor, Breeden found new customers. As an attend-

ee, he was able to find supplies and plant material he might not have located otherwise.

"Everybody that has something that we're looking for is right here in one single space," he said. "And on top of that, we get to go and share beers together at the after party. So it's [been] very good."

Lucas Piccolo is the owner of **Mossify**, a new company from Toronto, Canada, that makes plant-based, bendable plant supports for house plants and other plants. He said the face-to-face interaction at Farwest was a difference maker for his company.

"The main reason we go to these shows is to get the word out about our brand," Piccolo said. "We're very new on the West Coast. I've emailed these people, [but] they've never seen my face. They've never met me in person. Then when they meet me, and we connect, then we grab a drink after at the [Farwest] Pub Crawl, that's where the relationships are made."

Robb Sloan, owner of **Noname Nursery** in Forest Grove, Oregon, said he made more connections at this year's show than any of the previous ones he has attended. Because he was chairing the show this year, he hired someone to mind his booth



while he walked the floor to talk to other exhibitors.

"I was able to actually sell some pretty large contract rows, by going out and visiting other people on the floor and finding out what gaps they had in their production," Sloan said.

Meanwhile, his booth attendant was able to track who visited, answer their questions, and observe patterns in who was visiting the booth. That will be good for business as well.

"It was a very, very lovely show and we were having a lot of fun," Sloan said.

Interest in Oregon's powerhouse nursery industry remains high. Oregon nursery and greenhouse growers sold an incredible \$1.19 billion in nursery material in the most recent year tabulated.

This year's Farwest show floor had nearly 300 exhibiting companies, including nursery and greenhouse wholesale growers, equipment suppliers, allied service providers and suppliers for growers, retailers and landscape industries and

more. Some 34 of the exhibitors were showing their wares at the Farwest Show for the very first time.

"When we're all here together as nursery owners, we're really able to connect and network on a level that isn't possible outside of this event."

Derry Breeden,Breeden Family Farms

Next year's 2023 Farwest Show will be the 50th annual show, and will take place August 23–25 at the Oregon Convention Center in Portland.

It's been half a century since the first

Farwest took place in the basement of Memorial Coliseum in Portland in 1973, with 120 exhibitors and 1,500 attendees. The objective was to familiarize out-of-state buyers with the quality of Oregongrown nursery stock.

What was then a modest dream has become the biggest nursery show on the West Coast.

"There were some naysayers and doubters before the first show," said Jim Heater, who oversaw that first show. "Once the first show had gone by, everyone was way more enthused."

The growth of the show has paralleled the ascendance of Oregon's nursery industry, which continues to grow.

"It's the 50th anniversary next year," said Piccolo, who plans to be back for it. "I think that's gonna be huge. I've worked in construction, fine dining. I've worked in retail. The garden industry is the best one I've ever worked in. It's just such a downto-earth industry and that's what we have to keep it as."





JFS' Nightfall Snowbell sweeps New Varieties Showcase

Nightfall Snowbell (Styrax japonicus 'JFS 6SJ') was chosen by voting attendees as the People's Choice winner in the 2022 Farwest Show's New Varieties Showcase. The new introduction from J. Frank Schmidt & Son Co. also won the Best in Show award from the professional judges, making it a rare sweep of both top honors in the New Varieties Showcase.



Nightfall Snowbell, which was bred by Oregon Nurseries' Hall of Fame member Keith Warren, combines the deep purple foliage of Evening Light Snowbell with the gratefully weeping form of greenleafed cultivars such as Fragrant Fountain. It features purple emerging leaves with green undertones, which contrast with pearly white flower buds in spring. They open to reveal creamy white, bell-shaped blooms. The leaves darken as the season continues. It is available from J. Frank Schmidt & Son Co. in #10 containers and multiple bare root sizes.

Runners up in the People's Choice voting included Midnight Express™ Redbud (Cercis canadensis 'RNI-RCC3' PPAF), introduced by **Upshoot LLC**; Hibiscus SUMMERIFIC™ Edge of Night (Hibiscus × 'Edge of Night' PPAF, CPBRAF), introduced by Walters Gardens; and VelveteenyTM Smokebush (Cotinus coggygria 'Cotsid1' PP30328, CPBR5837), introduced by Sidhu & Sons Nursery.

Runners up in the judges' voting included: Vinho Verde Weigela (Weigela florida 'Smnwfbgv' PPAF), introduced by Spring Meadow Nursery; Invincibelle SublimeTM Hydrangea (Hydrangea arborescens 'SMNHRL' PPAF, CPBRAF), bred by Tim Wood and introduced by **Proven Winners** ColorChoice Flowering Shrubs; and Pretty Parasols Coneflower (Echinacea 'JS Engeltje'), introduced by Concept Plants.

All of the New Varieties Showcase selections for 2022, as well as prior years, are viewable at www.farwestshow.com/ new-varieties-showcase.



IMPECCABLE SERVICE

From Acers to Zelkova, and many varieties in between, we specialize in understock for flowering, fruiting and shade.

Our customers come to us for our quality rootstock. They come back for our service and attention-to-detail.



WillametteNurseries.com

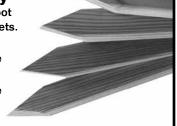


503-434-5525

1726 SW Highway 18, McMinnville, OR 97218 • www.dstakemill.com



- Shipping Materials
 - Pallet repair boards, shipping gates, tilt sticks.
- Custom Assembly
 - Shipping racks, bare root crates and nursery pallets.
- **Planting Stakes**
 - Multiple sizes available
- Treated Lumber
 - Multiple sizes available



Lumber Products for All Nursery Needs



Retailers' Choice Awards honor exciting discoveries on the floor of the Farwest Show

Twelve exciting new plants and nurseryrelated products received Retailers' Choice AwardsTM at the 2022 Farwest Show.

The winners were chosen by a jury of volunteer garden retailers who roamed the Farwest Show floor in search of new and exciting plants and products that particularly piqued their interest.

The awards were presented at the show Thursday afternoon (August 25), in a presentation emceed by Danny Summers, managing director of The Garden Center Group. "[The retailers] nominate plants and products that they would like to carry," he said.

The award went to the exhibitor who had the plant or product on display in their booth. Both live goods and hard goods were eligible.

Bailey Nurseries and Sidhu & Son Nursery Ltd. each had two selections, while eight other exhibitors had one each.

One of the winners, Nightfall Snowbell from J. Frank Schmidt & Son Co., was also the Best in Show winner in the Farwest New Varities Showcase, as well as the People's Choice award winner (see related story, previous page).

The award winners included Little Hottie® Panicle Hydrangea (Hydrangea paniculata 'Bailpanone' PP32549), offered by Bailey Nurseries; Goldblitz Rudibeckia (Rudbeckia fulgida var. sullivantii 'Goldblitz'), offered by Ball Seed Company (Booth #15025), Shadow Magic Crapemyrtle (Lagerstroemia 'Bailagtwo' PPAF), offered by Bailey Nurseries; Nightfall[™] Snowbell (Styrax japonicus 'JFS 6SJ' PPAF), offered by J. Frank Schmidt & Son Co.; Wood Tag™ and Bamboo Plant Stakes, offered by Hip Labels (Booth #16045); The Bendable Moss Pole[™] and Trellis, offered by **Mossify**; Weigela Midnight Sun (Weigela florida 'Verweig9' PPAF, Can PBRAF), offered by **Proven Winners**; Bushel and Berry[®] Scarlet Belle[™] Strawberry (Fragaria × ananassa 'Ruby Ann'), offered by Sester Farms; aGlowing Hearts™ Pieris (Pieris japonica 'Piesid2'), offered by Sidhu & Sons Nursery; Velveteeny™ Smokebush (Cotinus coggygria 'Cotsidh5' PPAF), offered by Sidhu & Sons Co.; REALFLOR® Fanfare Showtime Gaillardia (Gaillardia x grandiflora 'Fanfare Showtime' PP33438), offered by Walla Walla Nursery Co.; and Leprechaun Arborvitae (Thuja standishii × plicata 'Leprechaun' PP33840) offered by Woodburn Nursery and Azaleas Inc.





Winners in the Retailers Choice Awards at the 2022 Farwest Show included (top) Weigela Midnight Sun from Proven Winners, and (bottom) Fanfare Showtime Gaillardia, offered by Walla Walla Nursery Co. Photos by curt kipp.

OBC NORTHWEST, INC.

Nursery & Greenhouse Supplies



Tracy Boyce, Owner & Melanie Miller-Gonzalez, President

A lot has changed in 68 years

One thing remains the same
Our commitment to our customers
It is OBC's philosophy
We live by it every day
For every customer
On every job
Customer service comes first
Serving our customers with Honesty
Integrity and Respect since 1954
Thank You
For allowing OBC Northwest, Inc. to serve you

OVER-DUE ANNOUNCEMENTS FROM OBC NORTHWEST, INC.

Laurie Rogers-Roach was hired as Sales Manager for OBC Northwest in June of 2021. Her diverse background in horticulture, and over 2 decades of experience managing teams, processes, and inventories, is an asset to the OBC Northwest, Inc. team. Laurie manages OBCNW outside sales staff encompassing West Coast, Idaho, Utah, Montana, Hawaii, and Canada.



Jones Patton joined the OBC Northwest, Inc. sales team in June of 2021. Jones was raised on a third-generation orchard in the Yakima area and is well versed in local agriculture. He possesses the knowledge and communication skills to help our customers grow. Jones supports our Eastern Washington, Montana, Idaho, and Utah customers.



OBC NORTHWEST, INC. EXPANDS SALES TEAM

Michael Wisshack joined the OBCNW sales team in August of 2022. He will support OBC Northwest customers in Washington and Canada. With more than 30 years' experience in our industry, Michael brings to our team a wealth of knowledge in horticulture and horticultural sales. Having worked in production management, sales, and nursery management, Michael understands firsthand the needs of our NW growers.





Hopper Bros. wins Best in Show booth award

Hopper Bros. nursery, based in Woodburn, Oregon, was the top winner in the Ted Van Veen Best in Show booth awards at the 2022 Farwest Show, held August 24–26 in Portland, Oregon.

The awards recognize booths for pushing limits to promote the green industry, Hopper Bros.' display of specimen size conifers, frosted Christmas trees, Halloween pumpkins and gourds, a model train and more was judged to be the best of the best.

"The exhibitors at Farwest this year really represented the industry well,"

Show Director Allan Niemi said. "There were some dazzling displays where people pushed creativity to a new level."

Hopper Bros. also won a Best of Division award for Best 10×20 or Larger Row Booth. They will receive a free 10×10 booth space for the 2023 Farwest Show, which can be applied to the cost of a larger booth. Other Best of Division award winners included the following:

Growers: Best 10×10 Booth – **Serendipity Nursery**, Canby, Oregon; Best Island Booth — **Alpha Nursery**, Salem, Oregon;

Service and Supply: Best 10×10 Booth – Earthlight Technologies, Silverton, Oregon; Best 10×20 or Larger Row Booth – Root Pouch, Portland, Oregon; Best Island Booth — Papé, Eugene, Oregon.

The show also recognized exhibitors who put extra creativity into their booths with three Far From Ordinary booth awards. Winning that award this year were **Cascade Tropicals**, Snohomish, Washington; **Sound Horticulture**, Bellingham, Washington; and **A & R Nursery Sales**, Boring, Oregon.

BUILDERS OF HEAVY DUTY GREENHOUSES AND STRUCTURES

GET YOUR GREENHOUSE READY FOR FALL



info@ovg.com * www.ovg.com 20357 Hwy 99E *Aurora, OR 97002

4' wide Clear 8mil Twin Wall Poly Carbonate \$1.75 per sq ft

4.25' wide Clear Corrugated Poly Carbonate \$1.10 per sq ft





12' WIRE LOCK base, wires and screws \$14.75 Poly
Poly Carbonate
Shade Cloth
Ground Cover
Wire Lock
Roll-Ups
Heaters
Exhaust Fans
Code Structures
Gutter Connects

prices good thru 9/30/22



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.



Working group looks into mysterious vascular streak dieback

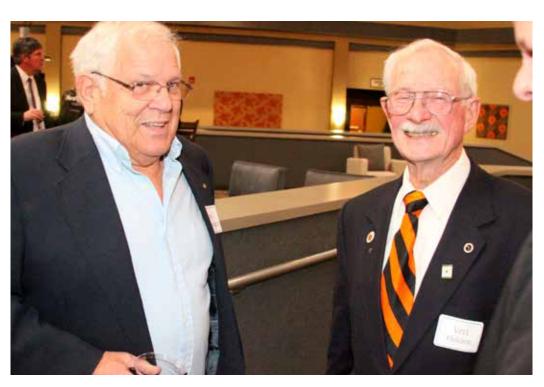
A working group of local, state and federal plant pathologists are working with nursery growers to gather more information about a mysterious group of symptoms known as vascular streak dieback (VSD) that are affecting certain trees, AmericanHort shared in a recent update.

