

Digger

OCTOBER 2025

Handing off a legacy

Nursery owners find satisfaction
in selling to employees

PAGE 19

Reining in
overtime costs

PAGE 25

Balancing climate impacts
with plant benefits

PAGE 17

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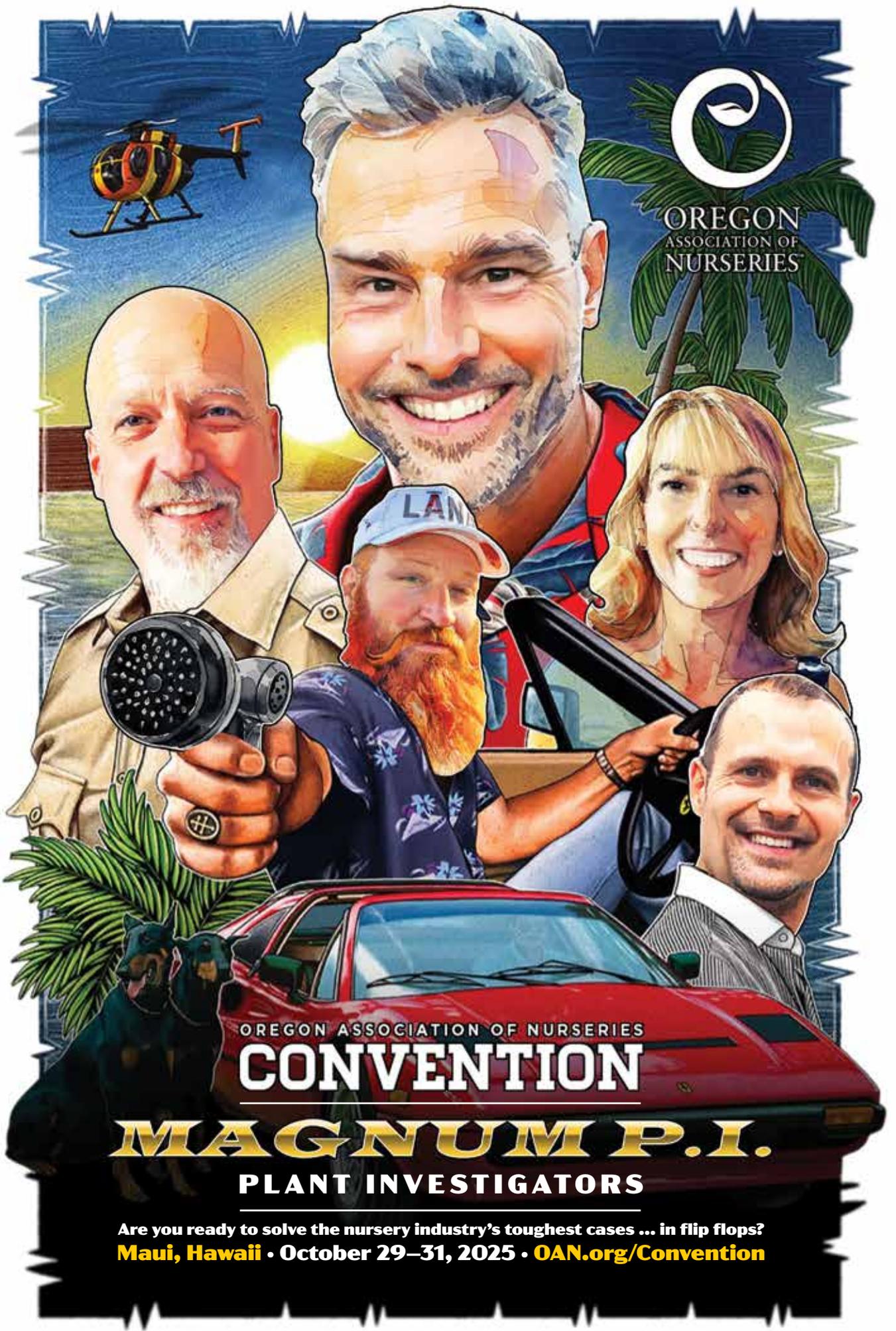
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October 2025 Vol. 69 No. 10

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On the cover: Some nursery owners are passing on their legacy by selling their businesses to their employees. PHOTO BY MDMOJIBOR

On this page: Left: Grace Dinsdale is selling Blooming Nursery to her employees through an ESOP. PHOTO BY VIC PANICKUL Right: JLPN owner John Lewis examines evergreen liners with Alma Dominguez. PHOTO BY VIC PANICKUL



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From left: Rivaldo Dias, Benjamin Mendoza, Patrick Newton, Ben Verhoeven and Felipe Martinez.

PHOTO BY PASCUAL PEREZ

Many thanks

Thank you, reader, for coming along with me to visit so many nurseries and meet so many wonderful folks over the past 12 months.

The Oregon Association of Nurseries (OAN) presidency is a privilege that lasts for one year. As I step down, I am grateful to all the people I have met. It's been a true joy to make new friends from different parts of the state, from both sides of the political aisle, all improving their workplaces in different ways and growing such an astounding variety of plants.

One of those friends is Patrick Newton, your next OAN president, whose farm I have come to visit today. It's a bright morning as I park in the shade at **Powell's Nursery** in Gaston, Oregon. I walk through the handsome new shipping warehouse and break area to the office, where Patrick is working on ironing out some logistics.

Patrick is one of the nicest folks in the nursery industry and that's saying a lot. I compliment his new warehouse, and he tells me it's more than just a warehouse. It started as a way to give his crew a nicer place to take breaks. It's now expanded to include the office, propagation, potting and of course an expansive break room that doubles as a wedding and quinceañera hall for employees, all under one roof. Quite a space!

Patrick tells me that prior to building it everything, "was spread out and necessitated

traveling through the mud. Now I'm closer to the action. It's a good working environment."

For Patrick, "It's all about relationships: from vendor, to coworker, to customer. I don't want to be the boss, I'd rather be a coworker." You can sense this in the jovial attitudes of the crew he introduces me to.

Patrick's warmth extends to his customers as well. He has the unique opportunity to be on his customers' farms weekly, collecting scion wood. This frequent interaction gives him insights into their needs and helps build lasting connections. "The relationships in this association, in this industry, are what keeps me going," Patrick tells me.

As I bring my visit with Patrick and my presidency at the OAN to a close, I know we are in good hands. I'm grateful to all the folks that I have met over the past year. I'm thankful to all of you who opened your doors and shared with me the improvements you have made.

Our team at **Peoria Gardens** thrived in my absence. I could fill countless *Digger* volumes with their improvements. I am indebted to my wife Kathryn and our kids Thea, John and Sam for giving me the time to travel and visit nurseries. Lastly, I am proud to have been your president this past year, and to continue to be a part of an industry that is open, friendly, and working together to grow plants for healthier cities, communities and homes.

Many thanks. ©

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Muchísimas gracias

Gracias, lector, por acompañarme a visitar tantos viveros y conocer a tanta gente maravillosa durante los últimos 12 meses.

La presidencia de la Asociación de Nurserías de Oregon (OAN) es un privilegio con un mandato de un año. Al dejar el cargo, estoy agradecido a todas las personas que he conocido. Ha sido una verdadera alegría hacer nuevos amigos de diferentes partes del estado, de ambos partidos políticos, todos mejorando sus lugares de trabajo de diferentes maneras y cultivando una variedad de plantas tan asombrosa.

Uno de esos amigos es Patrick Newton, su próximo presidente de la OAN, y cuya granja he venido a visitar hoy. Es una mañana radiante cuando me estacione a la sombra en su granja, **Powell's Nursery**. Camino por el nuevo y elegante almacén de envíos y la zona de descanso hasta la oficina, donde Patrick está arreglando algo de logística.

Patrick es una de las personas más agradables en la empresa de los viveros, y eso dice mucho. Lo felicito por su nuevo almacén y me dice que es más que un simple almacén. Comenzó como una forma de ofrecer a su equipo un lugar más agradable para descansar. Ahora se ha ampliado para incluir la oficina, la propagación el cultivo de macetas y por supuesto, una amplia sala de descanso que también funciona como salón de bodas y quinceañeras para los empleados, todo bajo un mismo techo. ¡Un espacio increíble!

Patrick me cuenta que antes de construirlo, todo “estaba muy disperso y requería caminar por el barro. Ahora estoy más cerca de la acción. Es un buen ambiente de trabajo”.

Para Patrick, “todo se trata de las relaciones: desde el proveedor hasta el compañero de trabajo y el cliente. No quiero ser el jefe, prefiero ser un compañero de trabajo.” Y lo percibir en la actitud jovial del equipo que me presenta.

La calidez de Patrick también se extiende a sus clientes. Tiene la oportunidad única de visitar sus granjas semanal-



De izquierda a derecha: Rivaldo Dias, Benjamin Mendoza, Patrick Newton, Ben Verhoeven y Felipe Martínez. PHOTO DE PASCUAL PÉREZ

mente, recolectando madera de injerto. Esta interacción frecuente le permite comprender sus necesidades y le ayuda a construir conexiones duraderas. “Las relaciones en esta asociación, en esta industria, son lo que me impulsa a seguir adelante,” me dice Patrick.

Al concluir mi visita con Patrick y mi presidencia en la OAN, sé que estamos en buenas manos. Agradezco a todas las personas que conocí durante el último año. Agradezco a todos los que me abrieron las puertas y compartieron conmigo las mejoras que han implementado.

Nuestro equipo en **Peoria Gardens** ha prosperado durante mi ausencia. Podría llenar innumerables volúmenes de *Digger* con sus mejoras. Estoy muy agradecido con mi esposa Kathryn y nuestros hijos Thea, John y Sam por darme el tiempo para viajar y visitar viveros. Por último, me enorgullece haber sido su presidente el año pasado y seguir formando parte de una industria abierta, amigable y que trabaja en conjunto para cultivar plantas y lograr ciudades, comunidades y hogares más saludables.

Muchísimas gracias. ☺



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*.

OCTOBER 4

PLANTFEST

The Hardy Plant Society of Oregon's popular annual PlantFest event returns 10 a.m.-2:30 p.m. Saturday, October 4, to Clackamas Community College, 19600 Molalla Avenue, Oregon City. Doors open at 9:30 a.m. This year's PlantFest welcomes Lisa Graff of Lux Perennials Nursery with her talk, *The Power of Fall Planting: Long-Blooming Perennials for Color from Spring to Fall*. Drawing on her lush, two-acre English-style garden, Graff will showcase top-performing perennials known for their season-long blooms, sharing expert tips on planting, care, and design. The speaker begins at 10 a.m. and the plant sale begins at 11:30 a.m. The OAN's Plant Something Oregon program will also be there, giving out copies of the retail Road Map, listing OAN-member retailers, landscapers and mail order nurseries. Admission to the lecture is \$5 for HPSO members, and \$20 for non-members. No admission is required for the plant sale. For more information or to purchase tickets, go to HardyPlantSociety.org/PlantFest.

OCTOBER 7

IR-4 ENVIRONMENTAL HORTICULTURE WORKSHOP

Join IR-4 October 7-8 in Kansas City, Missouri, at the Crown Plaza Kansas City downtown hotel, for the IR-4 Environmental Horticulture Program's biennial priority-setting event. Together participants will help shape IR-4's ornamental pest management research priorities for the next two years. Cost is \$500. For more information or to register, go to TinyURL.com/WorkshopIR4.

OCTOBER 13-15

INTERNATIONAL PLANT TRIALING CONFERENCE

Join the International Plant Trialing Conference October 13-15 at the Embassy Suites Hotel in Bloomington, Minnesota, near the Minneapolis-St. Paul International Airport. There will be two full days of educational sessions covering ornamentals, edibles, trialing techniques and industry trends. The last event was held in 2015 in conjunction with the Farwest Show in Portland, Oregon. For information or to register, go to TinyURL.com/PlantTrialingConf.