The information was shared by Dr. Michael Martin. who is the science, research and regulatory programs director with AmericanHort.

The symptoms were first observed in Acer trees in late 2019 or early 2020 in the Southeast and Mid-Atlantic states, and initially were misdiagnosed as winter damage. The symptoms since have been observed in Cercis, Cornus, Lindera, Magnolia and Myrica,

Researchers aren't sure what causes VSD, nor have they developed a comprehensive list of plant hosts, and they aren't sure how it spreads, either. The working group proposes to develop sampling, diagnostic and other tools to combat the issue. American Hort and the affiliated Horticultural Research Institute, which funds research projects, have endorsed the effort.

For more information, contact Dr. Michael Martin at michaelm@americanhort.org.



Longtime nurseryman Verl Holden (right, with the late Ray Klupenger) is a member of the Oregon Nurseries' Hall of Fame and will now be inducted into the OSU College of Agricultural Sciences Hall of Fame as well. OAN FILE PHOTO

HOLDEN SELECTED FOR OREGON STATE AG HALL OF FAME

Longtime OAN member Verl Holden of Holden Wholesale Growers Inc. in Silverton will be inducted this fall into the Oregon State University (OSU) College of Agricultural Sciences (CAS) Hall of Fame, the CAS dean's office has confirmed.

The award honors "contributions to agriculture and natural resources or activity directly concerned with agriculture and natural resources," as well as "excellence in accomplishment and service and cooperative involvement with Oregon State University and the College of Agricultural Sciences," according to the university.

Induction will take place at the CAS Dean's Dinner on Friday, October 7. The event is by invitation only. The award adds to several other honors Holden already has received. He is an OAN Honorary Life Member as well as a member of the Oregon Nurseries Hall of Fame.

Holden was nominated for the honor by Dr. Bill Braunworth and Dr. Ryan Contreras, who are the head and the associate head of the school's Horticulture Department. They mentioned that he

has played a key role in the industry since graduating from OSU with his degree in floriculture in 1953. He's played key roles in the OAN, the International Plant Propagators Society (IPPS), the American Conifer Society, American Bamboo Society, Marion County Extension and lastly the Oregon Garden Foundation, where he was a founding board member and continues to serve.

"[Verl] helped to fundamentally shape the state's largest agricultural sector," Braunworth and Contreras stated in their letter of nomination. "In addition to all the documented areas of leadership and innovation, his mentorship and friendship are immeasurable in their impact. It is hard to imagine anyone more deserving than Mr. Verl Holden to be recognized as a member of the College of Agricultural Sciences Hall of Fame."

TANA KLUM JOINS THE OAN AS NEW OFFICE **COORDINATOR**

Tana Klum has joined the Oregon Association of Nurseries as its new office coordinator.



Northwest News

She will be the first point of contact for members and the general public. She will assist with events including the Farwest Show, help members utilize OAN programs, assist with payments and other tasks while overseeing general office duties.

Tana brings a wealth of experience to the OAN. She served as the executive assistant and tribal liaison for Columbia Basin Fish and Wildlife Authority in Portland, and was the marketing director of IBEW & United Workers Federal Credit Union. She served as assistant editor of *The Lariat* equestrian magazine, and the office manager of a construction company.

Tana is also a trained chef/pastry chef. She volunteers for Oregon State University Extension master food preserver and family food educator. She has a degree in journalism and enjoys horses, gardening, baking,



and hiking with her trusty Airedale, Bodhi. To reach Tana, call her directly at 503-582-2012 or email tklum@oan.org.

Announcements

TERRA NOVA NURSERIES ANNOUNCES NEW GENERAL MANAGER

Harini Korlipara has been appointed as the new general manager of **Terra Nova Nurseries Inc.**, a plant breeding and genetics firm based in Canby, Oregon. She has been with the company since 1999, serving

most recently as the company's lab manager and research director.

"We could not be more excited to announce the promotion of Harini to general manager," said Ken Brown, managing owner of Terra Nova Nurseries. "Harini is an extremely valuable and admired member of the Terra Nova family, and she has been instrumental for nearly 25 years in the success of our growth and more than 1,000 new varieties."

In her new position, Korlipara will work closely with other members of Terra Nova's management team, which is responsi-



Northwest News

ble for budgetary oversight; streamlining lab and liner production; supervising licensees, stock and trial material for brand new Terra Nova varieties; and other managerial duties.

She will continue her tenured roles involving lab research, plant breeding, tissue culture production, and ST3 sales in North America. She additionally will maintain her role as a member of Terra Nova's licensing team, where her focus is to provide support and stock to licensees at various levels, with a primary concentration upon international licensees.

Korlipara joined Terra Nova in December 1999 as a research assistant and plant breeder. She was then given increasing levels of responsibility as her career advanced. As laboratory research assistant, she provided extensive internal breeder support. Then, as laboratory manager, she oversaw the development of new varieties with improved habit and growth traits, disease resistance and increased liner and plug productivity.

She also held the titles of breeder, with a crucial focus on laboratory breeding and production; and principal breeder of composite plants, offering a diverse and wide range of special support for the breeding team. She additionally worked as Terra Nova's laboratory division manager in charge of all tissue culture sales; global supply chain manager, including sending stock to and visiting/training all production labs and cutting farms around the world; and director of research and laboratory development.

She has traveled with Terra Nova's founders, owners and leadership team to many continents, countries and cities across the world to actively participate in near countless critical meetings held at trade shows and licensee visits.

"Harini has added value to everything she has touched at Terra Nova," said Brown. "She has been an essential and impressive part of our licensing team and has been involved with all related strategic decisions and tactical planning. We look forward to seeing the exciting ways in which she will manage Terra Nova's high-performance breeding standards and continue to



6494 Windsor Island Rd N

Keizer, Oregon 97303

Strawberries Raspberries Blackberries Grape Vines

503-393-8112 Fax: 503-393-2241 www.weeksberry.com plants@weeksberry.com

Blueberries Asparagus Roots Rhubarb Roots And Much More!



SMALL FRUIT SPECIALIST The Very Finest Quality!

Call or Write Today!





Planting and harvesting is stressful enough.

Let UFP Industrial alleviate some stress with our deep knowledge of agriculture and horticulture products. We have everything you need including:

- · greenhouse and nursery containers
- bamboo
- trellises
- · tree stakes
- · greenhouse film
- shipping and retail ready racks
- load gate solutions
- tilt sticks

With good planning and communication, we help our customers stay ahead of supply chain shortages and lead times. We've also increased our inventory at our warehouse on key items for immediate shipping. For competitive pricing,

and total confidence, call Kelsey Dean 503.951.3929





UFPINDUSTRIAL.com

kelsev.dean@trlcompany.com P 503.951.3929



Chamaecyparis Sciadopitys Kalmia Thuja Picea



Rhododendron Boxwood Prunus Pieris Ilex

Container and Field Grown Ornamentals

Phone: 503-663-1200 • Fax: 503-663-5134

www.reardonnursery.com info@reardonnursery.com 10050 SE 282nd Ave Boring, OR 97009

Broadacres North

Farm Store

9400 St. Paul Highway, Aurora, OR 97002 503-633-4562 20160 Main Street, St. Paul, OR 97137 503-633-4281

Home of the St. Paul Rodeo



Our team has the knowledge and experience to assist you in making sound decisions.

www.marionag.com

- Custom Blending
- Dry Fertilizer
- Liquid Fertilizer
- · Organic Fertilizer
- Lime & Dolomite
 Application
- Nutrition Programs
- Pest Management
- Testing & Analysis
- Seed Cleaning
- Sand Blasting
- Paint Shop



Marion Ag Service is proud to partner with Harrell's, LLC to bring you Polyon™ controlled release fertilizer



Get the longevity you pay for

05 6 3 3 4 5 0 0

Northwest News

help shape our fast-paced and innovative business environment."

OBC NORTHWEST ADDS THREE TO ITS SALES TEAM

Nursery and greenhouse supplier **OBC Northwest** has announced three recent additions to its sales team.

Michael Wisshack joined the company sales team in August of 2022 and will support OBC Northwest customers in Washington and Canada.



He has more than 30 years of experience in horticulture, including jobs in production management, sales and nursery management. He can be reached at mwisshack@obcnw.com.

Laurie Rogers-Roach was hired as company sales manager in June 2021. She manages the company's outside sales staff encompassing the West Coast, Idaho, Utah,



Montana, Hawaii and Canada. She has a diverse background in horticulture, with more than 20 years of experience managing teams, processes, and inventories. She can be reached at lrroach@obcnw.com.

Jones Patton joined the company sales team in June 2021. He was raised on an orchard near Yakima, Washington, where his parents were third-generation



farmers. He uses his communication skills and knowledge of local agriculture to support customers in Eastern Washington, Montana, Idaho and Utah. He can be reached at jpatton@obcnw.com.

OBC Northwest was founded in 1954 and is based in Canby, Oregon. The company's offerings include greenhouses, plastic containers, shade cloth, soil and amendments, labels and many more quality products for the horticulturist. For more information, log on to www.obcnw.com.

Oregon moves to limit groundwater development

REGON NURSERIES are heavily dependent on groundwater. It is a clean, reliable source of irrigation water for nurseries across the state. Additionally, with surface water fully allocated, (or even over-allocated) in virtually every stream system in Oregon, groundwater has been the only source available for new water rights to support expansion.

However, in recent years, that has changed. In many parts of the Willamette Valley and in other watersheds, such as the Walla Walla, Harney, and Umatilla basins, groundwater is subject to strict regulation, including a moratorium on new uses. The Oregon Water Resources Department (OWRD) is now undertaking actions that will significantly restrict new groundwater development in the future.

This trend toward tighter regulation of groundwater means it will become increasingly difficult to acquire a new groundwater right. As a result, irrigation-dependent agricultural operations will face serious future challenges if they hope to expand their operations.

Background on groundwater regulation

More than half of Oregon, including the Willamette Valley and most of the northeast side of the state, is underlain by lava flows dating back approximately 15 million years, known as the Columbia River Basalts.

As successive flows occurred, water was trapped between the flows, much like the icing in a layer cake. Those basalt aquifers are generally deep and are "confined," meaning that they are not connected to the shallower alluvial aguifers that consist of river flood deposits. Because they are confined, those aquifers do not receive annual recharge from rain and snow.

Over time, OWRD has developed an increasing body of data on how these aquifers behave and how they interact with



Steve Shropshire

As an attorney, Steve uses his experience and knowledge to help his clients understand and navigate the complex legal environment that governs water rights and water law, natural resources. environmental, real estate, and land use matters. He advises clients in a wide variety of contexts, including transactions, administrative proceedings, and legislation. He can be reached at 541-647-2979 or steve.shropshire@jordanramis.com.

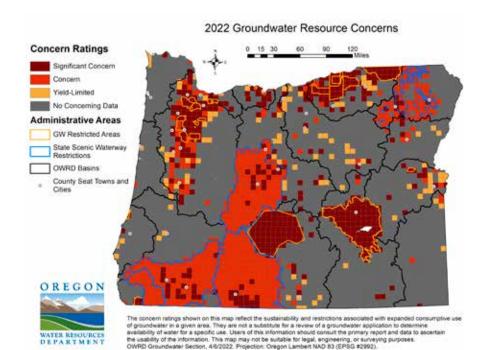
surface water. The surface water interaction issue is important because most of Oregon's rivers and streams are designated as habitats for endangered fish species that require cool, clean water to thrive. In places where groundwater contributes to surface water flows, groundwater withdrawals can impact fish habitats or scenic river flows.

OWRD regulates groundwater for three primary purposes: (1) to preserve the sustainability of an aquifer; (2) to avoid injury to senior water rights holders; and (3) to avoid impacts to listed species or state-designated scenic waterways. However, that is about to change.

Increased attention to groundwater concerns

In 2012, OWRD launched the Integrated Water Resources Strategy, which was an attempt to coordinate water resources issues across various state agencies. In the original strategy, groundwater was not identified as a high priority. However, two significant developments changed that approach.

In August 2016, The Oregonian newspaper (Portland, Oregon) published an investigative report titled "Draining Oregon," which opened with the



Legal Access

following statement:

"Oregon is helping farmers drain the state's underground reservoirs to grow cash crops in the desert, throwing sensitive ecosystems out of balance and fueling an agricultural boom that cannot be sustained ... Managers with the Oregon Water Resources Department have handed out rights to pump water while pleading ignorance about how much was actually available. They have approved new pumping for irrigation even as their own scientists warned it could hurt the water table, interviews and state records show."

That newspaper report was followed by the release of a Secretary of State's audit of OWRD in December, 2016 finding that:

"Oregon is facing growing pressures and concerns related to its water supply. The Water Resources Department (WRD), charged with managing the state's water resources, could better balance water rights issuance and management with actions to sustain current and future water needs. The agency can also enhance its focus on groundwater protection, data collection and analysis, and workload and staffing."

In 2017, OWRD updated the Integrated Water Resources Strategy, to identify groundwater as one of four cross-cutting issues of vital importance to Oregon's water future. The update contained recommended actions to advance the collection and processing of groundwater data, as well as the management and protection of groundwater resources.

In the intervening years, Oregon has experienced a significant drought cycle, leading to groundwater regulation, shallow domestic wells going dry, and continued aquifer declines in many parts of the state. More recently, headlines have focused on

drinking water contamination issues in Morrow County and emergency domestic water supply programs in Klamath County.

Increased regulation, decreased development

The increased attention on groundwater allocation and regulation has prompted OWRD to undertake several initiatives that could impact agricultural water users.

1. Statewide assessment of groundwater vulnerability. In 2021, OWRD published the Groundwater Resources Concerns Assessment, a statewide examination of groundwater concerns. This includes the development of a new groundwater vulnerability mapping tool.

The assessment's primary conclusions are as follows:

• There are many portions of the state where OWRD has significant



*\$0 Down, 0% A.P.R. financing for up to 36 months on purchases of select new Kubota R430 Series equipment from participating dealers' in-stock inventory is available to qualified purchasers through Kubota Credit Corporation, U.S.A.; subject to credit approval. Some exceptions apply. Example: 36 monthly payments of \$27.78 per \$1,000 financed. Offer expires 9/30/22. For complete warranty, disclaimer, safety and product information see dealer or KubotaUSA.com. † For complete warranty, safety and product information, consult your local Kubota dealer and the product operator's manual. Power (HP/KW) and other specifications are based on various standards or recommended practices. K1136-24-147206.

groundwater concerns, but that are not in existing groundwater restricted areas. Further groundwater development in these areas has the potential to exacerbate negative impacts and conflicts between users. Those areas may warrant further study and potential inclusion in expanded or new groundwater restricted areas.

• Over 80% of applications for groundwater permits and limited licenses since 2010 are in areas of concern or significant concern. Further groundwater development in these areas has the potential to exacerbate negative impacts and conflicts between users.

2. Oregon Water Resources Commission Actions. In October 2016. OWRD staff and the Oregon Water Resources Commission began a discussion regarding groundwater management, reviewing the policy and legal framework for groundwater management, the importance of data to inform decision-making, the current status of the resource, and existing groundwater management tools. Since then, OWRD has received funding from the legislature to conduct additional groundwater investigations, advance groundwater data collection and assessment capabilities, and develop modeling tools.

In December 2021, the commission directed OWRC staff to develop recommendations for a plan of action that will lead to a modernized groundwater allocation policy that is more sustainable and protective of senior water right holders, both surface and groundwater.

3. OWRD actions to restrict future groundwater allocation. In March 2022, staff reported to the commission that surface and groundwater supplies in much of the state have reached a limit whereby newly permitted groundwater uses increasingly

come at the expense of existing surface water right holders. Staff proposed to update OWRD's groundwater allocation policy and process to consider the source of water to wells, surface water availability, and the regulation history for surface water sources receiving groundwater baseflow. Specific recommendations include:

- Areas where groundwater is documented to be in persistent decline would, through rulemaking, be determined to be over appropriated with groundwater not available. Where data is unavailable, OWRD will default to denying new applications rather than approving them, as has historically been the case.
- Groundwater availability will be determined in the future not just by determining whether an individual proposed use will impact the aquifer and hydraulically connected surface water, but \gg







A MORE EFFICIENT LIGHTING SYSTEM WAS THE KEY TO FINDING **OUR WAY INTO THE GREEN.**

Our business is nothing without its lighting. So when it came time to find a more efficient lighting solution, we relied on the guidance of Energy Trust of Oregon. And our business has never been greenerin more ways than one. See how they can help your business at EnergyTrust.org/for-business.



ENERGY TRUST for BUSINESS



Serving customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista.

Legal Access

by looking at all groundwater uses and their cumulative impact on the resource. The practical effect of this shift in methodology will determine that the vast majority of Oregon's groundwater is unavailable for new water rights.

Meanwhile, OWRD has already taken other important actions in the Walla Walla Basin and the Harney Basin that may portend regulation in the rest of the state. In those areas of groundwater concern, OWRD has stopped issuing new groundwater permits, stopped granting permit extension applications for undeveloped portions of permits, updated basin program rules to be more restrictive, and invested significantly in groundwater studies.

Finally, OWRD is revising its Division 10 administrative rules that govern OWRD's general process for designating critical groundwater areas. OWRD staff has indicated that once the general rules are in place, it intends to commence basin- or subbasinspecific proceedings around the state to designate critical groundwater areas.

Conclusion

OWRD's enhanced focus on limiting groundwater allocation and increasing regulation marks a significant change in how the state will manage the resource in the future. As a result, it will become more difficult to acquire new groundwater rights. In addition, it is likely that OWRD will enhance regulation of existing uses as more data becomes available.

Steven Shropshire is a shareholder at Jordan Ramis PC, where he focuses on water law and environmental regulatory law. He has served as counsel on several cases involving water rights issues of first impression before Oregon, Colorado and federal courts. He serves as legal counsel for the Oregon Association of Nurseries, and can be reached at steve.shropshire@jordanramis.com.

OAN regular and associate members receive up to 30 minutes per month of free legal consultation through the Legal Access program, in partnership with Jordan Ramis PC. If your problem or issue requires more than 30 minutes of consultation, Jordan Ramis will estimate the cost and you can decide to drop or pursue the matter further. To use this benefit, call Steve Shropshire at 503-598-5583 or toll free at 888-598-7070. Have your membership number ready.





Hot, hardy hydrangeas

Heat resistant hydrangea introductions give gardeners the confidence to push forward

BY KYM POKORNY

HE HISTORIC HEAT DOME of June 2021 left homeowners panicked about their crispy hydrangeas and wondering how the plant can thrive as climate change continues to bring unprecedented weather events. Even before last year's record-breaking temperatures, breeders saw the effects of climate change and began selecting for better heat and cold tolerance.

"More extreme weather events and fluctuations are what often hurts plants," said DeVonne Friesen, a founder of Bloomin' Easy and vice president of Van Belle Nursery in British Columbia. "We're looking for plants that can handle big swings. If they wilt in intense sun and their leaves dry up, we won't select those plants. We know the homeowner who doesn't know a lot about plants will face those experiences and lose interest."

Even with some disappointments, it would be hard to erase hydrangeas from the top of customers' shopping lists. The most popular shrub worldwide is either hydrangeas or roses, depending on who you talk to. Regardless of who wins, people love their hydrangeas.

"A lot of it is nostalgia," said Kristin VanHoose, owner of Hydrangeas Plus® and Amethyst Hill Nursery. "Hydrangeas remind people of their grandma and grandpa. They remember their grandma in Iowa who had a big blue hydrangea in the front vard. It's very heartfelt to grow a hydrangea. And these plants are easy to care for. You water them, cut them back in fall. Maybe fertilize; maybe not. Put them in the right location with some shade and they perform June through October."

It's also one of the most versatile shrubs, taking a place in almost any style of garden in myriad ways, including in mixed borders, as hedges or specimens and in containers. According to VanHoose, maintenance is minimal, they take full sun, and there's one for every region.

"It's no wonder hydrangeas are one of the most popular genera," said Georgia Clay, new plants manager for Monrovia. "Few plants can grow from California to Florida and up to Canada. It has a huge range."

The new breed

The story of modern hydrangea breeding began with a chance discovery by Dr. Michael Dirr, a well-known woody plant breeder and professor emeritus at the University of Georgia. It has been told many times, but bears repeating in an article about hydrangeas.

Dirr was riding around **Bailey Nurseries**' growing grounds in Minnesota in 1998, when his well-trained eye spied a hydrangea that was flowering on new buds. It was September, not

Hot, hardy hydrangeas

Previous page: Bailey Nurseries introduced Summer Crush® bigleaf hydrangea (*H. macrophylla* 'Bailmacfive' PP30359) in 2018 as part of their Endless Summer line, offering a small statured selection maxing out at about three feet tall.







the time for new blooms.

"He stopped the car and said, 'What is this?'" said Alec Charais, chief marketing and product development officer for Bailey. "Before you know it, the Endless Summer® brand was born."

Hydrangea macorphylla 'Bailmer', known as 'Endless Summer', was the first repeat-blooming bigleaf hydrangea that would change the world. In 2004, the famous bluepotted hydrangea was introduced by Bailey, which can brag of selling over 27 million plants. Four additional varieties — BloomStruck®, Twist-n-Shout®, Blushing Bride® and Summer Crush® — have joined the Endless Summer line.

Unlike other mophead hydrangeas, 'Endless Summer The Original' flowered on old and new wood, stretching the bloom season substantially. Martha Stewart caught wind of the plant, put it on TV and the world quickly caught on. And so did breeders. Since then, most new *H. macrophylla* introductions are rebloomers.

The five hydrangeas that rank as the most popular in the 50-species genus are: *H. macrophylla* (mophead or bigleaf), fol-

lowed by *H. serrata* (mountain), *H. paniculata* (panicle or peegee), *H. quercifolia* (oakleaf) and *H. arborescens* (smooth). *H. macrophylla* is the top seller by far, perhaps because they're in bloom when people are most likely to be at the garden center, according to Clay.

"When customers see those big colorful flowers in bloom, they're smitten, panicle hydrangeas don't have a lot of colors until they age. Macrophyllas have tons of colors."

- Georgia Clay, Monrovia Growers

H. paniculata withstands cold better than H. macrophylla, usually down to USDA Hardiness Zone 3. Bigleaf hydrangeas hover at Zone 5, though hardier varieties keep appearing. Panicle hydrangeas also deal with heat better than other hydrangeas. They send out robust, cone-shaped inflorescences ranging from 6 to 12 inches that continue to bloom into the dog days of summer when many other shrubs have long given up.

There are other good traits: The

shrubs flower on new or current season's growth, so late-winter pruning doesn't affect blooming. Butterflies and bees are bountiful pollinators.

"The one that will survive everywhere is *paniculata*," said VanHoose, who grows 340 hydrangea varieties. "It's hardier than other hydrangeas and deals with heat better. Plus, it's low maintenance."

The most famous *H. paniculata* cultivar has to be 'Limelight' (*H.p.* 'Limelight' PP12874), a sturdy, heat-tolerant shrub introduced to the market by Proven Winners in 1988 to great fanfare. With a statuesque size (6–8 feet tall and wide), exquisite green flower color and tough-as-nails reputation, 'Limelight' stands up to the most popular

its hype and is one of the most popular hydrangeas in the world.

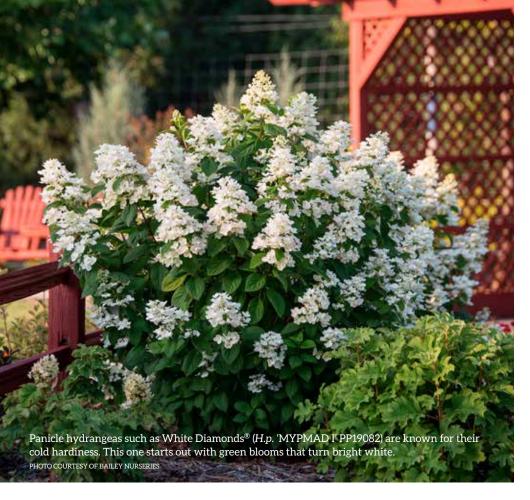
"It's a banner hydrangea," said Natalie Carmolli, media and public relations specialist for **Spring Meadow Nursery**. "'Limelight' is like the Q-tip® or Kleenex® of the hydrangea world. It's a household name. People love those great big green blooms."

Smaller versions, also adapted to hot sun, have come down the pike at Spring Meadow, including Little Lime (*H.p.*









'Jane' PP22330), Limelight Prime (H.p. 'SMNHPPH' PP32511), and Little Lime Punch (H.p. 'SMNHPH' PP33207), all topping out under 6 feet with Little Lime Punch growing just 3-5 feet. All have the same stop-in-your-tracks green flowers that age to varying colors of pink and red.