OCTOBER 29-31

2025 OAN CONVENTION IN HAWAII

Cue the soundtrack and rev up the Ferrari, it's time to join the Magnum, P.I. (Plant Investigators) crew at the Oregon Association of Nurseries Convention, Wednesday-Friday, October 29-31, at the Wailea Beach Resort Marriott in Maui, Hawaii. Leave your field work clothes and boots behind, dust off your aviator sunglasses, and put on your aloha shirts and sandals. All-access registration is \$470. If you've been waiting to commit, now's the time



PHOTO COURTESY OF THE IRRIGATION ASSOCIATION

DECEMBER 8-11

IRRIGATION SHOW AND EDUCATION WEEK

The Irrigation Show brings the brightest minds and the latest innovations in irrigation to one place. As an attendee, you will be making an investment in your business and your career while spending an exciting, jam-packed week with your peers. The show this year is being held in vibrant New Orleans, Louisiana. For more information or to register, go to Irrigation.org/2025Show.

to lock in your spot and save. Start your Maui mission with island cocktails and ocean views. Celebrate the individuals making a real impact in our industry and make lasting memories with ocean views, poolside networking, island sunsets, and great company. Register now at OAN.org/Convention25.

NOVEMBER 11-13

CORE PESTICIDE TRAINING

Need more CORE pesticide credits to renew your license before the end of the year? Oregonians for Food and Shelter is hosting classes during the Willamette Valley Ag Expo Tuesday-Thursday, November 11-13, at the Linn County Expo Center, 3700 Knox Butte Road E., Albany, Oregon. These classes are designed to provide essential education and certification for pesticide application, ensuring best practices and safety in agricultural operations. Don't miss this opportunity to enhance your knowledge, ensure compliance, and promote safe and effective pesticide use. Courses are complimentary with paid expo admission. Expo admission is \$5 at the door, and parking is free.

NOVEMBER 13-14

2025 GREEN INDUSTRY SHOW & CONFERENCE

The 2025 Green Industry Show & Conference is set to take place November 13-14, 2025, at Westerner Park in Red Deer, Alberta, Canada. This year's theme, Ready.Set.Grow, encapsulates the spirit of innovation and growth within

the landscape industry. Attracting over 1,200 visitors and featuring more than 100 exhibitors from various sectors of the landscape industry, this event is a must-attend for industry professionals looking to expand their network. Oregon Association of Nurseries members receive complimentary registration to the show. Members should use discount code **OANVIP** at checkout. For more information and to register, go to GreenIndustryShow.com.

VARIOUS DATES

FIRST AID/CPR CLASSES AT OAN

Need a first aid and CPR certification renewal for yourself or one of your employees? For the first time, the Oregon Association of Nurseries is proud to offer first aid/CPR training to members at no charge through OAN's partnership with the State Accident & Insurance Fund (SAIF). The certification is valid for two years, and participants receive hands-on first aid and CPR training in small class sizes. The classes are offered in English and Spanish from 8 a.m.-12:30 p.m. The sessions in English are offered September 17, October 15, November 19, December 17. Sessions in Spanish will be September 18, October 16, November 20 and December 18. Classes are held at the OAN office, 29751 S.W. Town Center Loop West, Wilsonville, Oregon. Register at OAN.org/Page/CPRclass. ©



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.

2026 Garden Trends Report focuses on 'lemonading'

Garden Media Group has identified 'lemonading' — making lemons into lemonade — as the unifying trend in its new 2026 Garden Trends Report.

"In 2026, people are finding sweetness in unexpected places. From cozy games to catios, consumers are embracing small joys and simple pleasures that brighten daily life. We're calling this cultural shift 'Lemonading' — a movement that transforms challenges into opportunities through creativity, mindfulness, and joy. Amid climate anxiety and digital overload, the garden is becoming the place where chaos softens and possibility blooms."

"The horticulture industry is uniquely positioned to embrace lemonading because we're rooted in resilience. We work with living things, face seasonality, unpredictability, and failure as part of the process."

The report identifies seven specific trends that relate to gardening, touching on what people want out of plants and gardening, as well as how gardening ties to other hobbies such as videogaming and pet ownership. It also mentions the trendy plant color of "faded petal," a soft blush color with a touch of ash.

Download the report at GardenMediaGroup.com/Trends.



Alaska has quarantined two varieties of *Prunus* that it has deemed invasive. PHOTO COURTESY OF THE ALASKA DIVISION OF AGRICULTURE

ALASKA ENACTS QUARANTINE ON *PRUNUS PADUS* AND *PRUNUS VIRGINIANA*

The director of the Alaska Division of Agriculture (ADA) signed a quarantine order effective September 1 to stop the importation, transport, and sale of *Prunus padus*, which is commonly known as European bird cherry tree, and *Prunus virginiana*, commonly known as the chokecherry tree.

In many parts of the state, these species are creating invasive monocultures and displacing native trees, shrubs, and forbs, ADA indicated in a statement. The two types of trees have invaded riparian zones along creeks and native forests throughout the state, including the Fairbanks North Star Borough, the Matanuska-Susitna Borough, the Municipality of Anchorage, the Kenai Peninsula Borough, and the City and Borough of Juneau.

"This quarantine prohibits the importation, transport, and sale within the state of these two trees and their parts," said Bryan Scoresby, director of the Division of Agriculture. "Many agen-

cies continue to pursue control measures with the goal of eliminating these invasive trees. With this quarantine, the flow of trees into Alaska will stop, making this goal more attainable."

OAN ASKS ODA TO 'STRETCH THEIR STAFF' FOR JAPANESE BEETLE

The Oregon Association of Nurseries is still working to solve a shortfall in funding for Japanese beetle eradication, caused when Gov. Tina Kotek did not include the money in her budget. The OAN will be asking the state Emergency Board for stopgap funding in December to continue the program, and in the meantime is "asking the state to stretch their staff," OAN Executive Director Jeff Stone said.

Stopgap funding to halt the highly destructive nursery pest ran out in June. The Legislature was expected to provide continued funding, but a proposed \$2 million line item was left out of a spending package at the last minute.

"You may have heard, ODA is breaking down the program," ODA state plant regula- ➤

Northwest News

tory official Chris Bennemann told members of the OAN Government Relations Committee at their August 21 meeting, which took place at the Farwest Show. “We are, because that’s what we’ve been directed to do. We have an obligation to do what’s directed and budgeted.”

The shutdown of the program affects market access for Oregon growers. Some states such as New Mexico have quarantined material due to the lack of an eradication program. The OAN remains determined to head off this outcome.

“We are going to get the funding, predominantly because we don’t want to be forced to be regulated,” Stone told the committee.

NEW XANTHOMONAS PATHOGEN CONFIRMED IN HYDRANGEA SHIPMENT FROM MICHIGAN

The Oregon Department of Agriculture (ODA) has notified the Oregon Association of Nurseries of a new pathogen that infects *Hydrangea*. “A *Xanthomonas* species, which may be a new bacterial leaf spot in the U.S., has been detected in oakleaf hydrangea — Gatsby Moon® *Hydrangea quercifolia* ‘Brother Edward’ — that was shipped mid-July to California from a Michigan firm,” said Molly Mott, a plant health section manager with the Michigan Department of Agriculture and Rural Development. “The shipment was intercepted at a FedEx facility and later destroyed.”

Michigan was notified on August 20



A shipment of hydrangea infected with *Xanthomonas* was intercepted at a FedEx facility and later destroyed. PHOTO COURTESY

OF THE MICHIGAN DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT

that USDA’s Plant Pathogen Confirmatory Diagnostics Laboratory (PPCDL) confirmed the bacteria as *Xanthomonas hydrangeae* (*Xanthomonadaceae*) via whole genome sequencing, and that it is possible this pathogen has been present in the U.S. for some time.

X. hydrangeae is uncategorized, but *Xanthomonas* sp. is quarantined for the entire U.S, Mott said. USDA has set up a cross-functional workgroup, is requesting categorization, and collected samples at the Michigan business. Michigan’s lab confirmed that samples were infected with this genus in Gatsby Moon®, Gatsby Pink®, and Gatsby Glow Ball® brands and will be shipping samples to PPCDL for species identification. Infected plants will be denied certification and movement. Because of a change in taxonomy and the presence of other *Xanthomonas* spp. (which were previously considered synonymous in hydrangea), there is some uncertainty in the domestic status of this pathogen.

BOX TREE MOTH SPREADS IN VIRGINIA

The Virginia Department of Agriculture and Consumer Services

(VDACS) announced in late August the detection of the box tree moth (BTM), *Cydalima perspectalis*, in Frederick County, Va. This is the second detection of the invasive pest in the state.

In July, VDACS announced the first detection of BTM in Virginia at four sites in Clarke and Loudoun Counties. Within days of that announcement, Maryland Department of Agriculture and USDA Animal and Plant Health Inspection Service (USDA APHIS) confirmed Maryland’s first BTM in a state park in Washington County.

BTM, a federally regulated insect, is a destructive pest of boxwoods, feeding primarily on them. They can produce multiple generations per year and, if left unchecked, can destroy the plant. BTM was first found in the United States in New York in 2021 and has rapidly spread with populations found in Connecticut, Delaware, Maryland, Massachusetts, Michigan, Ohio, Pennsylvania, South Carolina, West Virginia, and Virginia. Early detection is the key to preventing significant damage, loss and spread of BTM.

PROVEN WINNERS TAKES THE SHOW ON THE ROAD

Designed for retailers, growers, brokers, landscapers and anyone who works in the green industry, Proven Winners Roadshows are opportunities to learn about upcoming trends, brainstorm with like-minded industry pros and learn all about new plants, products and programs from Proven Winners.

This year, Proven Winners is hosting roadshows 8 a.m.–3 p.m. Wednesday, November 12 in Nashville, Tennessee, and 8 a.m.–3 p.m. Wednesday, November 19 in Philadelphia, Pennsylvania. Both events include a sit-down lunch, networking opportunities, roundtable discussions, new variety information and much more.

The Proven Winners team of plant and retail experts will share insights on growing the newest varieties, increasing sales through marketing, consumer trends, merchandising ideas and more. “We have some amazing new plants, programs and

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resources to share this year to help our partners and customers boost profits in the spring,” said Jessica DeGraaf, Proven Winners director of retail accounts. “These roadshows are a great way to learn what Proven Winners can do to help you succeed, but they also help us learn how to be the best partner we can be. I hope we see you there!”

These events are free, but space is limited, and registration is required. For more information and to register, go to ProvenWinners.com/Roadshows.

IN 2034, GLOBAL INDOOR PLANT MARKET WILL BE WORTH \$32.78 BILLION

The global indoor plant market will be worth \$32.78 billion in 2034, according to Custom Market Insights, *Green Profit* magazine reports. This market was

last valued at \$20.41 billion in 2024 with an expectation it would reach \$21.40 billion in 2025. They predict a compound annual growth rate of 4.85% between 2025–2034. The report also provides several insights.

An industry strength is that people are aware of indoor plants’ health benefits and ability to lower stress. However, there’s a lack of consumer knowledge about plant care, and this can make artificial plants more appealing to them, the report indicated.

There’s a surge in the urban population living with limited space. This may cause an increase in demand for houseplants, and also for “smart planters” and automated systems that make caring for indoor plants easier. However, extreme weather can limit production, and market saturation and increased competition can lower margins, the report also said.

WEEKS BERRY NURSERY CLOSED AFTER 117 YEARS

Weeks Berry Nursery in Salem, Oregon has closed after announcing last year that it was planning to do so because of soaring labor costs, increased government regulation and squeezed margins due to competition, owner Bradley Weeks said.

The nursery was founded in 1908 and had continuously been run by the Weeks family since that time.

“We want to sincerely thank you — our loyal customers and friends — for your unwavering support, your shared >>



Bradley Weeks



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stories, your gardens nurtured with our plants, and your faith in what we do,” Weeks stated in an email to customers. “Whether you visited us once or year after year, you’ve been part of something special. You helped us carry a legacy forward through more than a century of farming and friendship. We hope our berry plants continue to thrive in your soil and in your memories for years to come. The roots we’ve grown together go deep — and we are endlessly grateful.”