Bobo (H.p. 'ILVOBO' PP22782), a Spring Meadow introduction that joined 'Limelight' as a winner of the prestigious Pennsylvania Horticultural Society Gold Medal of the Year in 2021, is another compact panicle growing to only 2½-3 feet tall and wide. Hardiness is ranked at Zone 3, and it deals well in the heat.

"Climate change is causing us to think more about working on finding plants better adjusted to warm climates or arid climates," Carmolli said. "And more fire-wise plants that are less likely to ignite."

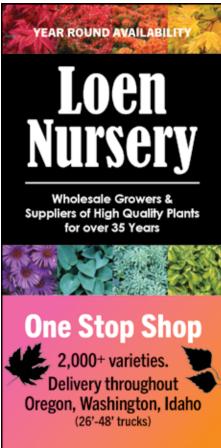
A hybrid hydrangea, Fairytrail Bride® Cascade Hydrangea®, (Hydrangea × 'USHYD0405' PP31120), is quite heattolerant and deserves special attention, she said with enthusiasm. It's another award winner, receiving the coveted Plant of the Year at the Chelsea Flower Show in 2018, and showing its value with long, trailing stems with bunches of white, lacy florets at every leaf node for blooming top to bottom. The lacy-looking blooms age to pink as fall arrives. Not so cold tolerant, though. It's a Zone 6 plant. 'New on the market this year, it was one of only eight hydrangeas to earn top rating in the Chicago Botanic Garden H. paniculata 10-year trial.

Though *H. paniculata* is sturdier and hardier than H. macrophaylla, there's plenty of breeding going on to improve macrophayllas, too. 'Bloomstruck' and 'Summer Crush' are two from Bailey.

"Both have nice, thick, waxy foliage that allows them to tolerate the oppressive heat we see in summer," Charais said. "They were standing up nice and perky in 90-degree heat. I have firsthand experience with these plants and understand what the consumer wants., These plants are absolutely my favorites from handson experience."

Elizabeth Ashley™ (Hydrangea macropyhlla 'Hokomarore' PP31264) is a H. macrophylla bred in Europe and named after the late daughter of a breeder friend of Tom Foley, director of new plants and production for Everde Growers. Foley described the plant as having "great big rich, dark pink flowers with a big petal count on a reblooming 3-by-3 shrub.

"We're always looking for that



QUALITY PLANT MATERIAL

- Japanese maples: 80+ varieties
- Shade & flowering: 20,000 in prod.
- Fruit trees: 10,000 in prod.
- Perennials, ferns and grasses
- Broadleaf and deciduous shrubs
- Roses: Shrub, groundcover
- Conifers: Grafted, seedling
- Groundcovers
- Rhododendrons and Azaleas
- Natives and vines
- · Berries: Blueberry, Logan, Raspberry
- Contract growing
- Yes, we have it!
- And yes, we can find it for you!

CONTAINER-GROWN AND CONTAINER-ESTABLISHED PREFERRED

> Let us quote your COMPLETE plant list.

Wholesale Sales/Growing Facilities (Real people will answer your call)

Local Contractor's Yard

www.loennursery.com

PLANT YOUR BRAND



WATCH IT GROW

Our flagship publications are respected, economical and effective. Deliver your message, your way — in print and online. Save even more with our OAN member rates!

Contact Curt Kipp, director of publications, at 503-582-2009 or ckipp@oan.org, and connect with your target audience: nursery professionals and industry leaders.



503-682-5089 (main) 888-283-7219 • ads@oan.org

DOWNLOAD THE MEDIA KIT www.oan.org/ads

Hot, hardy hydrangeas



Fairytrail Bride® cascade hydrangea (H. × 'USHYD0405' PP31120, CPBRAF) is a unique new trailing option that can take up to six hours of direct sun and still bloom abundantly.

size." Foley said. "It's perfect for the yard and it does well in Southern California, as well as the Northwest. It's fantastic."

As for *H. paniculatas*, Foley spoke up for 'Sweet Summer' (*H.p.* 'Bokrathirteen' PP21778), coming to the market in 2023. The shrub is very upright to 5 feet with heavy blooming clear white flowers that age to a soft, shell pink in late summer and fall. Stiff stems ably hold up the elegant 12-inch-long blooms.

Charais of Bailey has his favorite H. paniculatas, too. His list starts with Little Hottie® (H.p. 'Bailpanone' PP32549), a brand-new compact variety withstands temperatures down to Zone 4 and maybe 3, and White Diamonds[®], (*H.p.* 'HYPMAD I' PP19082), an underappreciated hydrangea that starts out green and then turns bright white. Large flowers stand up beautifully on both shrubs and they both handle heat well as demonstrated in Bailey's Georgia trials, which were done specifically to rate heat tolerance. Across the county, 'White Diamonds' did incredibly well in both heat tolerance and cold tolerance.

Wintering well

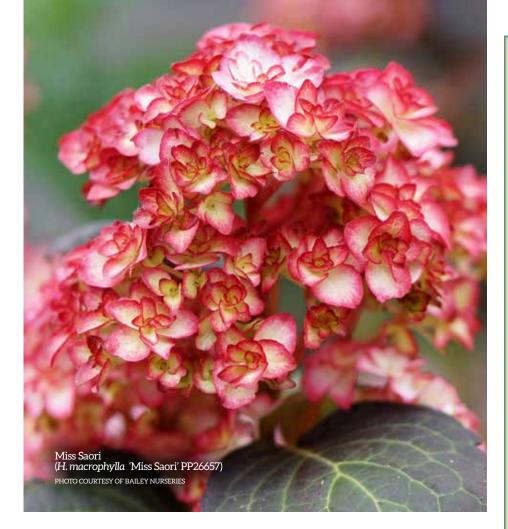
While flower size, color and sturdy, compact plants are key for breeders, winter hardiness ranks as one of the top-tier traits breeders consider. As climate change nudges temperatures up there's the risk the plants won't get the cold that brings on the vernalization that allows flowering.

"Hydrangeas require vernalization — 600 hours of cooling," Clay of Monrovia said. "Warmer winters are an issue of climate change. You can mitigate drought with water and shading, but cooling you can't fake."

At Monrovia, excitement surrounds the Seaside Serenade® collection. The plants are tetraploids — with thicker leathery foliage that stands up to heat better — and their compact size makes them appropriate for today's smaller spaces. Eleven hydrangeas make up the collection, including pinkand-white Fire Island (*H.m.* 'HORTFIRE' PP29058)', dark pink 'Martha's Vineyard (*H.m.* 'HORTMAVI' PPAF)' and the newest, Cape Cod (*H.m.* 'HMUPSI' PP28974), a classic blue hydrangea.

"Because we're coming out with new ones, it's fueling growth," Clay said. "Hydrangeas are very versatile and they're only getting better and better. People are having more success. They are only growing in popularity."

The Bloomin' Easy brand added three hydrangeas to the collection this year: TorchTM (*H.p.* 'HPOPR018' PP32972), FlareTM (*H.p.* 'Kolmavesu' PP26928) and



Candelabra[™] (*H.p.* 'Hpopr013' PP27472). Friesen from Van Belle said easy-care paniculatas hold their flowers up on stout stems emerging from compact plants that need little pruning.

"What I love about these plants is that without knowing how to prune, you can cut them back a foot every year and they grow into a perfect vase," Friesen said. "No matter the weather, they stand up straight. It grows in a very behaved manner."

Friesen couldn't hang up without mentioning Pink Dynamo™ (H. serrata 'JPD01' USPP33412), a high-performing hybrid with both H. paniculata and H. serrata in its parentage. Its lineage contributes to its hardiness and has incredible garden performance. Harsh weather didn't stop it — the plant came through with flying colors. At only 2—3 feet tall and wide, Pink Dynamo[™], a Zone 5 plant, really stands out in a mixed border, container or in mass plantings to show off flowers edged in a pure pink with white and yellow accents near the center.

VanHoose suggested heat-tolerant H. macrophylla 'Miss Saori', winner of the highly sought-after Chelsea Flower Show Plant of the Year in 2014, as well. 'Miss Saori' is clothed in dark burgundy new foliage and flaunts unique double white blooms with bright pink petal edges on a 3-by-4-foot shrub that's hardy to Zone 5.

'Limelight', another top performer in the Chicago Botanic Garden, may be the hydrangea most associated with Spring Meadow, but there are so many more. The huge blooms of 'Incrediball®' and 'Invincibelle®' hydrangeas have been incredibly successful and spawned several offspring, including Invincibelle Lace® (H.a. subsp. radiata 'SMNHRLL' PP33290), a new *H. arborescens* with the first plumpurple lacecap flowers. Because it's a native, this 4-by-5-foot shrub is especially tough and thrives down to Zone 3. Also in the collection, Invicibelle Spirit® (H.a. 'NCHA1' PP20765), which supports the fight against breast cancer with \$1 per sale going toward conquering the disease, is an improvement over the original with darker foliage, stiffer stems and richer pink flowers.

Carmolli, Spring Meadows' public relations specialist, is partial to the new Let's Dance® series, hydrangeas crossed between macrophylla and serrata. Let's Dance ;Arriba!® (H. × 'SMNHSC' PP33206) takes after it's mophead parentage with purple or pink flowers depending on soil pH,





QUALITY FLOWERING & SHADE TREES SINCE 1925



33740 SE LUSTED ROAD GRESHAM, OR 97080

TREES@SURFACENURSERY.COM

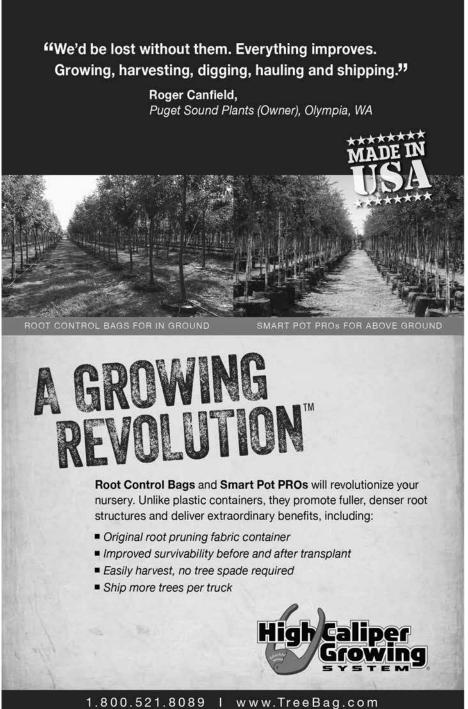
WWW.SURFACENURSERY.COM

PHONE: 503.663.5224

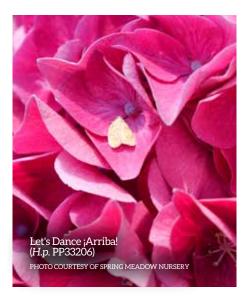
800.831.2599

FAX: 503.907.8099





Hot, hardy hydrangeas

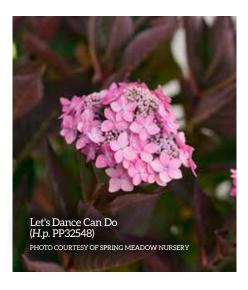


while Let's Dance Can Do® (*H.s.* 'SMNHSI' PP32548)!' looks more like its serrata side.

Since there's serrata in the breeding, the Let's Dance collection is a tough hydrangea, growing down to Zone 4. Carmolli considers them super reliable. They bloom from top to bottom so they're just a ball of flowers.

"It's an exciting time in the world of plants, in the world of hydrangeas," Friesen said. "Every time a person has a good experience with a hydrangea, it's good for the whole industry."

Kym Pokorny is a garden writer with more than 20 years' experience writing for The Oregonian (Portland, Oregon) and other publications. She is currently a communications specialist with Oregon State University Extension Service. She can be reached at kym.pokorny@oregonstate.edu.





Retention through progression

These strategies can help employers reduce worker turnover and increase productivity

BY TRACY ILENE MILLER

ABOR SHORTAGES HAVE BEEN A PROBLEM for the nursery industry long before the COVID-19 pandemic. But then came the ensuing lockdown and a widely reported shift in employee mindset about the workplace. Dubbed the Great Resignation, a mass worker exodus last year yielded more than 47 million people quitting their jobs, according to the U.S. Bureau of Labor and Statistics.

Compounding previous problems, it became that much harder to fill positions. The experience of the nursery industry is borne out by the work world overall. Research firm Gartner summarizes the issues facing employers in their hiring pursuits:

- 50–75% higher turnover than previously experienced.
- 18% longer time to fill a role than before the pandemic.
- Approximately 50% of prospective candidates juggling two or more offers at the same time.
- A 6% increase annually of skills required to do a single job.