BORING SQUARE GARDEN CENTER CLOSED

After 40 years in business, Gordon and Karen Watkins closed **Boring Square Garden Center** on September 1. Michelle Watkins said her parents, both in their 80s, have retired. They will retain ownership of the property but will lease the building. The garden center is located at

28150 S.E. Highway 212E, Suite E, in Boring, Oregon, and has been an OAN member since 1988.

Announcements

BAILEY HONORS KRAEMER’S NURSERY, OTHER GROWERS

Bailey Nurseries announced that it has honored five brand licensees for their exceptional partnership, recognizing their dedication and contributions to supporting Bailey Consumer Brands Endless Summer® Hydrangeas, First Editions® Shrubs & Trees, and Easy Elegance® Roses.

These awards were presented at the annual grower meeting, celebrating excellence across key areas including sales performance, plant quality, marketing and social media engagement, trade show participation, and overall collaboration and communication.

Among the nurseries honored was

Kraemer’s Nursery in Mt. Angel, Oregon.

“These awards are a meaningful way to celebrate the hard work and commitment our partners invest every day to bring these high-quality branded plants to market,” said Layci Gragnani, brand & business development manager at Bailey. “Each grower has a different customer base, sales team, and strategy for how they sell our plants, and it’s a joy for our team to witness their creativity and passion throughout the year. We are grateful for our partners’ dedication to represent our premium brands to their customers.”

The 2025 award recipients:

- Endless Summer® Grower of the Year — R.A. Dudley Nurseries, Thomson, Georgia.
- First Editions® Grower of the Year — Kraemer’s Nursery.
- Easy Elegance® Grower of the Year — Bracy’s Nursery, Amite City, Louisiana.
- Trial Grower of the Year — Lancaster Farms, Suffolk, Virginia.

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- New Variety Leader of the Year — Dewar's Nurseries, Apopka, Florida.

MONROVIA INTRODUCES NEW STRONG STARTS™ LINER PROGRAM

Monrovia Nursery is introducing Strong Starts™, a new yearly program with planned liner orders that will feature many of Monrovia's sought-after genetics, according to an announcement from the nursery.

The goal of the Strong Starts program is to bring more of these high-quality plants into the marketplace, specifically making them more accessible to the landscape market. "We want the landscape market to be more aware of our genetics," said Mark Hixson, regional sales manager at Monrovia. "There are phenomenal varieties from Monrovia that are superior in performance and offer easier maintenance. These quality, healthy plants create happy customers and can mean less call backs for landscapers."

Liners will feature exceptionally strong plants, grown to the company's exacting standards and will be available in the following sizes: Better Beginnings™ #72, Rooted and Ready™ #24, and Prime Starts™ #15.

For more information, contact Mark Hixson at Mark.Hixson@Monrovia.com.

DAVE WILSON NURSERY ANNOUNCES LEADERSHIP CHANGES

OAN member **Dave Wilson Nursery** (Hickman, California), one of the nation's largest growers of fruit, nut and ornamental trees, is promoting a longtime employee and bringing in new talent to fill key leadership positions. The company said these changes will help reinforce its commitment to excellence, customer success and innovation across the nursery industry. "We are rooted in tradition but investing heavily in the future," said CEO Seana Day. "By strengthening our leadership team, we're better equipped to meet the evolving needs of orchardists, retailers, and home gardeners across the country."

Kristin Camarena has been promoted to director of the Wholesale Division, »

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Northwest News



Kristin Camarena

bringing more than a decade of nursery operations experience and a proven track record of strategic leadership to the role.

Lloyd Cassidy joins the company as territory manager for Garden Center Sales, expanding the nursery's capacity to serve independent garden centers with tailored support and strategic merchandising.



Lloyd Cassidy

With more than 35 years of experience in the horticulture industry, Cassidy brings extensive expertise spanning stone fruit, nut trees, citrus and grapes.

Brandi Rohr joins the nursery to strengthen technical sales and design expertise and is a veteran horticulture professional with more than 30 years of experience in wholesale, retail and agricultural nursery sales.



Brandi Rohr

GROWER'S NURSERY SUPPLY NAMES NEW GENERAL MANAGER

Andrew Tyler is the new general manager for **Grower's Nursery Supply** (Salem, Oregon), the company said in a press release. His promotion was effective July 1. "Tyler brings 14 years of hands-on experience in horticultural supply and operations management, and his promotion marks an exciting new chapter for the company as it continues to support the evolving needs of growers throughout the Pacific Northwest," the company said.

Tyler joined Grower's, a wholesale

nursery and greenhouse supplier and distributor, as a part-time delivery



Andrew Tyler

driver in 2011 and rose through the ranks. In the past several years, he served as director of operations, where he helped modernize inventory systems, streamline logistics and strengthen vendor partnerships.

In his new role, Tyler will oversee all daily operations as well as strategic planning, and customer service initiatives. He will guide the company's response to changes in the market demands of commercial growers.

FISHER FARMS HIRES NEW PRODUCTION MANAGER

Bert Delgado is the new production manager at **Fisher Farms**, a wholesale nursery in Gaston, Oregon, according to Gary Grant, head of sales operations at Fisher Farms.

Delgado "brings his years of experience and leadership to his production manager role with a focus on growing the company and himself professionally," Grant said. "He believes working is key to benefitting the company and his coworkers. It does not matter if it is the plant propagator or the sales rep, everyone wins at the end of the day."

Delgado previously worked at Highland Meadow Nursery where he worked in inside/outside sales and moved up to operations manager and production manager. Prior to that, he worked at Arbor Valley Nursery and Rio Verde Plantas in Cornelius, Oregon.

"He has five children and has actively been involved in the youth soccer community as a soccer coach for his kids' teams," Grant said. "He currently coaches club teams and at North Marion High School." ©



Bert Delgado

What's the deal with bug poop?



Mike Darcy

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



Chapul Farms converts organic waste into a nutrient-rich soil amendment. PHOTO COURTESY OF CHAPUL FARMS

There is always so much to see and learn at the Farwest Show, put on by the Oregon Association of Nurseries, and this year was no exception. Walking through the aisles and looking at the booths, there was a wide array of new products and plants.

One particular booth caught my eye, because at first glance it appeared that they were marketing bug poop. Upon further inspection, yes indeed, that is exactly what they were marketing — bug poop. Of course, with a product like that, there are many questions, and I wanted to learn their story, which is fascinating.

In the beginning

The story begins with **Chapul Farms**, located in McMinnville, Oregon, which designs, builds and operates insect farms. This was such a unique concept to me that I needed to learn more. Thus, I contacted Pat Crowley, the founder and CEO. Pat is a climate modeler, hydrologist, agronomist, and is a founding member and previous industry chair of the Center for Environmental Sustainability Through Insect Farming.

These farms convert organic waste

into two products: high protein animal feed and a nutrient-rich soil amendment. This soil amendment consists of 100% black soldier fly frass, (insect poop), which gives it a 3-2-2 formula.

The stellar producer in these farms is the native black soldier fly larvae which can be used to compost organic waste and create nutrient-rich soil amendments. Taking food waste that has been diverted from landfills and using the black fly larvae, zero waste processing can occur in less than 14 days.

The resulting product is rich in soil microbes and is a nature-based soil enhancer that increases soil biodiversity. This certainly seems like a viable solution to the current day problem of trying to keep materials out of landfills. Any new product needs a distribution system, and the Milwaukie, Oregon based company Concentrates is on board as a distributor.

Ramping up

In May of 2024, the United States Department of Agriculture awarded grants to three projects that are studying how the black soldier fly's larvae turn food waste into a soil enhancer. Chapul Farms was

one of the three selected to receive one of these grants. As the study progresses, it is likely to result in the frass, the excrement, and exoskeleton of the black soldier fly being packaged and marketed to garden centers in the spring of 2026.

To increase their ability to meet consumer needs, Chapul Farms is currently building a facility at their McMinnville location that will be able to take 50 tons of waste per day. This facility is scheduled to open in late 2026.

Poop by any other name

A major question in the marketing of this product is whether the gardening consumer will realize the value of this new product, or will the name possibly turn them off? The name on the front side of the bag that I originally received was called “bug poop+.” Looking at the back side it was labeled as insect frass. Bug poop and insect frass are not exactly words that would probably entice a gardener to purchase it.

However, since the August date of the Farwest Show, the package has been changed and it is now called “Soil Revival,” which to me has more of a positive tone and upbeat meaning. Many gardeners would jump at the chance to just add a new amendment to the soil to revive it to a more energetic growth environment.

Consumers can be very particular about purchasing new products. Often, if gardener's previous gardening techniques worked, it may be a challenge to get them to change. However, it is certainly not impossible, and most gardeners are very environmentally motivated and strive to do the best practices for our planet. ➤

What I'm Hearing

Chapul Farms redesigned the product's packaging to focus on the benefits of the product instead of its key ingredient.

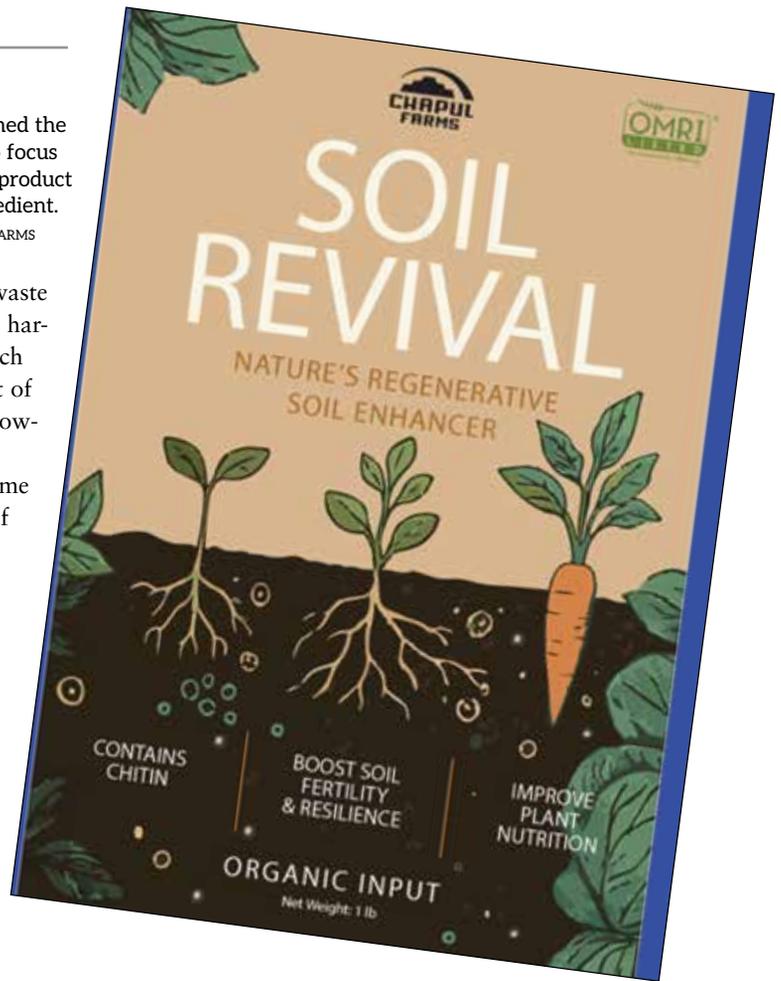
PHOTO COURTESY OF CHAPUL FARMS

The concept with this product is that it is taking food waste and letting the black soldier fly eat this waste, which is then harvested and can be used in our gardens as a soil enhancer. Such a concept involves the best of both worlds, making the most of our food waste while producing a better environment for growing more things to enhance our livability.

For gardeners, spring is a time of renewal, and also a time to try to new plants and new products. Soil Revival is one of what will be one many new items on the shelves of garden centers in the spring of 2026.

If the concept behind this product is told to garden center personnel and they pass it on to gardeners, it will be a successful new product. Getting the word out on any new product or plant can be difficult but I think that when a gardener realizes the benefits of Soil Revival, it will be something new to try.