In this environment, employee retention programs are just as important as recruitment, and have become a cornerstone of business longevity. Here we look at strategies to retain talent.

Provide professional, career development opportunities

Workplace research studies demonstrate employees are

more engaged when they are learning new skills, whereas disengagement leads to higher turnover. Defined career development opportunities foster employee engagement and satisfaction by supporting and embedding learning and growth on the job.

For new hires, understanding their aspirations from the start and creating a program for them to transition into a new role over time demonstrates company commitment to their future.

"If we get a young person, we want to keep them and get them as excited as we can," said Terri Cook, senior vice president of human resources, Everde Growers, a Texas-based nursery company with additional farms in Oregon, California and Florida.

Instituting a mentorship program can be used to support all employees in their career development path. Mentorship programs focus employee attention on the attainment of goals and continually build their future at a company.

"[During employee reviews] we outline the mentorship and make sure they know where they are headed and where potentially they can go," said Jonathan Pedersen, CEO and president of Monrovia Nursery Co., a California-based grower with additional locations in Oregon, Georgia and Connecticut.

A carefully developed training program can help employees identify opportunities for moving into different roles and

Retention through progression

Previous page: A positive work environment does wonders for keeping employees on board and reducing turnover expenses. PHOTO BY BILL GOLOSKI

This page, opposite and next: Workers at Everde Growers in Forest Grove, Oregon move plants throughout the site. Although some lifting and bending is always required, growers can look for ways to automate these tasks as much as possible to keep employees safe, healthy and on the job. PHOTOS BY BILL GOLOSKI

areas of production, sales, IT, human resources and more.

"There is no position — if you've got the drive and passion — you cannot have at this company," Pedersen said.

Not all roles can be set on a management pathway, but companies can still increase retention and morale by providing continual learning opportunities and training for personal and professional development.

Invest in technologies

Many nurseries are facing the challenge of filling general labor positions by investing in technology. Replacing menial and hard labor tasks with automation is an investment in productivity and efficiency, but also in supporting, and retaining, the existing labor force.

"We are spending a lot of time looking at every process so people want to stay, and they are not doing repetitive lifting tasks all day," Pedersen said. "We are trying to eliminate bending, lifting and repetitive motions, and replacing them with automation where we can, without decreasing the number of existing employees."

Use of technology is also a big part of staying current, especially when attracting millennials, according to Pamela Evans, human resources manager at the J. Frank Schmidt & Son Co. nursery (JFS), a tree grower with 3,000 acres of growing space at three Oregon locations. Last year, supervisors at JFS got iPads to take into the fields to update inventory — "a valuable tool for managers and employees" - and a worthy customizing challenge for the programmer.

Enterprise resource planning (ERP) systems are software tools that automate business processes. They also manage day-to-day business activities such as project management, production, sales and human resources. Nurseries investing in these can establish standardized and best practices while also providing a professional development opportunity for their employees.

Everde uses the technology for proj-

ect planning and management to make the job easier and share information company-wide. According to Cook, a communication portal allows everyone to contribute their ideas for doing tasks or making projects better. The system shows employees the value of their input and expertise.

At Monrovia, training videos are provided in both English and Spanish, putting everyone on the same platform.

"It streamlines the process of learning, employees' understanding of the job requirements, and also makes sure they are doing the job in a safe and appropriate way," Petersen said. "For a craftsman, it makes them feel they know what needs to be done, decreases uncertainty, and shortens that learning curve. That adds to a feeling of being valued."

A culture of recognition

Employee recognition can come in many forms, small and large, privately and publicly. And apparently, it benefits everyone. A large-scale study undertaken by Workhuman and Gallup in the United States, the United Kingdom and Ireland showed profound results when acknowledgement, praise and recognition were part of workplace culture: Employees were engaged and connected, and businesses experienced cost savings with lower turnover. Yet, recognition is something that is often overlooked.

At IFS, Evans pointed to a bonus program for hitting company goals that is linked to the company's performance overall, rather than individual performance. It was especially well-received by employees.

"We have a lot of employees who have been here 10, 20 and 30 years. They take pride in their role here," Evans said. A cash bonus, rather than providing additional benefits, was highly regarded. Additional benefits don't always apply to all employees; not everyone needs them. But cash allows individuals to use the money however they choose.

At Monrovia, they have a craftsman of distinction award, where the individual is recognized in front of their peers, and

they get additional days off and a \$1,000 gift card.

Recognition can be creative and a way to create friendly work conditions. There can be annual employee/family picnics, occasional parties for holidays, or public acknowledgement of birthdays and work anniversaries.

"We recognize [employees] with gift cards, caps, and other giveaways in front of their peers on the farm," Evans said.

Developing a culture of recognition and camaraderie creates a sense of belonging. It's a human-centered approach that many studies show promotes friendly work conditions that foster individual investment.

Cultivate communication

Evans has been in HR for more than 30 years. After all that time, she said the story remains the same: Communication between employees and management is key to employee satisfaction. That holds true no matter the issue, from job execution to coworker conflicts to understanding and receiving guidance on benefits.

"A lot of people leave not because of the money, but because they don't feel they are being heard," Evans said. It all comes down to finding ways to institute open communications, and that includes support for managers and supervisors to deal with employee situations.

"Culturally, we make sure that our







employees, new or otherwise, have a voice and we listen to what they have to say," said Mike Pezzillo, CEO and vice president at Eason Horticultural Resources (Covington, Kentucky), a consultant and sales agent to retail garden center growers, wholesale greenhouse growers, nurserymen, and landscapers. "We address their challenges and internal issues."

That can happen in a variety of ways: Using technology to facilitate communications, collect feedback and post open positions internally when jobs are ready to be posted externally; creating opportunities for regular one-on-one, department and company-wide meetings; and ensuring job descriptions, expectations and instructions are clear and easily available.

At IFS, Evans works with a management assistant, Pedro Torres, who has been with the company for more than 18

years. He is a liaison, conducting weekly farm visits at all locations, walking the fields, talking with employees, recognizing individual employees for their work anniversaries and picking up any concerns or questions.

"Those one-on-ones provide valuable information," Evans said. "You're not always going to get that in a group meeting."

Coaching and communication

After you set expectations and create a work path for new hires or in review sessions for existing employees, consistent communication and transparency on job performance is good management practice, according to Cook. Especially for new and younger employees, performance communications and check-ins early, and continuously, allow for more moments

where managers and employees work together toward improvement.

"People want to know how they are doing, where they stand, with no surprises," he said. "I have a 23-year-old employee, and she wants to know what the plan is, and if she is doing it right." She wants to know how she fits in with the team, and if she is doing what's needed.

Gone are the days where people are hired, put their nose down, and come up only for an annual evaluation. They want to be part of the conversation and involved in their own learning.

"There is the mantra of rowing the boat together in the right direction, and if you are waiting for once a year to have those conversations, it is too late," Cook said.

Outside of more frequent formal reviews, companies can build in reg-









Call for Special Pricing

Delivery available throughout Oregon and California 7 days a week!





Retention through progression

ular informal interactions with employees. As with customers, plan touchpoints to specifically reflect on goals, recognition, areas for improvement, and learning opportunities.

"We want to make sure we are communicating the wants and needs of the position before someone becomes so frustrated that they walk out the door," Cook said.

Embracing flexibility

No conversation about employee retention is complete without talking about compensation. If the candidate pool is limited, retention may require paying people more money, but there are nonsalary alternatives to compensation that can bolster satisfaction.

For example:

- For exempt employees, comp time for working weekends and nights is by no means required, but it still can be provided as a perk.
- For positions where technology can create connections to the home office, working from home at times can be a lifestyle benefit. Hiring completely remote workers can perhaps be a benefit for both employers and employees.
- Flexible start and stop times, without tapping paid time off (PTO), for people with young children or elderly parents can ease work schedules.

Just as with recruitment, retention of existing employees is based on reputation and an overall sense of the company. When employees feel valued, safe, and connected to company culture and part of an innovative team — as well as earning good benefits and pay — it adds up to an engaged and happy staff.

When an investment is made, with time and financial resources devoted to their well-being, it fosters loyalty and longevity.

Tracy Ilene Miller is a freelance writer and editor who covers several topics, including gardening and the nursery industry. She can be reached at tmillerwriter@gmail.com.



Employing Lean in outdoor operations

Small margins and lengthy production timelines mean that small changes can add up to a huge difference

BY MITCH LIES

BOUT A DECADE AGO, while working on improving the efficiency of its operation, managers of liner grower JLPN Inc. in Salem (JLPN) realized the company was spending "a massive amount of time grading containers," according to owner John Lewis.

The company moved its grading from tables in a greenhouse onto conveyor belts, which provided significant improvement, "But the process was still an orchestrated mess." he said.

Lewis then brought in Rick and Elizabeth Peters of the Peters Company, a Wilsonville, Oregon-based consulting firm that specializes in Lean. Collaboratively, they began employing Lean methodology, also known as the Toyota Production System.

Employing Lean helped JLPN identify the seven most common wastes in production: transportation, inventory, motion, waiting, overprocessing, overproduction and defects. And through Kaizen Events, or waste-elimination events, which JLPN employed multiple times for processes involved in growing, grading and processing its container crop, it was able to dramatically improve efficiencies.

"It would seem ridiculous to go back and do a Kaizen on the same process so many times, but we knew it was still one of the highest labor processes in the nursery," he said.

Prior to employing Lean, to grow, grade and process its container crop, JLPN required around 15 touches a season. That included lifting a 30-pound flat 10 times a year, which added up to roughly 26 million pounds of lifting. By itself, a decision to automate the planting portion of its operation dramatically reduced efficiencies, eliminating more than 13- million pounds of lifting.

Other improvements followed. Eventually, the nursery was able to increase its production from 20,000 plants a day with a 12-person crew to 50,000 plants a day with a 12-person crew.

"Those are massive efficiency gains," Lewis said.

According to Rick and Elizabeth, Lewis' experiences with Lean are not unusual.

"The whole idea is to minimize the seven wastes," Elizabeth Peters said.



Employing Lean in outdoor operations

Previous page, this page and next page: Workers at JLPN Inc. in Salem Oregon sort and grade Acer palmatum seedlings by size. They made their process more efficient by holding Lean events and eliminating wasteful steps. PHOTOS BY CURT KIPP



Constantly improving

Scott Cowan, West Coast container manager for Bailey Nurseries, who has incorporated Lean in his department for the past four years, said applying Lean involves constantly looking for improvements in efficiencies.

"The mentality that we strive for is continuous improvement," Cowan said.

"I continually ask my crew leads and other folks who work in the nursery for ideas and suggestions," he said.

When he began incorporating Lean into his department, Cowan started by looking at the bigger jobs.

"The bigger the job, the better the chance you have waste in it, just because of how many hours you have in that task," he said.

Cowan first looks at jobs that have historically been sources of injuries.

"What I'm seeing is the more you can eliminate the physically demanding jobs, the ones where you have had injuries, the more buy in you get out of your crews." he said. "The heavy-lifting processes are usually the most arduous on your people, which can result in injuries. Mechanization or simple process changes

sometimes can accomplish that."

Visual controls

Asked to identify the most common problem in an outdoor operation, the Peters pointed to the time and energy spent searching for items, whether that be a plant, a tool or something else.

"One of the biggest mistakes growers make in field operations is assuming their people know where things are," Rick

"We are always looking for a way to do something better than the way we presently do it. It could be as simple as a change in crew size or implementing other types of equipment."

- Scott Cowan, Bailey Nurseries

Peters said. "Crew members need information and clear, visual controls to find what they need with the fewest steps possible."

Locating plants becomes particularly difficult given the length of a growing cycle in a nursery operation, according to Rick Peters.

"When you are talking nurseries, we

aren't talking a few weeks or months. You could easily be into years to complete a product," he said. "So, keeping track of those products throughout its life cycle becomes problematic."

Also, when misplacing a plant, the repercussions can be significant.

"Unlike a bolt or something that you might find in a parts warehouse, if you misplace a living thing, you can be lucky if it survives while you are trying to find it,"

he said.

"One of the first things we do is we have leaders think about visual controls, such as locater signs in growing areas, to help people find what they need," Elizabeth Peters said. "Having things visually organized is a big part of a successful outdoor growing arrangement."

In addition to signage, arranging inventory into smaller blocks also can cut down on wasteful searching.

"Organizing your product in smaller blocks so they are more manageable is another thing people can do to reduce time and steps," Elizabeth Peters.

Another key to eliminating waste in outdoor production is processing products as close as possible to their growing space.