It will also be a feel-good purchase because we all need to help our environment stay healthy. Soil Revival may be only a small step but it could be a giant leap to help our environment. ©



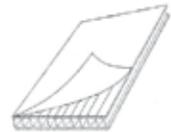
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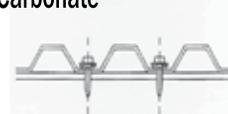


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From left: Greg Addington (Oregon Farm Bureau), Ken Fisher (AmericanHort), Tyler Meskers (Oregon Flowers Inc.), Adam Farley (Fairdale Nursery and Countryside Nursery), Jonathan Sandau (Oregon Department of Agriculture) and OAN Executive Director Jeff Stone at the Climate Summit during the Farwest Show in Portland, Oregon in August. PHOTO BY CURT KIPP

Balancing the equation

OAN's Climate Summit starts a research and policy discussion on measuring plant benefits and production impacts

BY CURT KIPP

Each professionally-grown plant has a life cycle. It starts with production, then transportation to market, purchase by the end consumer, and installation in the landscape.

At each step, there are environmental impacts, but there are also benefits. At the 2025 Farwest Show, held in August, the Oregon Association of Nurseries organized a Climate Summit aimed at examining both sides of the equation.

The effort brought together researchers from Oregon State University and Chemeketa Community College; advocacy groups like Farm Bureau and AmericanHort; government entities like the Northwest Power and Planning Council and the Oregon Department of Agriculture; staffers for members of Congress; and of course, nursery producers themselves.

Between the two days, more than 40 people participated, either as panelists or

audience members.

The hope is that if nurseries are going to be regulated and taxed based on environmental impacts, they can also be credited for environmental benefits, but research is needed to measure those with greatest accuracy and reliability.

“One thing we have to remember is, we produce sequestering plants,” said Tyler Mesker, an owner of **Oregon Flowers Inc.** in Aurora, Oregon and a member of the OAN Board of Directors. “That’s what we want to do, but it’s also what environmentalists want us to do. We shouldn’t let politics get in the way.”

Day one, on August 20, focused on research to measure the environmental benefits and carbon sequestration of nursery material. Day two, on August 21, focused on policy. Of course, the two are linked. Without policy in place that supports research, research is less likely to happen, and so in turn is improved policy.

“We have ideas,” said OAN Executive Director Jeff Stone, who conceived and organized the summit. “We want to inform congressional members we need research dollars to solve the math problems over time.”

Motivation to help

The prevailing sense from the gathering was that growers want to help with societal climate challenges, but they also want to stay in business and pursue profitability. They want to find solutions that will let them do both.

“Farmers don’t wake up at night worrying about climate change,” said Greg Addington, executive director of the Oregon Farm Bureau. “They worry about passing the farm on to their kids, staying in business, keeping it profitable. If there’s no cost, no decrease in performance, people will do it. But the bottom line is, it’s got to pencil out. We can talk about the carrot and stick, but if our people sense the stick, it’s not going to be a good solution.”

Ken Fisher, CEO of the national green industry trade group AmericanHort, felt similarly. “We want the business mock case and the environmental case to work together,” he said.

Jonathan Sandau, deputy director of the Oregon Department of Agriculture said cooperation is the answer. “The most environmentally friendly gallon of fuel and the most business friendly gallon of fuel are the same one,” he said. “It has to make business sense. Both of those can be true. They are >>

Balancing the equation

often true, if we approach it that way as a shared goal in a common manner.”

Initial efforts

Of course, nursery awareness of environmental impacts and benefits is not new.

The Climate Friendly Nurseries Project, a collaboration between the OAN and the Oregon Environmental Council from 2008–2012, focused on improving the environmental efficiency of nursery production.

This effort yielded a guide, “Best Management Practices for Climate Friendly Nurseries” (2011). It covered lighting, variable frequency drive pumps, irrigation efficiency measures such as drip, greenhouse insulation, reuse/recycling of waste, efficient use of nutrients, and vehicle fuel efficiency.

It prescribed improvements nurseries could make to lessen their environmental impact while improving their bottom line.

Many did, particularly by seeking incentives to help them finance environmentally driven capital improvements.

This new initiative expands the scope of that effort by also looking at the positive impacts of plants, both during production and once installed.

A few years ago, Meskers sensed the industry’s need to measure impacts and benefits, and decided to get a head start. He developed a carbon footprint calculator for his business, Oregon Flowers Inc. This year, he had an intern from England work with the spreadsheet in greater depth to get better information.

The company has already acted on this knowledge and made improvements. For ideas on resource efficiency, the company has looked to European producers — primarily those in Holland, where the Meskers family is from.

In terms of plant benefits, Fisher of

AmericanHort said that part of the problem is not knowing where nursery material goes or how long it will be there. That makes calculating the sequestration benefits more complicated for nurseries than for, say, forestry. “The forest isn’t going to move, but the trees from our nurseries are going to move around, on purpose,” he said.

Adam Farley, second-generation nursery owner of **Countryside Nursery and Fairdale Nursery** (Aurora, Oregon), wants to make end consumers aware of plant benefits, and would like to have more data to back it up. “When people drive [by] and see our nursery, we want them to say, ‘There’s a place that’s part of the solution,’” he said. “We want to quantify it and we want to tell our customers the truth.”

Looking to the future

Stone said it was the OAN’s first climate summit but won’t be the last. “My sincere hope would be in two years, to regather this group and see what our progress has been,” he said.

Those attending acknowledged there will be political challenges but expressed interest in working through them.

Margi Hoffman is a full-time member of the Northwest Power and Conservation Council, which plans the power grid for the Pacific Northwest. “We have to find a way to rise above or below the politics,” she said. “We have to find a way to work together even when we disagree It’s easy to discount a legitimate concern from a producer as just, ‘Oh, they’re on the other side of the politics.’”

She said the Climate Summit was a great first step in overcoming that. “This is how we make a beginning and make a commitment to each other,” she said.

“I want to thank our finalists,” Stone said. “It took time and a little bit more of faith to come here. We have work — a lot of work to do.” ©

Curt Kipp is director of communications and publications at the Oregon Association of Nurseries and the editor of Digger. Contact him at 503-582-2008 or CKipp@OAN.org.

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A rewarding legacy

Mark Krautman (right) decided to sell his nursery to Octavio Martinez, who had been working at Heritage Seedlings and Liners since high school. PHOTO BY VIC PANICKUL

Four Oregon nursery owners find fulfillment in selling their businesses to key employees

BY MITCH LIES

Since high school, Octavio Martinez, 38, has been working at **Heritage Seedlings and Liners** in Salem, Oregon, but never with the thought that he would one day own the operation.

As of June 1, however, former owner Mark Krautmann handed Martinez the reins of the nursery that he and his late wife, Jolly, started in 1982.

Martinez is among dozens of employees to assume ownership of Northwest nurseries in recent years. In his case, Martinez is taking sole ownership; other nurseries are selling to groups of employees. The motivation behind each sale, however, appears similar.

Preserving the culture

In multiple cases, nursery owners said they could have made more money selling to outsiders, but were more interested in maintaining the culture of an operation than reaping profits from a sale. Also, according to Linda Eshraghi of **Eshraghi Nursery** and **Farmington Gardens** in Hillsboro and Beaverton, Oregon, the financial reward would have come sooner under a direct sale than under the protracted sale to employees that she engaged in.

“But as tempting as that might seem,” she said, “it doesn’t compare to the satisfaction of preserving and strengthen-

ing the culture we’ve built here. The most worthwhile endeavors often take more time and effort, but their payoff goes far beyond what you can see on a balance sheet.”

Grace Dinsdale of wholesaler **Blooming Nursery** in Cornelius, Oregon, also sold her nursery to employees. While selling Blooming Nursery, Dinsdale retained a separate retail nursery, **Blooming Junction**, that she owns.

She said that she expects that she could have sold Blooming Nursery to an outside buyer for a higher price, “but that was never my main goal.”

“I have a lot of time invested in this place, 43 years, and I’ve got a really won-»

“The money comes and goes, the plants come and go, but the people are pretty much for keeps, whether it is the suppliers or the customers or the employees.”

— Mark Krautmann
Heritage Seedlings and Liners

A rewarding legacy



Grace Dinsdale (fifth from left) sold her nursery to employees through an ESOP with the help of Apis & Heritage Capital, an investment fund that finances the conversion of companies into employee-owned businesses. PHOTO BY VIC PANICHKUL

derful group of employees, and I wanted things to continue and go well for them,” she said. “And I felt like this was the best chance of that happening, of maintaining the company culture and going forward. It’s the people that have been doing this work all this time, and if they can learn how to be in charge of it and control it, they have the best chance of being able to continue the nursery along the same vein of what it is now and carry it forward and benefit themselves personally.”

Loyal to the company

On the flip side, Martinez said he has fielded offers to leave Heritage Seedlings and work for another nursery at twice the compensation. But, he said, “I always stuck with Mark. I have always been loyal to the company.”

“I’ve never dreamed that I would reach these heights,” Martinez said. “I am honored and humbled to have been given this opportunity. I’m excited to continue Heritage and aim to run it with the same

culture and values as Mark and Jolly did.”

Martinez, who started at Heritage when he was 13, began scaling up at the nursery after high school, going from crew leader to supervisor to sales manager and then general manager.

“He was really the only one of our employees that seemed well suited to be the next owner,” said Krautmann, who began looking to transition the company to an employee 10 years ago with his wife, Jolly, who passed away in July of 2024. Martinez has always been good at sales, Krautmann said, and though in going from general manager to owner he will face a steep learning curve, Krautmann believes he is up for the task.

“His role has substantially changed because now he has to rely more on others for doing some of the management stuff that he was doing so he can focus on sales and contracts and calling people and making sure that we’re in touch with our markets,” Krautmann said.

Krautmann added that Martinez has agreed to take business seminars at AgWest Farm Credit and is a fast learner.

Dinsdale, who sold Blooming Nursery through an ESOP, or an Employee Stock Ownership Program, said her employees are

also facing a steep learning curve. “We are in the middle of a pretty big change of trying to figure out the best ways to get people to think from a more strategic

“I have a lot of time invested in this place, 43 years, and I’ve got a really wonderful group of employees, and I wanted things to continue and go well for them.”

— Grace Dinsdale
Blooming Nursery



Lorne Blackman sold 90 percent of Walla Walla Nursery to seven senior managers, production staff and a retail partner: (from left) Bradley Wright, Dale Lauby, Ernesto Salamanca, Jeremy Maddess, Lorne and Auralea Blackman, Noel Ortiz, Alex Ramos, Cody Connor, and Jo Anne Simons. PHOTO COURTESY OF WALLA WALLA NURSERY CO.

perspective of what is going on here and what they can do to influence that,” she said. “There is quite a bit of education and training that has to occur for this to be successful.”

Dinsdale is working with Apis & Heritage Capital, an investment fund that finances the conversion of companies into employee-owned businesses, and with an organization called Democracy at Work,

which works on facilitating ESOPs.

Operational structure

The new structure at Blooming Nursery includes a board to oversee



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A rewarding legacy



Linda Eshraghi (far right) is selling to employees under an ESOT or Employee Share Ownership Trust. From Left: Chris Lee, Andrea Fields, Salvador Dominguez and Linda Eshraghi. PHOTO BY VIC PANICKUL

operations. It is made up of two investors, an outside industry representative, Dinsdale and an employee. A general manager runs the day-to-day operations, and approximately 100 employees — those working 900 or more hours a year — now own shares in the nursery. They are awarded shares annually based on their income from the nursery.

Eshraghi, who is selling to employees under an ESOT, or Employee Share Ownership Trust, also has a board of directors, which in this case includes independent advisors from outside the company to help oversee big-picture decisions and provide strategic guidance. The ownership structure includes an executive team of internal leaders from within the nursery to run the day-to-day operations, and a trustee, or third-party fiduciary, who manages the trust on behalf of the employee-owners and ensures their best interests are represented.

When the transition is complete, approximately 95 employees — those with a certain tenure with the company — will

own shares in Eshraghi Nursery.