"If you are hauling product to some

remote machine, that is all waste," Rick Peters said. "It is all overprocessing, extra handling, a lot of transportation, which is particularly wasteful right now given the price of fuel. Whenever possible, being able to process it right where it is, is ideal. And it typically requires fewer people to do that."

One mistake that nurseries make that inhibits their ability to process products where they are growing is buying large equipment, according to Elizabeth Peters said.

"We see that a lot, where a general manager will buy a big piece of equipment for a warehouse, and then people end up having to bring plant material to the warehouse to process it and then take it back out to the field. That is really costly."

"The bigger-the-better approach is definitely not always the case," Rick Peters said.



The Peters also pointed out that it is important for outdoor nursery operations to prepare for unusual weather events, such as last summer's heat dome that drove temperatures up to 117 F in some areas of the Willamette Valley.

"It is important to standardize the process of mitigating those issues," Elizabeth Peters said. "Some just kind of say, 'Okay, it is all hands-on-deck' without talking through the process with the team. The countermeasure would be to

standardize those processes ahead of time."

Start slow

Matt Gold of Everde Growers in Forest Grove, Oregon, who took a course in Lean from the University of Kentucky taught by ex-Toyota executives, no less — believes that it is important to start slow when bringing Lean into an operation.

"We do some work with Lean at



GK Machine Builds Heavy Duty Ag Equipment





WWW.GKMACHINE.COM 503-678-5525



Employing Lean in outdoor operations

different company sites, but we haven't done a lot yet," he said. "We want to make sure we have a good program in place that we can effectively deploy it and not have a false start.

"That is a big problem a lot of companies have. They put a little effort into Lean and it doesn't work out or they hit some stumbling blocks and they kind of chalk it up to 'Lean didn't work for us.' We want to avoid that pitfall." he said.

At this point, the nursery is evaluating its different processes and identifying areas of improvement, as well as conducting some Lean leadership training with employees, including its executive team.

"Any project that we have, we are identifying where we are at today and what our target should be," Gold said. "And then we will come up with a plan to get to our target."

The company also is using that strategy to determine whether to invest in new machinery, he said.

"Take, for example, a canning system," Gold said. "We ask ourselves what is a canning system doing for us today and what

"Lean is the entire reason we have been able to keep up with increasing market demand as labor availability decreases and costs increase."

- John Lewis, owner of JLPN Inc.

can a new and improved system do that is better: what kind of results can it provide?

"So, we quantify that and based on the number of units that go through that machinery in a 12-month period, we can put that difference in a dollar amount," he said.

"Then, when you start working with that machine, you don't always hit your target, so you have to work through some action items to overcome obstacles. You understand where you are today and where you want to be and identify obstacles that are impeding your progress toward that goal, and then you take a disciplined approach to remove those obstacles through a systematic cycle," Gold said.

For many who utilize Lean on a daily basis, it has become an invaluable resource, particularly in the current market, with labor at short supply and demand up.

"We would not be a growing business if we hadn't got serious about Lean."

Mitch Lies is a freelance writer covering agricultural issues based in Salem Oregon.

He can be reached at mitchlies@comcast.net.

DIGGER ADVERTISERS Please contact our fine advertisers for your plant, product and supply needs. AAA Mercantile45 Material Flow Systems31 Meridian Young Plants......45 Alpha Nursery Inc.43 Anderson Pots2 Motz & Son Nursery45 Nursery Outlet, The45 Energy Trust of Oregon......21 F & L Lumber Inc......42 GK Machine.....35 Harrell's Inc.40 Oregon Valley Greenhouses14 Reardon Nursery18 HC Companies47 Rickel's Tree Farm45 Schurter Nursery45 Kubota......20 Spring Meadow Nursery......48 Surface Nursery Inc......27 T&R Lumber......17 Leonard Adams Insurance6 Weeks Berry Nursery......17 Willamette Nurseries 11 Marr Bros. 43

ASSISTANT FARM MANAGER

Ekstrom Nursery in Gresham, Oregon is looking for a career oriented individual to work in multiple areas. We are looking for an experienced individual who has a strong work ethic, is disciplined, motivated for personal and professional growth and committed to the vision of our company. We have 200 acres of container, field and bare root ornamental plants. Customer base includes retail, re-wholesale and growers. The person will work closely with the owners in all aspects of container, B&B and bare root production. This is a career opportunity for a person who is interested in diverse plant production and nursery business.

Responsibilities and Qualifications 1)Experience in ornamental nursery production and propagation related to field, container and bare root.

- 2)Oversee all aspects of our container production
- 3)Assist in crew management of field production practi techniques.
- 4)Assist with supervi scheduling daily and wee 5)Must be self-motivated or to work with a group
- 6)Possesses strong comr skills, interpersonal skills person of good character 7)Computer knowledge, abilities, and bilingual (E Spanish) language desire

8)Strong work ethic, positive

9)Valid driver's license.

10)Ability to work with v of agricultural equipmen tractors and implements. 11)Have leadership skills to make decisions, motivate employees.

Compensation: Salaried position is DOE and includes benefits package. Please send resumes to ekstrom.nsy@gmail.com

HELP WANTED

For jobs and key employees throughout California and the Northwest, call Florasearch, Inc. You know us. For more than three decades we have been bringing together key people and excellent companies in the nursery and greenhouse industries and allied trades. Check our references. Confidential. Employer pays fee.

Florasearch, Inc. 1740 Lake Markham Rd. Sanford, FL 32771 Ph (407) 320-8177 Fx (407) 320-8083 Website: www.florasearch.com Email: search@florasearch.com

Digger

PRODUCTION ASSISTANT & INVENTORY COORDINATOR

Patterson Nursery Sales, Inc. Eagle Creek, OR., an employee owned company (ESOP), is seeking a selfmotivated skilled individual to assist in maintaining plant inventories thru all production cycles. Primary duties include, but not limited to, facilitating the harvest of market ready plants and assisting in the coordination of staging for shipment.

- This individual must have the ability to work in a team environment capable of coordinating multiple tasks simultaneously in a fast-paced
- Must be able to work under inclement weather conditions (hot, cold, and rain)
- Willingness to learn new jobs and skills.
- Spanish/English preferred (but not required).
- Computer skills preferred (but not required)
- · Basic reading, writing and

PRODUCTION MANAGER, PRT

As a member of the local management team you will have the opportunity to work with the most innovative conifer seedling producer in the industry with a focus on customer satisfaction and continuous improvement. Reporting to the Senior Production Manager, you will oversee all aspects of greenhouse and open compound seedling production as part of an experienced team that takes pride in meeting our customer expectations. Your focus will include crop culture, continuous improvement activities, customer focus, and safe work procedures. Compensation, Benefits & Workplace Culture: •Highly competitive annual salary matching your level of experience and ability •Bonus incentive program – up to 10% of annual salary •Matching 401K program •Comprehensive benefits package inclusive of extended health and dental •Relocation allowance (if applicable) •Our PRT nurseries

GENERAL MANAGER

Cascadian Nurseries is looking for the right person to manage the day to day operations of this mid-size nursery and work with staff to take the nursery into the next generation. This person will continue to build relationships with landscape associations, customers and suppliers. More company information can be found at www.cascadiannurseries.com

Duties: •Run the day to day operations of the nursery. Supplement current team as necessary to provide a complete and sufficient workforce to achieve company goals. Develop team to establish a first-class, effective organization. • Evaluate the nurseries competitive situation, strengths and financial returns. In concert with management team, create and implement a strategy that results in a strong competitive position and appropriate returns. •Be the face of the organization ustomer and business

> ies. Create and sustain osition of high quality, tomer service, equitable actices and relationships. strong business nt practices to maintain pany's position as a of superior top quality •Oversee all company nsure strong operations, and internal controls. zational skills required.

and maintain excellent communications among vees. •Strong planning the nurseries inventory, d product mix to meet needs. ons: • Passionate about the nursery/landscape industry. Willing to take the business to the next generation, such as implementing new technology. • B.A. required, with emphasis

management preferred. **Experience:** Three to five years managerial experience at a horticulture business. Overall seven to ten years related experience or equivalent combination of education and experience required. Demonstrated progression in management of horticulture

in business administration and/or

horticulture, greenhouse, or nursery

company preferred. Computer Skills: Experience with Microsoft Office preferred. Able to manage company website and internet applications. We use Sage 100 for our accounting, inventory, and sales.

Apply: Please send resume to Cascadian Nurseries, 8900 NW Dick Rd., Hillsboro, OR 97124 or email to jim@cascadiannurseries.com.

REPRESENTATIVE

TSW Nursery Sales Inc. is seeking a plant-knowledgable inside sales representative with 3-5 years of sales experience. The perfect candidate must be proficient in MS Office Suite and Quickbooks software, provide excellent customer service, have strong verbal and written communication skills, manage their time, and be organized. Salary commensurate with experience.

Please mail or email cover letter and resume to:

TSW Nursery Sales, Inc. Attn: Human Resources P.O. Box 1217, Wilsonville, OR 97070 accounting@tswnurserysales.com

Classified ads work!

Email us at ads@oan.org or call 503-682-5089

planning, organization, and time management skills •Knowledge or experience with continuous process improvement in a production environment •Ability to problem solve and conduct root cause analysis Location: PRT Hubbard is located in Hubbard OR, a small town with a big heart. Hubbard is in Marion County about 45 minutes from the Portland Airport. A pleasant climate, the city of Hubbard offers excellent recreational facilities, including equestrian and wine tours, golf and nearby swimming pools. A quick drive east of the city to Mount Hood, offers four seasons of fun. Just 90 minutes to Oregon's rugged coastline and quaint beach towns with family attractions such as public beaches, artistic enclaves, delectable meals and surfing. PRT's Nursery location is a 28 acre site, with 30+ species, 70+ products, grown in greenhouses and outdoor compounds. Please check out our Career video at youtube.com/ watch?v=AsvfZdw_9m0 Please apply on the website at www.prt.com/ careers/current-job-postings.

Nursery Guide.com 🔍

ASSISTANT FARM MANAGER

Ekstrom Nursery in Gresham, Oregon is looking for a career oriented individual to work in multiple areas. We are looking for an experienced individual who has a strong work ethic, is disciplined, motivated for personal and professional growth and committed to the vision of our company. We have 200 acres of container, field and bare root ornamental plants. Customer base includes retail, re-wholesale and growers. The person will work closely with the owners in all aspects of container, B&B and bare root production. This is a career opportunity for a person who is interested in diverse plant production and nursery business.

Responsibilities and Qualifications 1)Experience in ornamental nursery production and propagation related to field, container and bare root.

2)Oversee all aspects of our container production.

3)Assist in crew management of field production practices and techniques.

4)Assist with supervi scheduling daily and wee 5)Must be self-motivated or to work with a group

6)Possesses strong comr skills, interpersonal skills person of good character

7)Computer knowledge, abilities, and bilingual (E Spanish) language desire 8)Strong work ethic, positive 9)Valid driver's license.

10)Ability to work with v of agricultural equipmen tractors and implements. 11)Have leadership skills to make decisions,

motivate employees.

Compensation: Salaried position is DOE and includes benefits package. Please send resumes to ekstrom.nsy@gmail.com

HELP WANTED

For jobs and key employees throughout California and the Northwest, call Florasearch, Inc. You know us. For more than three decades we have been bringing together key people and excellent companies in the nursery and greenhouse industries and allied trades. Check our references. Confidential. Employer pays fee.

Florasearch, Inc. 1740 Lake Markham Rd. Sanford, FL 32771 Ph (407) 320-8177 Fx (407) 320-8083 Website: www.florasearch.com Email: search@florasearch.com

Digger

PRODUCTION ASSISTANT & INVENTORY COORDINATOR

Patterson Nursery Sales, Inc. Eagle Creek, OR., an employee owned company (ESOP), is seeking a selfmotivated skilled individual to assist in maintaining plant inventories thru all production cycles. Primary duties include, but not limited to, facilitating the harvest of market ready plants and assisting in the coordination of staging for shipment.