Eshraghi too is finding it challenging to train long-time production workers to be managers and decision makers. “This is both the most challenging and most rewarding part of the process,” she said. “Finding each employee’s strengths and helping them grow into leadership roles is an ongoing journey in any industry. As I gradually step away from daily decisions, I enjoy mentoring the next generation of leaders and seeing how their ideas and perspectives shape the future of the company.”

Lorne Blackman of Walla Walla Nursery Co. — based in in Walla Walla, Washington but located on the Washington-Oregon border — used what he called a hybrid ESOP to structure the sale of 90% of his nursery to seven senior managers, produc-

tion staff and a retail partner. The structure included an initial down payment by each of the new owners in 2023, the size of which determined their individual ownership levels in the existing corporation.

From there, the balance owed is paid out of the business profits over a 10-year term. Blackman retains 10% ownership and still serves as general manager for the time being.

The structure includes a board consisting of the eight new owners who bring a mix of talents to the table, Blackman said. “The multiple owner arrangement brings with it some

risk of personality conflict, but the team has a history of working well together, so that seems to be minimized,” he said.

After the business buyout is complete, the next step will be for the team to pur-

“When employees have a direct stake in the success of the company, they are even more motivated to innovate, improve efficiency and deliver top-quality products.”

— Linda Eshraghi
Eshraghi Nursery



chase the property where the business is located, Blackman said. The terms of that sale are already defined in the business sale agreement.

Rewarding employees

Blackman's goal in selling to employees was to reward longtime valued managers and production foremen, who already possessed an ownership mentality, he said. He also wanted to protect the business and its almost 200 employees from the possible disruptions associated with outside ownership.

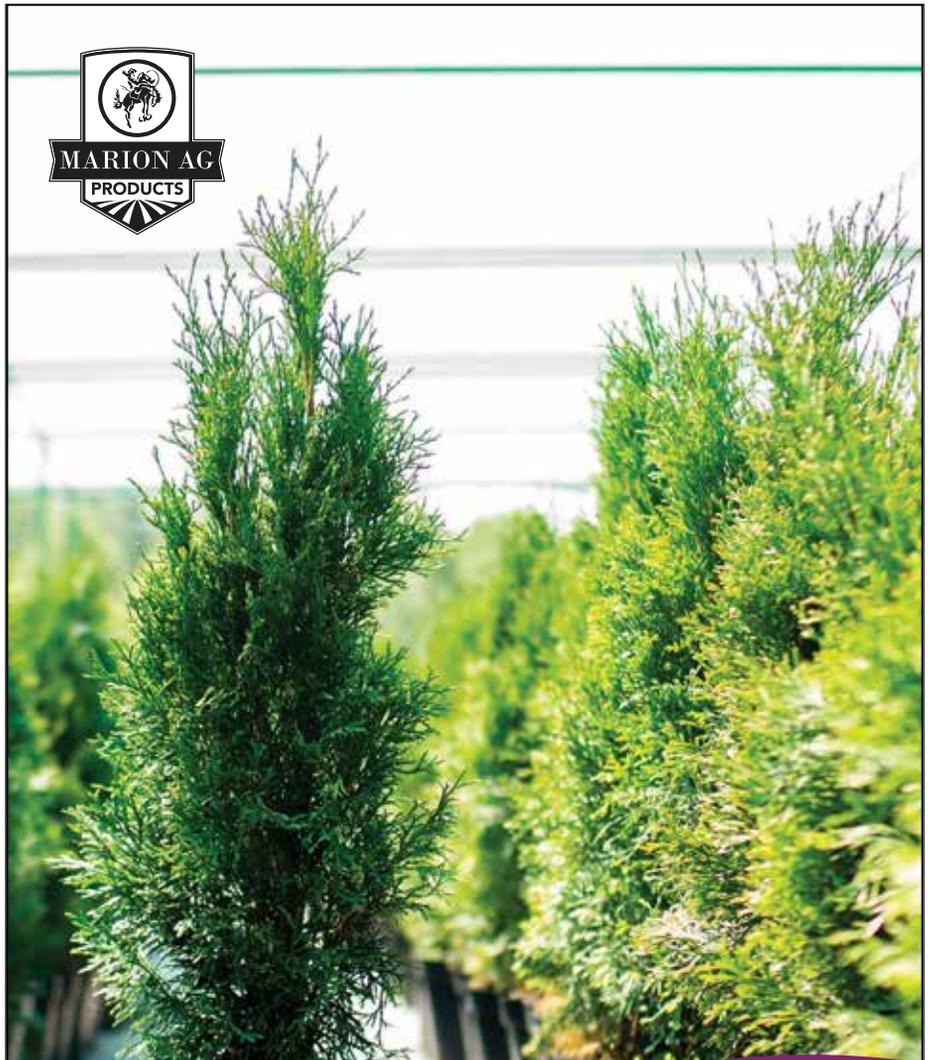
Blackman added that he had been wanting to reduce his commitments for several years. This arrangement "allows me the benefit of resolving the inevitable ownership transition and reduced the burdens of ownership while maintaining productive, collaborate and creative involvement with the team and the business," he said.

Krautmann has structured the sale of Heritage in a way that allows Martinez to purchase the company out of annual profits over a 10-year period. In addition, Krautmann is providing a line of credit for Martinez until Martinez can establish his own credit worthiness. And Krautmann has agreed to stay on and provide what he calls "the wisdom factor" over the next decade or so.

"I not only have a personal interest in Octavio's success, but a financial interest, as well," Krautmann said. "But really, I just want him to succeed and give him the best opportunity to do so."

Krautmann said he too has been approached from outsiders about purchasing his nursery, but said he believes the best opportunity of preserving the culture that he and his wife worked to establish was to keep the nursery in-house.

"We have a very tight culture at the nursery," he said. "We take a very strong collaborative approach to our work, and I've always wanted to run it that way, because the money comes and goes, the plants come and go, but the people are pretty much for keeps, whether it is the suppliers or the customers or the employees. And if we can't supply a really >>>



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strong work environment, in terms of a gratifying place to work, and if they're not happy, they're not going to make a good product.

"I think if we would have sold it to outsiders, it would never be the same culture," Krautmann said.

Eshraghi, too, said the decision to sell to employees came down to a desire to continue a legacy she has established at Eshraghi Nursery and a respect for what her employees have brought to the operation.

"I chose to sell the company to our employees because they have always been at the heart of what we do," she said. "They've

invested their lives and hard work into this business, and I want to ensure their legacy continues to thrive while continuing to support some of the best customers in the world. I have been incredibly fortunate to have such dedicated employees, and this decision is a reflection of my dedication to them."

"Our customers will benefit because employee ownership will strengthen our company," Eshraghi added. "When employees have a direct stake in the

success of the company, they are even more motivated to innovate, improve efficiency and deliver top-quality products."

Eshraghi, who started transition-

ing her nursery to employee ownership in 2019, said she had hoped she would be further along by now. "But anything worthwhile takes time," she said. "We are learning as we go, and while I'd like the transition to be completed in the next couple of years, I'm committed to seeing it through, however long it takes."

Eshraghi added that selling to her employees "is incredibly rewarding."

"Even though it's a lot of work up front to set up, the vision of the company continuing to succeed and supporting the employees long after I'm gone is what drives me," Eshraghi said. "That is where the true reward lies."©

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

"The multiple owner arrangement brings with it some risk of personality conflict, but the team has a history of working well together, so that seems to be minimized."

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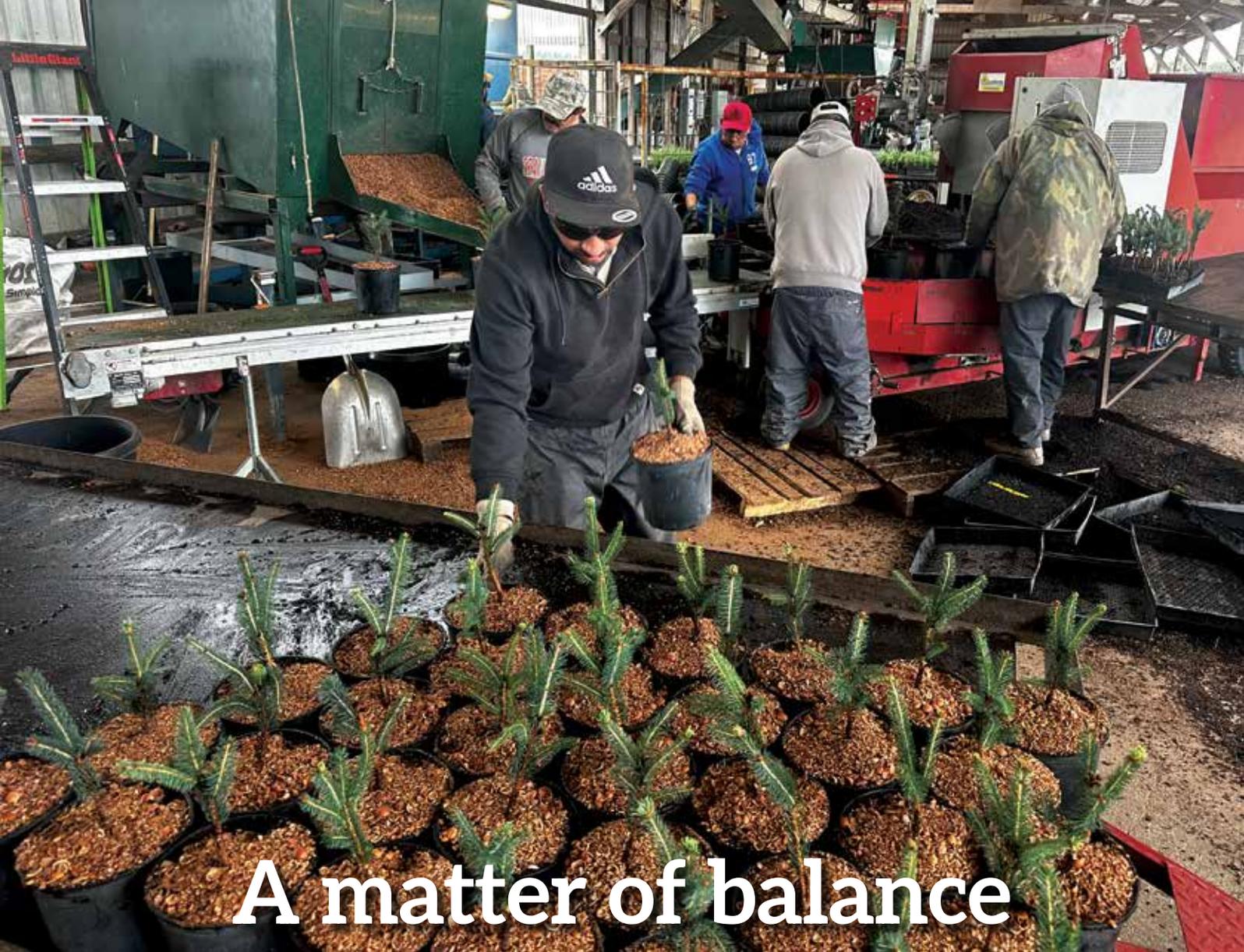
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A matter of balance

From left: Rafael Garcia, Guillermo Aguirre, Leobardo Lopez, Santiago Arenas and Rosendo Mata repot evergreens at Oregon Pride Nursery in McMinnville, Oregon. PHOTO BY VIC PANICHKUL

With new agricultural overtime rules in place, nurseries find ways to balance the highs and lows of manpower needs

BY JON BELL

Throughout Oregon’s nursery industry, it’s not uncommon for a nursery’s employee headcount to swing wildly, depending upon the season.

During the peak months of planting, harvesting and/or prepping for shipment, a nursery might see its headcount almost double to handle the workload. It might then ease up again as the season simmers down.

A different path

Not at **Columbia Nursery**.

An 80-acre wholesale nursery special-

izing in conifers and Japanese maples on the outer edges of Canby, Columbia takes a different approach to its workforce, which hovers around 10 to 12 employees. Rather than let people go during the slower months, the nursery has always strived to keep its workers busy — and employed — throughout the entire year.