• This individual must have the ability to work in a team environment capable of coordinating multiple tasks simultaneously in a fast-paced

- Must be able to work under inclement weather conditions (hot, cold, and rain)
- Willingness to learn new jobs and skills.
- Spanish/English preferred (but not required).
- Computer skills preferred (but not required)
- · Basic reading, writing and

PRODUCTION MANAGER, PRT

As a member of the local management team you will have the opportunity to work with the most innovative conifer seedling producer in the industry with a focus on customer satisfaction and continuous improvement. Reporting to the Senior Production Manager, you will oversee all aspects of greenhouse and open compound seedling production as part of an experienced team that takes pride in meeting our customer expectations. Your focus will include crop culture, continuous improvement activities, customer focus, and safe work procedures. Compensation, Benefits & Workplace Culture: •Highly competitive annual salary matching your level of experience and ability •Bonus incentive program – up to 10% of annual salary • Matching 401K program •Comprehensive benefits package inclusive of extended health and dental •Relocation allowance (if applicable) •Our PRT nurseries are vibrant and fun communities

GENERAL MANAGER

Cascadian Nurseries is looking for the right person to manage the day to day operations of this mid-size nursery and work with staff to take the nursery into the next generation. This person will continue to build relationships with landscape associations, customers and suppliers. More company information can be found at www.cascadiannurseries.com.

Duties: •Run the day to day operations of the nursery. Supplement current team as necessary to provide a complete and sufficient workforce to achieve company goals. Develop team to establish a first-class, effective organization. • Evaluate the nurseries competitive situation, strengths and financial returns. In concert with management team, create and implement a strategy that results in a strong competitive position and appropriate returns. •Be the face of the organization to the customer and business

ies. Create and sustain osition of high quality, tomer service, equitable actices and relationships.

strong business nt practices to maintain pany's position as a of superior top quality Oversee all company nsure strong operations, and internal controls. and maintain excellent communications among vees. •Strong planning zational skills required. the nurseries inventory, d product mix to meet needs.

ons: • Passionate about the nursery/landscape industry. Willing to take the business to the next generation, such as implementing new technology. • B.A. required, with emphasis in business administration and/or horticulture, greenhouse, or nursery management preferred.

Experience: Three to five years managerial experience at a horticulture business. Overall seven to ten years related experience or equivalent combination of education and experience required. Demonstrated progression in management of horticulture company preferred.

Computer Skills: Experience with Microsoft Office preferred. Able to manage company website and internet applications. We use Sage 100 for our accounting, inventory, and sales

Apply: Please send resume to Cascadian Nurseries, 8900 NW Dick Rd., Hillsboro, OR 97124 or email

to jim@cascadiannurseries.com. Nursery Guide.com 🔍



REPRESENTATIVE

TSW Nursery Sales Inc. is seeking a plant-knowledgable inside sales representative with 3-5 years of sales experience. The perfect candidate must be proficient in MS Office Suite and Quickbooks software, provide excellent customer service, have strong verbal and written communication skills, manage their time, and be organized. Salary commensurate with experience.

Please mail or email cover letter and resume to:

TSW Nursery Sales, Inc. Attn: Human Resources P.O. Box 1217, Wilsonville, OR 97070 accounting@tswnurserysales.com

Classified ads work!

Email us at ads@oan.org or call 503-682-5089

planning, organization, and time management skills •Knowledge or experience with continuous process improvement in a production environment •Ability to problem solve and conduct root cause analysis Location: PRT Hubbard is located in Hubbard OR, a small town with a big heart. Hubbard is in Marion County about 45 minutes from the Portland Airport. A pleasant climate, the city of Hubbard offers excellent recreational facilities, including equestrian and wine tours, golf and nearby swimming pools. A quick drive east of the city to Mount Hood, offers four seasons of fun. Just 90 minutes to Oregon's rugged coastline and quaint beach towns with family attractions such as public beaches, artistic enclaves, delectable meals and surfing. PRT's Nursery location is a 28 acre site, with 30+ species, 70+ products, grown in greenhouses and outdoor compounds. Please check out our Career video at youtube.com/ watch?v=AsvfZdw_9m0 Please apply on the website at www.prt.com/ careers/current-job-postings.

IN-HOUSE SALES REPRESENTATIVE

Patterson Nursery Sales, Inc. located in Eagle Creek, Oregon is searching for an experienced In-House Sales Representative. We are unique in that we are both a Grower as well as a full-service brokerage of Ornamental Nursery Stock. Our mission is to supply the finest plant material available through exceptional service. We ship throughout the USA and Canada. A successful candidate will maintain existing customer accounts as well as develop new accounts. In conjunction with those primary duties, he or she will also maintain, develop, and cultivate strong vendor relationships. Candidate needs to be extremely self motivated, quality driven, and possess a high work ethic. Must be a team player with extensive industry experience. Vehicle provided for to and from work as well as significant local travel

visiting our suppliers an customers. Minimal over out of area travel requ Excellent benefit 's competitive compensat on DOE. If we interest y apply! All applicant confidential. Please send Jason@PattersonNurservS



We are always looking for career orie Our operations include wholesale gro landscape contractor sales, and retail have the interest and skills needed to team, please apply. We are growers of field grown ornamentals.

We are looking for people in the following areas:

- Sales / Customer Service (Wholesale/Retail)
- Production/Growers/Supervisors
- · Shipping & Receiving
- · Inventory / Office Mgmt & Admin / Purchasing
- Pesticide / IPM Managers & Applicators
- Irrigation Management / Skilled Laborers • Outside sales throughout U.S. & Canada
- Controller / Accounting Manager
- Horticultural Website Developer

Applicants with specific work experience or education in the nursery industry is desired. Computer skills, Spanish / English bilingual, plant ID knowledge and equipment operation skills also preferred.

Pay commensurate with experience. Benefits to include: Paid vacation and sick leave, paid holidays, medical and dental insurance. Respond with resume to hr@loennursery.com to the specific job for which you qualify.

For more information, please visit us online at www.loennursery.com

Northwest Natives



Bare Root Native Plants

Acer. Alnus. Amelanchier. Betula. Conifers, Cornus, Fraxinus, Holodiscus, Lonicera, Mahonia, Malus, Physocarpus, Populus, Rosa, Salix, Spiraea, Symphoricarpos, Wetland Plants

> Over 300 species of source identified natives

Fourth Corner

Rhododendrons

The place

TALL RHODODENDRONS

Available up to 12' tall.

Lots of great ideas with tall.

Hidden Acres Nursery

Sherwood, OR 503-625-7390

www.hiddenacresnursery.net

Rootstock

TRECO®

THE FOUNDATION OF YOUR ORCHARD STARTS HERE.

PREMIUM OUALITY OREGON ROOTSTOCK

TRECO® offers the finest apple rootstock, hazelnut trees and softwood cuttings.

WILLAMETTE NURSERIES

YOUR SOURCE FOR ORNAMENTAL SEEDLINGS, FRUIT TREE ROOTSTOCK, CUTTING LINER VARIETIES & MORE.

We specialize in understock for flowering, fruiting and shade.

www.willamettenurseries.com

Excellent quality. Outstanding service.

25571 S. Barlow Rd. Canby, OR 97013

503-263-6405 Toll-Free: 1-800-852-2018 E-Mail: willamette@canby.com

REAL ESTATE

LAND WANTED

Cut flower grower looking to buy 1-3 acres land to expand operation within 30-45 min of Portland, OR. Must have access to water. Please ita@armossdesigns.com.

478 with opportunities.



ads@oan.org



and **Ground Cover Specialist**

Growers of Quality, Healthy, Ready-to-Sell Plants.

Phone: 503-632-4787 Fax: **503-632-5412**

CONTRACT GROWING YEAR ROUND

21200 S. Ferguson Rd. Beavercreek, OR 97004

www.beaverlakenursery.com

Digger

PHONE

503-682-5089

EMAIL

Info@oan.org

ONLINE

www.oan.org/publications



Reach more customers!

To place an ad, email us ads@oan.org or call 503-682-5089

SUPPLIES

FOR SALE

- 3 5/8 X 6 Used Band Pots 3800 .13 cents each
- 2 3/4X 2 1/2 Used Band Pots 250,000 .05 cents each also 380,000 new ones .08 cents each
- 311 Gage Dura Used Pots 240,000 .04 cents each
- 4 Gallon Used Pots 4500 Make offer
 14 1/4 X 18 1/2 Used Flats 26,250
 \$1.30 each
- 2 Gallon Super Root Air Pots 8000 Make Offer
- 5 Gallon Super Air Pots 3,500 Make Offer
- Also we have 2 Wurdinger Inline Potting Machines \$25,000 each

Please contact Tim Sester – 503-719-2545 cell



SEE THE DIFFERENCE

NURSERY SUPPLIES AND EQUIPMENT FOR SALE

- Edegal 3 point bed pruner or lifter #160217: \$1,500
- Lincoln Welder 20 wave Tig: \$1,500
- Speedaire compress
 3 Phase 1WD70: \$2,00
- Wood trellises 48" & 24
- Plastic Inc 10" Terra co containers: 4000 @ .50
- Endless Summer B 5 gallon squat: 440 @ S
- Kubota M6-141 Tracto 2019 650 hours: \$72,90
- Misc. shop tools and te Call for complete Dave Van Essen, 541-90

CONTAINERS WAN

WE BUY \$\$\$ used 1-ga 2-gallon nursery containers. Drop in or we'll pick them up (larger quantities),

Beaverlake Nursery, 21200 S Ferguson Rd, Beavercreek OR, 97004. Phone 503 632 4787 Email info@beaverlakenursery.com Monday–Friday, 7 a.m.–4:30 p.m

NURSERY STAKES

1/4"x6' on metal pallets, used 4 years great condition \$1/stake.



Creekside Valley Farms Dayton, OR 503-437-4833

Nursery Guide.com 🔍

DIGGER ADVERTISERS

Please contact our fine advertisers for your plant, product and supply needs.

AAA Mercantile	45
Anderson Pots	47
Bailey Nurseries	23
Biotherm	
Biringer Nursery	16
Bowers Forest Products	
D-Stake Mill	36
Energy Trust of Oregon	5
F & L Lumber Inc	
GK Machine	5
HC Companies	2
High Caliper Growing - Root Control Inc	

FP()

GROWING

Series content is coordinated by Dr. Jay Pscheidt, professor of botany and plant pathology at Oregon State University in Corvallis, Oregon.



An ongoing series provided by **Oregon State University** in collaboration with the United States Department of Agriculture and in partnership with the Oregon Association of Nurseries



Fig. 1 Western Flower Thrips. Western flower thrips is a key pest for many ornamental nurseries. Research into IPM tactics to manage this pest was identified as a critical need for the industry (a). PHOTO BY CHRIS HEDSTROM.

An integrated plan of attack

The new IPM strategic plan for Oregon's nurseries identifies industry priorities for research and education

BY CHRIS HEDSTROM

HE NORTHWEST NURSERY CROP RESEARCH CENTER (part of the USDA- Agricultural Research Service, or USDA-ARS, Horticultural Crops Research Center) in Corvallis, Oregon recently funded the creation of the first Integrated Pest Management (IPM) Strategic Plan for Oregon's ornamental nursery industry.

Integrated Pest Management Strategic Plans, or IPMSPs, are comprehensive reports that are created in collaboration with a representative regional industry working group. The group consists of producers, researchers, extension agents, crop consultants, regulators, and other relevant industry stakeholders. These reports serve as a snapshot of the current state of IPM for a given industry. Detailed information is obtained through surveys and interviews from the working group about their pest management activities throughout the year.

Stakeholders are also asked to suggest any and all critical pest management needs in research, regulation, education, and broader needs related to IPM for their industry. The finished document describes the pests, challenges, and critical needs in detail, with the intent to identify the critical IPM needs, gaps, or concerns from the stakeholders themselves: in short, what's working, what's not working, and what's missing.

The published IPMSPs serve as a citable resource that indicated specifically what the industry deems necessary to



An integrated plan of attack

improve IPM. This makes them especially helpful for people seeking grant funding support to pursue projects to address these gaps. These documents are also intended to be updated periodically (every five years, ideally) to reveal where progress has been made, where work is still needed, or what new concerns have arisen.

Oregon IPM Center (as the Integrated Plant Protection Center) at Oregon State University has been producing Pest Management Strategic Plans for the last few decades, which focused primarily on chemical management strategies for insects, weeds and diseases. These reports, created by many different groups throughout the U.S., helped the Environmental Protection Agency (EPA) and other regulatory agencies understand usage patterns of certain pesticides to aide in their decision making, such as revision to

label restrictions.

Over time, non-chemical IPM strategies began to be included in the documents, which has resulted in the creation of IPMSPs to capture this information. By highlighting these practices and reviewing their efficacy, the plans can help to reduce the dependence on chemically-based pest management strategies by improving the alternatives.

Putting a team together

The Oregon Nursey IPMSP advisory committee consisted of Jane Lee (entomology), Jerry Weiland and Nik Grunwald (plant pathology) and Carolyn Scagel, a plant physiologist, all with USDA-ARS. The final volunteer working group consisted of seven nursery managers, five state and federal agency staff, five crop consultants and ten university faculty. The working group met

via Zoom for a four-hour meeting to validate and add information collected from surveys and interviews on July 28, 2021.

For the purposes of this project, the term "ornamental nursery" broadly covered production of woody ornamental perennials, ornamental shade and fruit trees and ornamental annuals and bedding plants. This includes container and field-grown plants such as bare root or balled-and-burlapped trees and shrubs in enclosed and open production systems. This project did not consider pests of propagation material for commodity crops (i.e. food or fiber crops), tissue culture, fruit and vegetable starts, mushrooms, aquatic plants, Christmas trees or industrial hemp. It was also restricted only to include the opinions of production or wholesale nurseries.

One message was clear from the surveys and interviews with production managers





and consultants: Much of Oregon's nursery industry is successfully utilizing IPM, and has been doing so for many years.

Season-long scouting and monitoring for insect pests, weeds and signs of disease is being performed at some level industrywide. Best management practices, such as importing clean plant stock and implementing environmental controls for temperature and humidity, are being used to prevent diseases from running rampant in greenhouses.

For insect pest management, growers widely reported the use of targeted or selective chemistries (versus broad-spectrum) based on scouting and the presence of the pest.

Many nurseries have also developed robust and sophisticated biological control programs, releasing natural enemies against key pests or creating non-crop habitat to support resident populations.

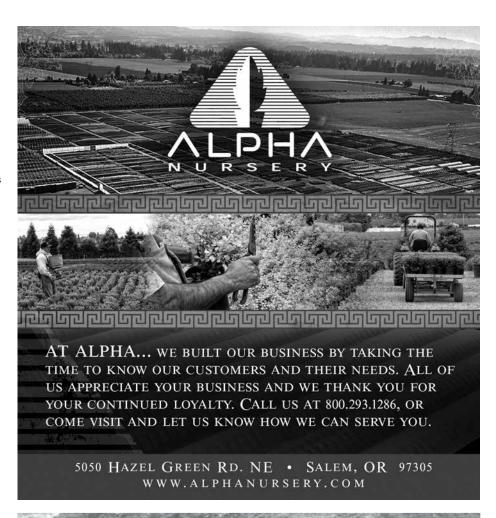
For a few nurseries, natural enemies have all but eliminated the use of chemicals in some situations. Although no nurseries depended necessarily on the pollination services of bees, their presence in nursery products cannot be ignored. Many nurseries reported that they consider pollinator health when considering their pest management strategies or product choices.

Needs and opportunities

Despite the widespread adoption of many of these IPM practices, there is room for improvement. For example, although the early prevention of weeds is a best management practice, using pre-emergent herbicides (in addition to flaming) was the primary strategy for weed prevention in most cases.

Similarly, for many pathogens reported, the use of fungicides both as a preventative and as a response appeared to be the standard. Alternatives to these methods were identified as high-priority research needs, especially through the lens of avoiding the development resistance to current effective chemistries.

Additional critical research needs included IPM methods specifically for thrips management, bacterial blight management, boxwood blight, agrobacterium, and nostoc. In addition, the development of



lity Bark at holesale Prices

Fir and Hemlock Bark • Sawdust **Compost • Hog Fuel • Fines** Rock, Chips, Bark Rock

Marr Bros. Bark has been serving the area with quality products and competitive pricing for over 30 years. And we deliver anywhere in the Willamette Valley!

When you want the best ... Marr Bros. is your only choice!

Call 503-838-1830 to schedule a delivery

Conveniently located at: 875 S. Pacific Hwy, Monmouth, Ore.



An integrated plan of attack

Fig. 2 Honey Bee on Ligustrum. Though nurseries generally don't depend on bees for pollination services, protecting them from pesticides is a consideration when developing management strategies for pests by many nurseries (b). PHOTO BY CHRIS HEDSTROM.



IPM tactics for new or invasive pests and pathogens (for example, Japanese beetle and spotted lanternfly) was also flagged as a top priority for research.

It is feared that the management of invasive pests will disrupt current IPM plans, as it has for many other industries in the state. Pest managers also requested the development of decision aid tools and technologies, as well as research into the potential impacts of climate change.

The working group identified several educational opportunities for the industry. Participants wanted more materials or outreach events about implementing of beneficial insects and natural enemies. They also requested more information and resources about the relationship between clean plants, scouting, sprays, and beneficial insects.

There were only a few suggestions for improvement in regulation. Participants identified clarification of label restrictions, as well as clarification on the rules on shipping and quarantine as necessary areas of improvement. They also requested simpler ways to find existing rules, restrictions, and guidelines, as the various regulatory agencies within the state and across the country may

have different restrictions that could affect shipment and sales.

Many insects, weeds, and pathogens were identified as key pests for the industry. A list of problematic species can be found in the published report, along with notes about current management methods for these specific pests.

As with other IPMSPs, these strategies are classified as prevention, avoidance, monitoring, or suppression, also known as the "PAMS" framework for IPM.

Publication and next steps

One of the key challenges in producing this initial IPMSP was the broad scope of nursery products that was captured in this report. Therefore, the authors recommend that future IPMSPs narrow the focus to specific production areas of the industry, and address sectors that were not covered for this project.

The IPMSP is available from Oregon State University Extension Publications (in press at the time of writing, with an expected publication in summer 2022). As this is intended as a regularly updated document, the authors encourage feedback and com-

ments on this report, as well as participation in any future revisions.

Integrated Pest Management Strategic Plan for Ornamental Nurseries was produced by Chris Hedstrom and Isaac Sandlin of the Oregon IPM Center, with additional input from Jay W. Pscheidt, Marcelo Moretti (Oregon State University), Jerry Weiland (USDA-ARS) and Chris Benemann (Oregon Department of Agriculture). This project was funded by the Northwest Nursery Crop Research Center, USDA-ARS Horticultural Crops Research Center, Corvallis, Oregon, with additional support from USDA-NIFA Crop Protection and Pest Management Program Extension Implementation Program Area (EIP).

Chris Hedstrom is the IPM Outreach and Communications Coordinator for the Oregon IPM Center at Oregon State University in Corvallis, Oregon. He holds bachelor's and master's degrees from OSU, where he sudied entomology and integrated pest management. He can be reached at 541-737-2534 or chris.hedstrom@oregonstate.edu.









Supplies for Small Growers

SEED STARTING Pots Trays Inserts Plug Trays

Labels - large variety size, color & shape of blank plant pot & row markers

Weed control, fertilizer, tapes & ties, watering, and more

www.amazon.com/shops/AAAmercantile

HOSTETLER FARM DRAINAGE 503-266-3584

• Plastic Tubing 3"-24" • Laser Grade Control • Open Ditch for Buried Irrigation • Plows and Trenches • Pot-n-Pot Drainage • Oldest Drainage Firm in Oregon • Newest Subsurface Irrigation Techniques



Materials and **Technical** Assistance **Available**



Quality Young Plants and Liners From Tissue Culture and Clean Stock

- Woody Ornamentals
- Flowering Shrubs
- Small Fruits
- Grasses and Ferns
- Perennials and Vines
- Conifers

Meridian Young Plants.com info@myplants.sale • 360-312-4217



Motz & Son Nursery

SHADE & FLOWERING TREES FRUIT TREES

Dwarf, Semi-Dwarf & Standard COMBINATION FRUIT TREES (4 in 1) Semi-Dwarf & Standard **ESPALIER APPLES**

Semi-Dwarf, Combination & One Variety WALNUTS & FILBERTS **DECIDUOUS SHRUBS**

www.motzandson.com 11445 N.W. Skyline Blvd. Portland, Oregon 97231 Phone 503-645-1342 FAX 503-645-6856







View ads online at www.oan.org/jobs.



Arborvitae-Emerald green **Virescens Boxwood** Japanese Maples Otto Luyken **Skip Laurel** Various sizes & Varieties 503-932-8006



Contact SWeihrauch@oan.org for details.

The OAN participates in Staples Business Advantage®. Free shipping and next-day delivery available for some purchases more than \$50. Visit www.oan.org for more.

Growing our tomorrow

The Oregon Association of Nurseries (OAN) established the Oregon Nurseries Foundation (ONF) to manage scholarship funds raised and/or contributed by OAN members. The money is used to award scholarships to deserving students who are preparing for a career in ornamental horticulture and related fields.

The ONF is a separate nonprofit foundation under section 501(c)(3) of the Internal Revenue Code and is governed by a five-member board of trustees comprised of OAN members.

Making a plan

My wife, Jennifer Satalino, serves as director of The College Place Oregon. She has been a financial aid expert the entire time I have known her. By this point, I can recite her talking points and her advice to parents back to you from memory.

The keys are: 1. Understand the true value of an education; 2. Realize the cost for a bachelor's degree is on another planet from when I went to school; and 3. Know the importance of planning ahead for future educational endeavors. That's true whether you have children, or you're an adult who just wishes to invest in a family or community member.

A resource for college access

I am deeply proud of the work that the ONF has done over the years. The foundation has supported numerous people who finished their education and went on to be industry leaders. Some became OAN board members. Those in recent memory include Jim Simnitt (Simnitt Nursery); Kyle Fessler (Woodburn Nursery & Azaleas Inc.) and Mark Bigej (Al's Garden & Home).

Some of our recipients went on to serve on the ONF Board of Trustees, including Peter Gregg of Iseli Nursery and Alexa Patti of Little Prince of Oregon Nursery.

ONF awards scholarships to students preparing for a career in ornamental horticulture and related fields. In all, 20 different awards — ranging from \$5,700 to \$1,500 — are sponsored by individuals and OAN chapters each academic year.

Over the past 20 years, ONF has awarded a total of \$260,900 in scholarships to 203 students. (Some may have received

scholarships more than once.)

Some of our scholarships are funded by nursery families, by OAN chapters, or as memorial scholarships in honor of people connected with the nursery industry.

These are the cornerstone of our scholarship program. The investment of scholarship dollars includes Nursery Employee Awards, given to students who are employed by an OAN member. Just since 2003, there have been 20 such recipients!

What is the EFC?

If you have high school or college students in your family, in your workforce, or are part of an employee's family, it's important they apply for scholarships and other types of financial aid.

According to ECMC's The College Place Oregon, the expected family contribution (EFC) is a number that determines students' eligibility for certain types of federal student aid. This number is calculated with the federal methodology formula, which uses the information that students provide on the Free Application for Federal Student Aid (FAFSA®).

Financial aid administrators subtract the EFC from students' cost of attendance to determine their need for federal student financial assistance offered by the U.S. Department of Education.

Student aid changes for ag families

My wife tells me the value of any family-held or family-controlled businesses or farms are currently excluded from FAFSA and ORSAA calculations. However, both exclusions are going away for the 2024—25 school year as part of the many significant changes Congress made in 2020.

On the revised FAFSA, the net worth of any family-held, or controlled business or farm will need to be reported as an asset. Depending on the value, this could significantly reduce the ability of certain families to qualify for need-based aid.

Net worth will be calculated by subtracting business or farm debt from the current fair market value of the business or farm (including the value of land, buildings, inventory, equipment, machinery, and livestock). To be considered a business or farm debt, the debt must be secured by the busi-



Jeff Stone

OAN EXECUTIVE DIRECTOR

ness or farm. If business or farm debt uses something else as collateral, such as home equity, it will not offset the value of the business or farm.

Navigating the application process

This fall, The College Place Oregon, along with colleagues from the Oregon Association of Student Financial Aid Administrators, will offer two free webinars for families who want to know more about the financial aid process. Families will be able to ask questions, even anonymously, and have them answered by professionals in the financial aid field.

An English language event will be held Tuesday, September 27. Register here: https://bit.ly/PFCOR2022

A Spanish-language event, will be held Thursday, September 29. Register here: https://bit.ly/PFCS2022

FAFSA and ORSAA applications open October 1, so this information will be especially timely for families with a high school senior or those already in college.

Help grow our future

I have seen firsthand two scholarships that became endowed during my tenure at OAN. These scholarships affirm the deep connection people have with our nursery industry, and demonstrate a firm commitment to the education of our future leaders. That is inspiring to see.

If you feel so moved, please help spread the word about our scholarships in your community and in your networks. Donate through the ONF website: www.oan.org/page/onfdonate. Support your local chapter. Your generosity may make a decisive difference for an aspiring industry member.

From branded container programs to growing containers up to 65 gallons to propagation sheets and trays.



HC is your full-service nursery container vendor



800-225-7712 | 📆 😭 🔾 📵

Sign up for our monthly e-newsletter! hc-companies.com/newsletter

For more information contact

Tom Brewer, District Sales Manager
503-686-8448

TBrewer@hc-companies.com