“When we don’t have a need for all those hours, I could let half my workforce go, but we always find full-time jobs for them so that no one is cut,” said Amanda Staehely, who co-owns Columbia with her husband, Wayne. “We try not to hire seasonally if we don’t have to. I don’t like to hire



“We try not to hire seasonally if we don’t have to. I don’t like to hire them and let them go.”

— **Amanda Staehely**
CO-OWNER
Columbia Nursery

them and let them go. They need to be able to have that consistency in their jobs, so we really try to make sure that we do everything in our power to keep them employed.”

Staehely said everyone at Columbia starts above minimum wage, and everyone gets trained for multiple roles, from pruning and watering to driving a loader and other tasks. They also get a bonus every year. The nursery is flexible with its employees, making sure they can spend time with their families or even leave for longer stretches to work

the berry or Christmas tree seasons.

One thing that Columbia — and



A matter of balance



From right: Jose Garcia, Alma Dominguez and Sayra Prado consolidate evergreen tree liners at JLPN Inc. in Salem, Oregon. PHOTO BY VIC PANICHKUL

many other nurseries in Oregon — isn't really able to do regularly? Pay overtime.

Back(ground) pay

Until 2022, overtime pay was not required for Oregon's agriculture sector, including nurseries. Because of the nature of the work and the seasonality of it, the system worked well. During peak season, workers would log well above 40 hours a week — getting paid for the time — and then either drop down or be let go for the slower times.

But legislation passed in 2022 implemented an overtime threshold of 55 hours, meaning that ag workers became eligible for time-and-a-half pay for hours worked above the cutoff during any given work week.

In 2025, the threshold dropped to 48 hours, and in 2027, it will bottom out at 40 hours. That means nurseries will have to pay overtime to anyone working more than 40 hours a week. It also means that very few nursery workers will be able to put in more than 40 hours anymore, even during the busiest times of the year when their labor is needed the most — and even though they want those extra hours and income.

Though the legislation phased in the new requirements over several years, their impacts are already being felt. And in 2027, they're going to turn the screws even tighter.

"I'd say we didn't really lose productivity at 55 hours," Stachley said. "Forty-eight hours has been a big one, and I am so nervous about 40."

Just how big of an impact the new overtime rules will have is still unknown, but nurseries are bracing for the hit. Some have already started training for the shorter work weeks. Some have cut staff — or are prepared to — while others are expected to add more people to meet their needs. Always on the lookout for greater efficiencies, nurseries have begun looking at ways they can run even tighter ships, and where mechanization may once have been a long-term evolution, now it's becoming

a bit more pressing possibility.

But if there's one theme that's running throughout the new overtime reality, it's that the seemingly good intentions behind the legislation will likely end up hurting the workers they were designed to benefit — and dig an even deeper hole for Oregon's nurseries.

"This, once again, is a bunch of bureaucrats who've never run a business or balanced a checkbook thinking they're helping people and doing the opposite," said Mark Van Hoef, owner of **Oregon Pride Nurseries** in McMinnville, Oregon.

"The people who are going to suffer are the people they think they are helping out."

**"This, once again,
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they're helping
people and doing the
opposite."**

— Mark Van Hoef
OWNER
Oregon Pride Nurseries

Unfair competition

Agricultural work, especially in nurseries, is different than factory work. There are peaks and valleys based on a



PHOTO BY VIC PANICHKUL

“Seeing the writing on the wall when the overtime rules got passed, we immediately started training for the 40-hour work week.”

— John Lewis
OWNER
JLPN Inc.

range of factors, including weather, seasons, demand and more. There are times throughout the year when nurseries need more labor, and times when the need ebbs.

“It’s not like you’re in some widget shop indoors producing X amount of something at the same rate throughout the year,” said Jeff Stone, executive director of the Oregon Association of Nurseries.

“There are weather variabilities, seasonality. The spring is when they make their money in our industry.”

And workers traditionally made much of their money during the busy spring by working extra hours. Nurseries, exempt from overtime, could afford to pay employees for 50–60-hour weeks because it would just be for a limited window.

Farmworker advocates and several state legislators, however, believed that those workers should be eligible for overtime, which led to the legislation in 2022. Less than a year after implementation, a report from Oregon State University found that some farmworkers had seen their total wages fall because they were working fewer hours under the new requirements. »

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A matter of balance

Similarly, the report highlighted the fact that many farms and nurseries could expect labor costs to jump by anywhere from 3–14%. At the same time, many of those operations would probably not be able to pass on such cost increases to customers, especially when other states are able to produce similar products more cost effectively.

“We’re competing with seven or eight states where the minimum wage is half of ours,” Van Hoef said. “The only state even close to us is Minnesota (\$11.13 per hour), and they don’t have to pay overtime.”

The OAN and others tried to get the Oregon Legislature to reconsider the overtime law this past session. They proposed a bill that would have capped the exemption at 48 hours and allowed a 12-week, non-consecutive annual window that would have stretched up to 55 hours. Labor-friendly forces prevented the bill from ever seeing the light of day.

“To say I was disappointed is an understatement,” Stone said. “I’ll try again in 2026, but the math will still be the same. It looks like the reckoning for Oregon is two years away.”

Getting ready

Rather than wait for the 2027 deadline to kick in, some Oregon nurseries have been proactive in steeling themselves for the overtime impacts since the very beginning.

“Seeing the writing on the wall when the overtime rules got passed, we immediately started training for the 40-hour work week,” said John Lewis, owner of **JLPN Inc.**, a fourth-generation seedling operation in Salem, Oregon. “Where we typically did 54-hour weeks during the grading and planting seasons, we immediately went down to 48-hour weeks. Then when overtime turned to 48-hour weeks, we adjusted to 40-hour work weeks. Planning long-term from the beginning has removed all burdensome planning that would happen, had we not already moved to 40-hour weeks.”

Lewis said JLPN, which does not pay overtime, has also increased its total number of staff to accommodate the transition. In addition, the nursery had many



Christian Gomez loads a shipment onto an awaiting truck at Oregon Pride Nurseries. PHOTO BY VIC PANICHKUL

long-time hourly employees —with 25 to 35 years of service — who were switched over to salary.

“We knew this (the overtime change) would hit them the hardest based on what they had achieved financially based on the years of working for JLPN,” Lewis said. “We also gave them all a significant raise to show our appreciation for the years of loyalty to JLPN. This would ensure that our MVPs were available when extra hours were needed, and the expertise wasn’t lost.”

At **John Holmlund Nursery** in Boring, Oregon, general manager Vladimir Lomen said there’s been a big push to cross-train employees so that no one has to work overtime in roles like spraying, watering and maintenance. Those are important positions that often require additional hours above 40 each week during certain times of year.

“Now we’re rotating in new people, so those key people we had doing that work are earning less,” Lomen said.

He noted that the nursery will likely hire more people to meet labor needs. Contract workers — essentially employees from a temp agency — are one option, but John Holmund Nursery hasn’t had too much luck with them. It will also be looking at ways to increase efficiency in its processes and maybe even ramp up mechanization efforts, but those are steps that have largely been ongoing anyway.

“Efficiency measures help, but every business should always be looking to save labor dollars by being more efficient,” Lomen said. “And yeah, there’s mecha-

nization, but it’s not always the answer. Our container yard is very hands on, very labor intensive. There’s not really a way around that.”

Automation also doesn’t come cheap.

“You’re looking at a million-dollar machine for a small business,” Staehley said. “We can’t afford that.”

Unintended consequences

Unless something major changes between now and 2027, the 40-hour work week — with overtime required for anything above that — will become a reality for the nursery industry. Despite efforts to raise wages, improve efficiency and automate where possible, most nurseries and their workers are likely to feel the sting. Van Hoef said ultimately he’ll probably have to cut down on staff, which will mean reduced production and, as a result, lower revenues for his nursery and less tax revenue for the state — an unintended consequence, he said, of the uninformed overtime advocates’ good intentions.

Staehely sees it similarly.

“I think the overtime laws are well-intentioned, but it’s from people who have no experience with the farm workforce,” she said. “It’s done nothing but hurt the workers, and it’s going to hurt us. I’m not going to be able to support any of my employees if I’m out of business.” ©

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

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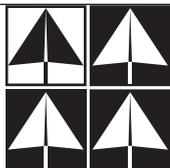
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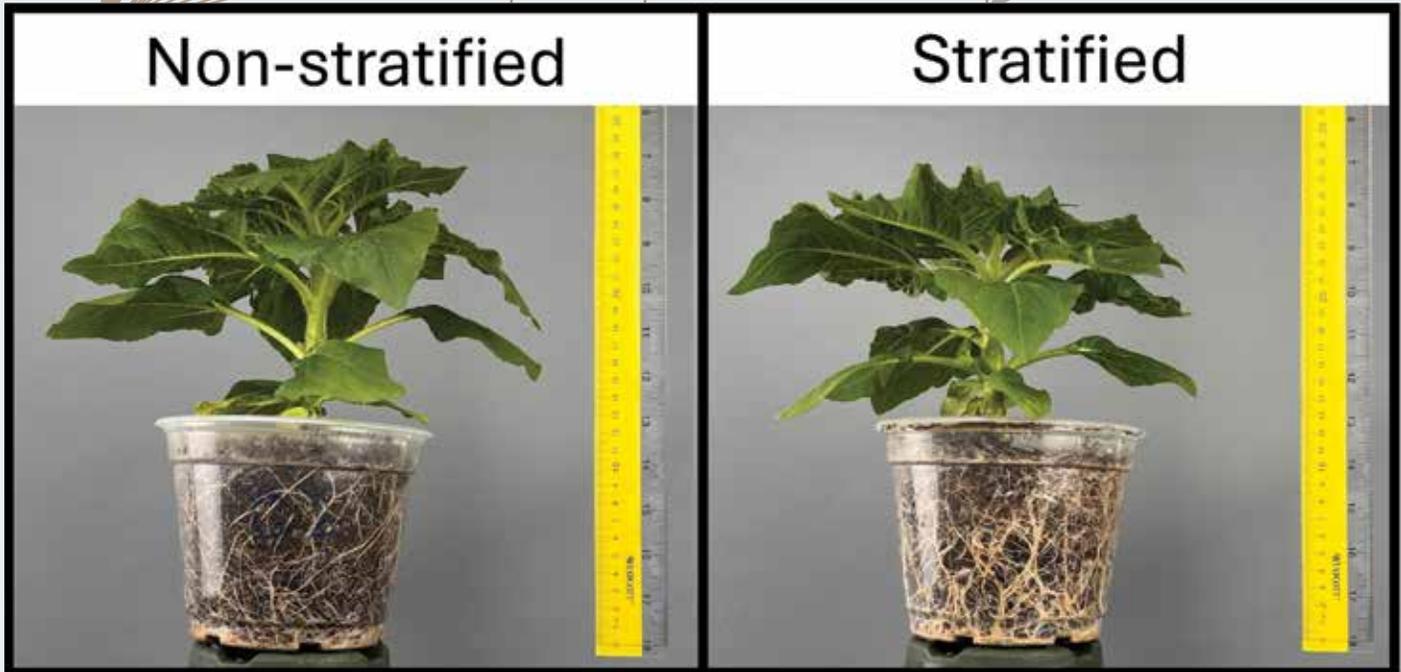
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Series content is coordinated by Dr. Lloyd Nackley, associate professor of nursery production and greenhouse management at Oregon State University in Corvallis, Oregon.



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Traditionally and stratified-grown plants in clear pots. Stratified-grown root systems are more prolific and fill the pot more efficiently. PHOTO BY KRIS CRISCIONE

Rethinking substrates for modern growing

How layering mixes, wood fiber, and filling practices can cut peat use without cutting crop quality

BY LLOYD NACKLEY

This September, I had the opportunity to travel halfway around the world to Freising, Germany, to present at Growing Media 2025, the International Symposium on Growing Media, Compost Utilization and Substrate Analysis for Soilless Cultivation. At this global gathering of scientists, substrate producers, and greenhouse innovators, we were all wrestling with the same question:

What will we grow in when peat becomes harder to rely on?

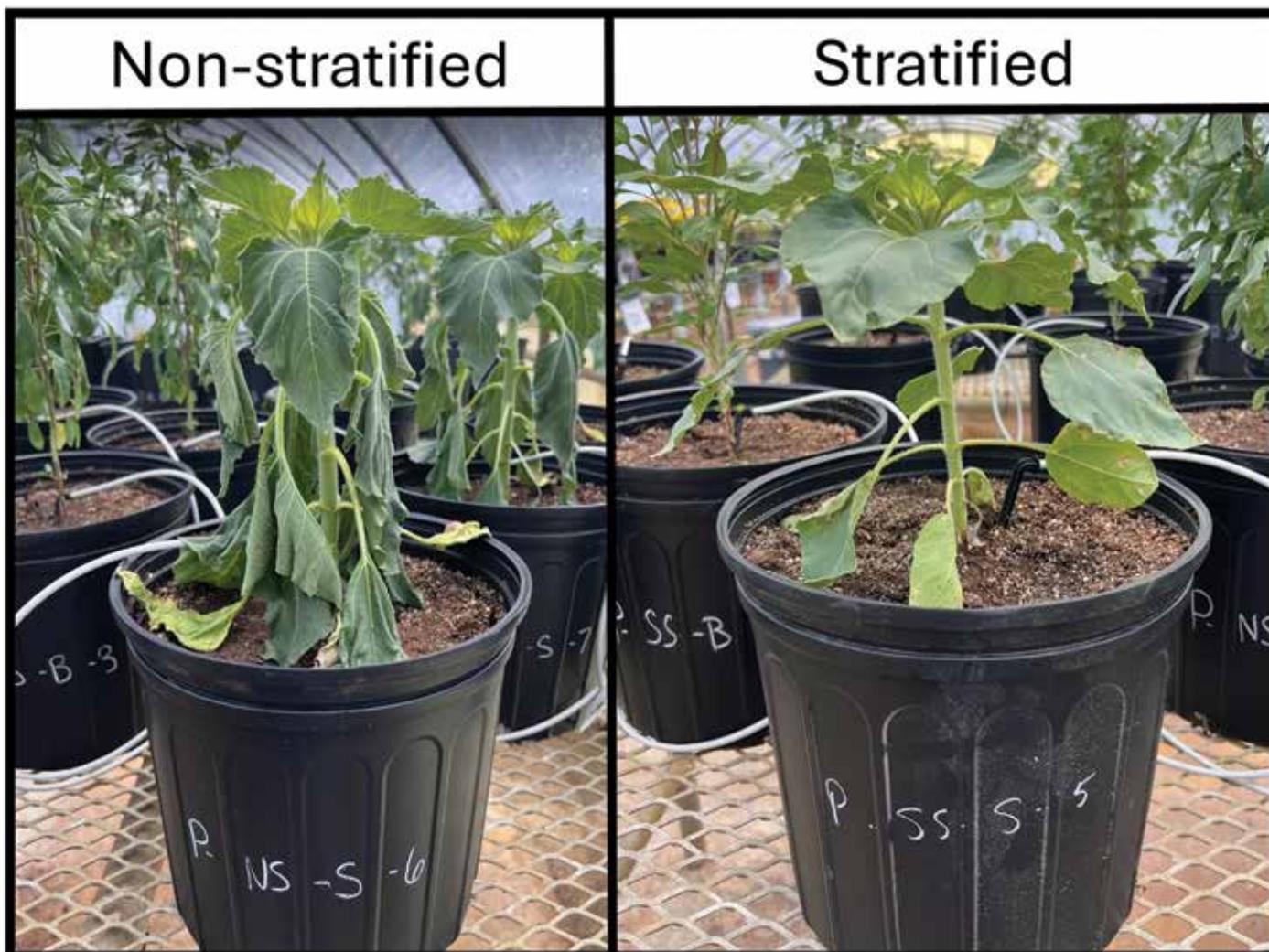
The symposium, organized by the International Society for Horticultural Science and the International Peatland Society, brought together experts to talk about everything from novel raw materials and composting to biochar, sustainability, and future directions for soilless cultivation. Walking through the sessions and getting to spend time with colleagues, I was struck by how much of this work connects directly to the day-to-day challenges we discuss with growers in Oregon.

It reminded me that on our Nackley Lab Nursery News blog, we've been highlighting several of these advances in

separate stories by Dr. Jeb Fields and Dr. Kris Criscione. Here, I want to pull those threads together and show how recent research is pointing growers toward practical, peat-saving strategies — ones that could help your bottom line while preparing for the future of greenhouse production.

Rethinking the foundation of greenhouse production

Substrates may not grab headlines like new varieties or pest alerts, but every grower knows they are the foundation of successful greenhouse and nursery production. The growing medium dictates how roots develop, how much water and fertilizer a crop needs, and ultimately >>



A non-stratified plant hastily wilting while a stratified plant remains fully turgid under hot and humid conditions. This can be attributed to greater fibrous feeder roots accessing more water in stratified systems. PHOTO BY KRIS CRISCIONE

whether plants leave the greenhouse looking strong and market-ready.

For decades, peat moss has been the go-to base for greenhouse substrates. Peat has a reliable texture, excellent water-holding capacity, and proven performance across a wide range of crops.

But it also comes with challenges. Peat is costly to extract and transport, its supply chain can be unpredictable, and there are mounting environmental pressures to reduce its use. For many growers, the question is no longer *if* peat reduction will be necessary, but *how* to do it without compromising crop quality.

Fields and others have been exploring that “how.” Their group has published a series of studies that tackle substrates from three angles: first, reducing peat by layering or “stratifying” mixes; second, identifying promising peat alternatives such as wood fiber, bark, coir, and perlite; and third, looking at how growers handle substrates during potting — specifically, how tightly or loosely they are packed.

Together, these studies point to practical, flexible strategies that can help growers reduce peat use, improve rooting, and maintain salable crops.

Stretching peat by layering mixes

One of the most promising approaches is substrate stratification. The concept is straightforward: instead of filling a pot or plug cell with one uniform mix, different substrates are layered within the same container. A finer, high-performance mix can be placed on top where young roots establish, while a coarser, lower-cost material sits below to provide structure and reduce peat use.

In a 2025 study, Fields and colleague Kris Criscione tested stratification with greenhouse petunias (Fields & Criscione, 2025a). They compared traditional peat-based mixes (“peatlite”), coir-based mixes (“coirlite”), and stratified systems where either pine bark or engineered wood fiber formed the bottom half of the pot, with peatlite or coirlite layered above.

The results were encouraging. Petunias grown with a 50% peat reduction using either pine bark or wood fiber as the substrata performed just as well as those in full peat mixes. Plants were similar in size, flower number, and overall marketability. Even peat-free systems, where coir replaced peat entirely, produced marketable crops, though they showed slightly smaller shoots and fewer flowers.

The takeaway is clear: growers can slash peat use in half without losing crop quality. And with coir-based mixes, peat can be eliminated altogether if some reduction in size and flower count is acceptable for certain crops or markets.

Extending substrate stratification to plug production

Another study, led by graduate researcher Maureen Thiessen with Fields, looked at stratification in much smaller containers: young plant plugs (Thiessen & Fields, 2025).

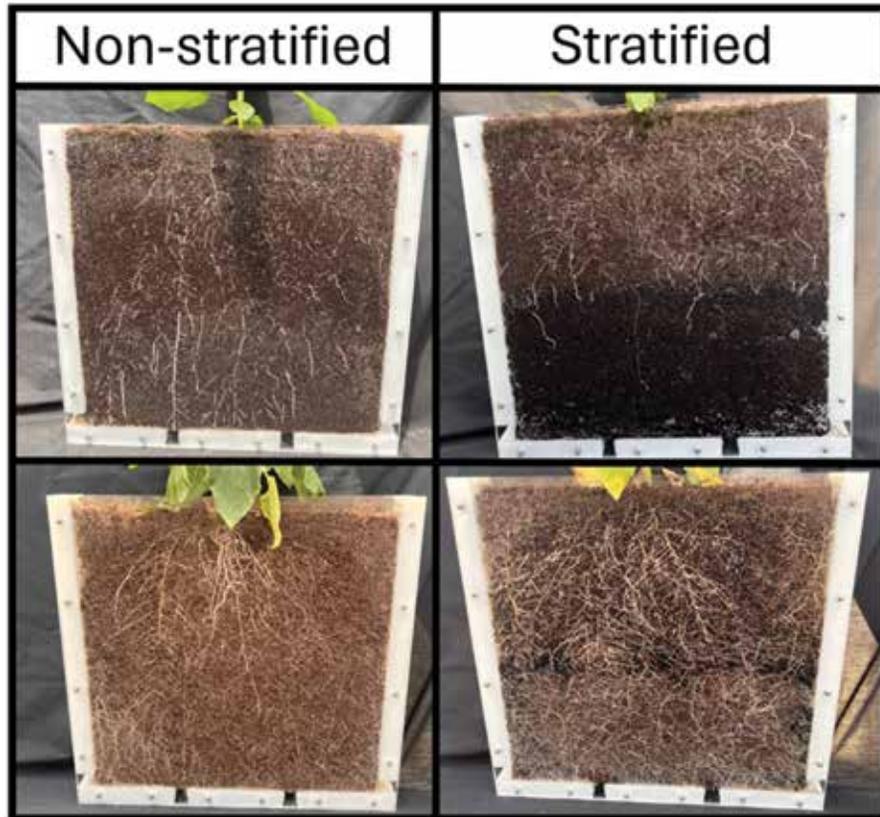
Plug production has unique chal-

lenges. The shallow trays hold very little substrate, so the lower portion of each cell often stays saturated. That reduces oxygen for roots and raises the risk of disease. Since plugs are the foundation of later production, weak rooting at this stage can ripple throughout the crop cycle.

Thiessen and Fields tested layering bark- or peat-based mixes over either wood fiber or perlite in 37 cm³ plug cells. The goal was to see if stratification could both reduce peat and improve rooting in this tight, high-stakes environment.

The results again highlighted the importance of material choice. Perlite layers increased air space in the trays, which might sound like a good thing, but they also reduced plug integrity the plugs tended to crumble or fall apart during transplanting. Perlite treatments also produced less root biomass overall.

By contrast, wood fiber layers



Representative photo of how stratified-grown roots begin to explore the container. Stratified-grown roots grew throughout the container more uniformly, ultimately producing stronger and larger root systems. PHOTO BY KRIS CRISCIONE



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increased container capacity and often produced root systems with equal or greater total root length and surface area compared to standard mixes. Importantly, plugs from wood fiber treatments held together well for transplanting.

The implication for growers is that wood fiber stands out as a promising peat alternative not just in finished crops, but also in plug production. Stratification with wood fiber can maintain plug quality while reducing reliance on peat, an important finding as propagation operations look to cut costs and improve sustainability.

Beyond ingredients: why packing density matters

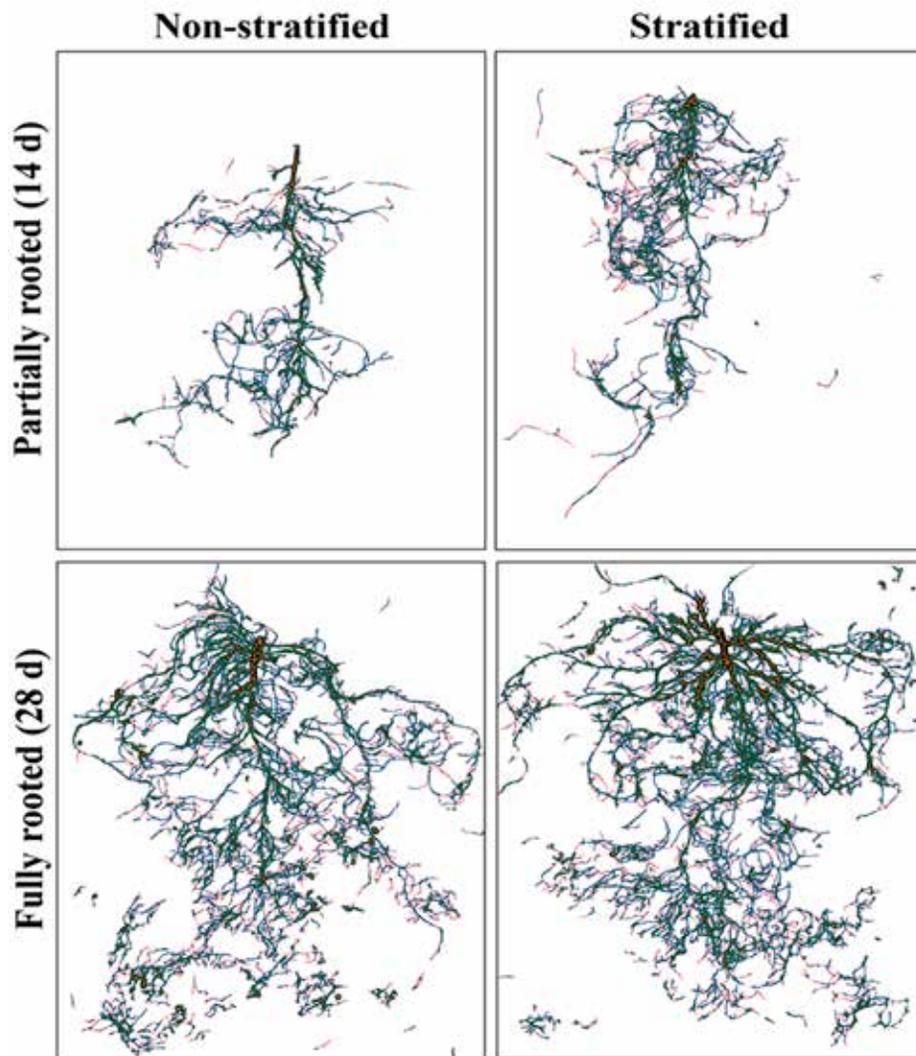
While ingredient choice and layering strategies get much of the spotlight, Fields and Criscione (2025b) also asked a simpler but often-overlooked question: how does the way substrates are *handled* during potting affect plant growth?

Anyone who has run a transplanting crew knows that pot filling is not perfectly uniform. Workers may press the plugs in firmly, lightly, or somewhere in between. Even automated filling lines can vary in how much compaction they create. That variability raises a practical question: does packing density matter for crop performance?

To find out, the researchers grew petunias in peat-based mixes packed at four densities, ranging from loose (0.08 g/cm³) to relatively firm (0.14 g/cm³). Shoots, flowers, and overall salability were unaffected by density. Every plant looked good on the bench. But root systems told a different story.

Root length, surface area, and biomass all peaked at moderate densities. Looser substrates provided less contact between roots and media, limiting water and nutrient uptake. Extremely tight packing, while not tested beyond the moderate range, could theoretically restrict pore space. But within the range of normal greenhouse practice, the data suggest that a firmer hand actually benefits root development.

This finding is a reminder that soilless substrates behave differently than field soils. In mineral soils, high bulk densities usually spell trouble because compaction reduces



Example of a non-stratified and stratified root system that was processed in a root imaging software. We can measure important root characteristics that are responsible for taking up water and mineral nutrients (fibrous feeder roots; blue and red roots), or the roots that deliver water and nutrients to the shoot (coarse roots; yellow). PHOTO BY KRIS CRISCIONE

pore space. In greenhouse substrates, however, moderate compaction increases root-substrate contact and can stimulate more branching and lateral root growth.

For growers, the lesson is practical: paying attention to pot filling can pay off. Training crews or fine-tuning machine settings for consistent, moderate packing could improve rooting across batches at no added cost.

Flexibility in substrate management

Taken together, these studies highlight a common theme: growers have more flexibility with substrates than many assume. Peat doesn't have to be the immovable foundation of every mix. By thinking creatively about layering, alternative materials, and even packing density, growers can meet production goals while reducing reliance on peat.

Some clear trends emerge:

Wood fiber is a reliable performer.

Whether layered beneath peat in finished crops or beneath plugs in propagation trays, wood fiber consistently supported strong rooting and crop quality.

Peat reduction is possible without sacrificing marketability. Half of the peat can be cut out of mixes with no noticeable difference in petunias. Even full peat replacement with coir can work if growers accept slightly smaller plants.

Handling matters as much as ingredients. The way a pot is filled can change root architecture just as much as what's in the mix. Moderate packing densities improve root development without hurting shoots or flowers.

For growers under pressure to reduce inputs, these insights are good news. Incremental changes — like layering a

coarser substrata, choosing wood fiber over peat for part of the mix, or adjusting how pots are filled — can yield measurable gains. Importantly, none of these strategies require an overhaul of existing systems. They can be phased in gradually and tested crop by crop.

Looking ahead

Peat isn't going away overnight, but the trend is unmistakable. Pressure is only growing from costs, supply chains, and environmental regulation to reduce its use. What Fields' lab is showing is that growers don't have to wait for the "perfect" peat alternative to appear. Solutions are already available, and they're flexible enough to adapt to different crops, markets, and production systems.

Wood fiber, coir, bark, and even perlite each have roles to play, but the key is smart management. Whether it's stratifying layers in a pot, tweaking how plugs are propagated, or training crews on consistent packing, growers can act now to future-proof their operations.

For an industry where margins are tight and consistency is everything, that flexibility matters. Research from the Jeb Fields Laboratory shows that the future of substrates may not hinge on a single replacement for peat, but rather on a toolbox of strategies that make the most of every cubic inch of media. ©

Lloyd Nackley, Ph.D., is a plant ecologist at the Oregon State University North Willamette Research and Extension Center (NWREC) in Aurora, Oregon. He can be reached at

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The cost of tomorrow

I am a public spending hawk. It is the top mission of the federal government to serve and protect the American people.

Of course this takes many forms: our national defense, shaping our economic destiny, providing a safety net for our citizens who need a hand up, not a handout.

But let's call it. On spending, America has lost its way, and it has been happening for decades.

The federal debt is vastly out of whack. Most Americans greet this with a shrug and wonder, does it affect them? In fact, yes it does — or better stated, it will.

Our total national debt is \$37.41 trillion. There are approximately 342.4 million Americans, meaning each one's share of this debt is \$109,000. The annual interest payments on this debt total \$879.9 billion. That's more than the cost of Medicare or national defense, and second only to Social Security.

Even by fiscal hawks' standards, debt is not a sin. The sin is that our debt is so large that it currently exceeds our Gross Domestic Product (GDP) — the monetary measure of the total market value of all the final goods and services produced over a period of time — by 19.4%.

As a country, we owe more than we earn. Some debt is fine if the economy is growing at a rate that can sustain it, but what we're seeing is reckless, unchecked spending.

A threat to future generations

Even this level of federal debt is not considered unsustainable with GDP. However, it is approaching a level that could lead to significant economic challenges.

This increase is driven by a mismatch between federal revenues and spending, as well as the growth of Social Security and Medicare spending. The accumulation of federal debt and high interest rates will push borrowing costs higher, crowding out investments in other priorities.

By any measure, this has graduated beyond a simple talking point for economists and policy wonks. Rather, it's a looming reality with direct consequences for future generations.

My staff has heard me mention the adage, "bad news does not get better with time." It's time for that tough conversation. As the U.S. national debt surpasses \$35 trillion and continues to grow, it's becoming increasingly clear that our choices today will profoundly impact the economic freedom, stability, and opportunity we leave to our children and grandchildren.

For decades, policymakers have kicked the can down the road, borrowing to fund spending priorities without seriously addressing the long-term fiscal imbalance. While deficit spending can be a valuable tool during recessions or national emergencies, such as the COVID-19 pandemic, its persistent use during periods of economic growth has undermined its legitimacy and sustainability.

The U.S. government is now running trillion-dollar deficits annually, even in relatively stable times. The Congressional Budget Office projects that the federal debt held by the public will reach 181% of GDP by 2053 if current policies continue. That kind of fiscal trajectory is not just unsustainable, but dangerous.

The most immediate concern is the burden this debt places on future taxpayers. The federal government borrows by issuing Treasury securities, which must be repaid with interest. As interest rates rise, the cost of servicing the debt increases. That means that a growing share of tax revenue will be used not to invest in education, infrastructure, or innovation, but simply to pay for past borrowing.

This will restrict the government's ability to respond to future challenges. Climate change, technological disruption, health-care costs, and geopolitical instability will all demand substantial public investment. If future leaders are handcuffed by the need to service past debt, they'll face stark choices: cut essential programs, raise taxes sharply, or borrow even more.

Is it ethical to spend like this?

Beyond the economic and fiscal consequences, there's a deeper ethical issue at play. A persistent federal deficit represents a failure to live within our means — and worse, a decision to pass the bill for today's consumption on to those who



Jeff Stone
OAN EXECUTIVE DIRECTOR

haven't even had a say in the matter.

Imagine a family continually living beyond its means, racking up credit card debt while leaving their children to deal with the eventual bankruptcy. On a national scale, that's precisely what's happening.

There is also the matter of national security. A heavily indebted nation becomes more vulnerable to external shocks and less flexible in its response. China, one of America's chief geopolitical rivals, holds over \$800 billion in U.S. Treasury securities. While this interdependence has not yet proven destabilizing, it introduces risk. If foreign confidence in the U.S. fiscal outlook were to wane, it could trigger a sell-off of U.S. debt, weakening the dollar and causing borrowing costs to spike.

Critics of deficit hawkery argue that focusing too much on the deficit could lead to unnecessary austerity and underinvestment in critical areas like education, health-care, and green technology. This is a valid concern. We saw this with DOGE. Hatchets and a failure to understand, fundamentally, how the federal government works does not solve problems — it just makes us bleed.

I am a product of the U.S. Senate, and my boss, former U.S. Senator Bob Packwood (R-Oregon), hit the issue head on. What did he focus on? Prioritizing deficit reduction over tax cuts, entitlement reform, spending cuts, program restructuring, tax reform, and limits on tax breaks — all with a balanced budget as the ultimate goal.

There is a path back to sanity. Kicking the can down the road puts our children and grandchildren at risk. Congress must act like the adult and solve this growing problem. ©

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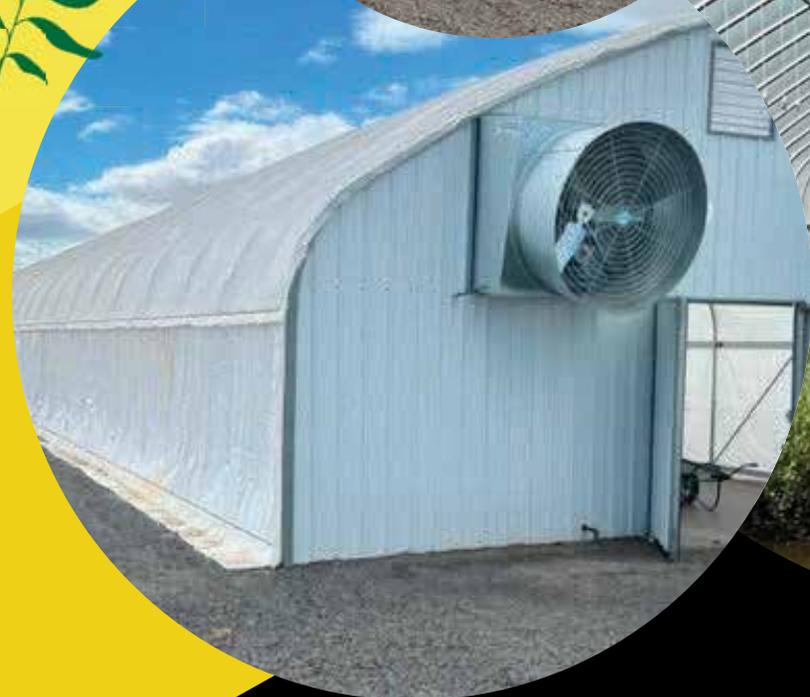
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