

# WATER OUTLOOK 2023

Scarcity, strategy and tools

Western nurseries lead on water 17

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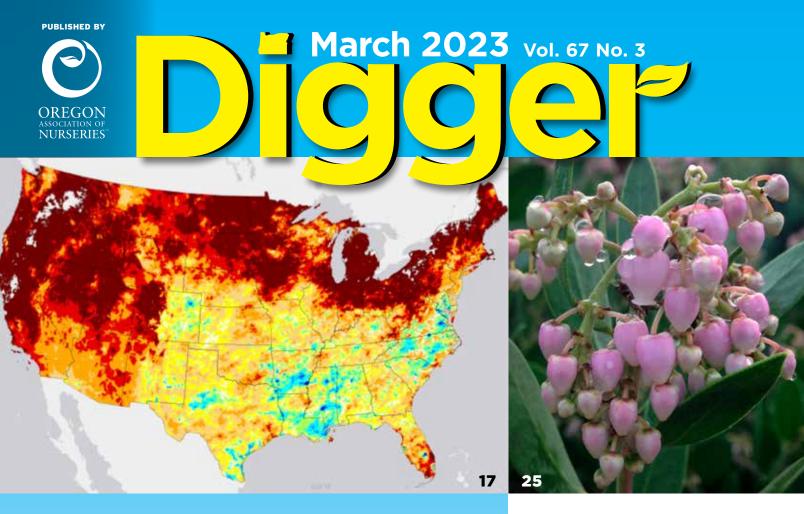
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## **WATER OUTLOOK 2023**

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Western nursery associations team up to tackle

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With new water rights on the wane, transfers become the best hope of new supply. **Legal Access by Steve Shropshire** 

ON THE COVER: An AI-generated image depicting drought in Oregon with a sponge in the shape of the state of Oregon dripping water in the foreground.  ${\tt IMAGE\,BY\,STARRYALCOM}$ 

THIS PAGE, LEFT: A 2021 map of the U.S. showing levels of drought, from severe (dark red) to light (light blue). PHOTO COURTESY OF CLIMATEGOV

THIS PAGE, RIGHT: Arctostaphylos 'Austin Griffiths' is one of a blossoming crop of low-water plants popular with water-conscious consumers. Photo COURTESY OF XERA PLANTS

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Finding new answers

Have you ever tried catching an octopus?

On the small island of Tonga, octopus is a delicacy. To catch the octopus, local fishers use a lure called a "makafeke." This lure is simple in design, with only a round stone and a couple large seashells that are fastened to a rope. As the fisher paddles over a reef they dangle the makafeke over the side of their canoe.

Seeking an easy meal, the octopus sprints towards its dinner and seizes the simple lure. Unaware that it's caught in a trap and so determined in its purpose, the octopus refuses to let go. This instinct has provided the octopus with meal after meal on countless occasions, but this time it spells doom. The fisher is now able to flip the octopus into the canoe.

Have you ever heard this phrase uttered when confronting new problems or challenges: "Well, this is the way it's always been done"? I know I have. Those nine words are the ultimate "makafeke."

Over the last decade, the world has evolved quickly. Technological advancements truly push the boundaries of what is possible. High tech also has changed how we interact with each other, and how we operate in our personal and professional lives.

There is a risk in being closed minded to new ideas or ways of thinking. Like the octopus, we can be susceptible to holding too tightly to the notion of "doing things the way they have always been done" even when it comes at such a great personal cost.

The solution is quite simple: Let go. The past way of doing things in most situations will continue to be the right way, but not every time. Some challenges require modern solutions.

On a few occasions while meeting with my father to discuss the future goals and aspirations of our business, he would tell me that there is wisdom in not just looking over your own fence. One should also look around the world to see the innovation and inspiration already happening.

One of the most productive trips I have been on took place 16 years ago when we traveled to the nursery trade show in Essen,



Todd Nelson

OAN PRESIDENT

Germany. While there, we were inspired by how beautiful their landscape and garden designs were. Immediately we began to brainstorm on how we could capture the feeling we had experienced there and bring it to the United States.

With excitement, we immediately began working with our team to see how we could incorporate this new-found vision into our everyday business model. We made a small tweak to one thing we already do, and it has had a major impact on landscapes across the country.

On another occasion, we visited different countries around Europe, intent on finding solutions to challenges we were facing. Labor laws were infringing on our ability to do needed work in a cost-efficient manner. Europe, having some of the world's more stringent labor laws, had already found innovative solutions to these labor/cost challenges.

Our friend gave us ideas and showed us how automation through machines and robots allowed them to do the same work that required many employees, but in a fraction of the time. This proved to be a cost-effective solution to their issues.

As I saw these machines and robots in action, my mind began to race and I knew this was the answer to our problem.

I know there are many challenges that lie ahead. Unforeseen obstacles will keep many of you up at night. Don't be discouraged. Find those who may do things different or better than you. Have them as a mentor and a friend.

Continue to educate and surround yourself with people who are successful at what they do. They will push you to keep moving onward and upward. Innovation and inspiration surround you. Let go. Look out and lean on each other to meet the needs of today and tomorrow.

JOHN CNESON



### Calendar

Spread the word about your event!

Email details to calendar@oan.org.



#### FIRST AID AND CPR CLASSES

The Oregon Association of Nurseries offers First Aid and Adult CPR classes so that employees have the needed certification and can render assistance if needed in the workplace. Successful completion results in certification that is good for two years. Participants are urged to register early to guarantee a spot. Registrations are only accepted up to two days before each scheduled class. Classes will be offered in English on March 15 and in Spanish on March 16 at OAN's office, (29751 S.W. Town Center Loop West, Wilsonville, OR 97070). Classes take place from 8 a.m. to 12:30 p.m. Cost is \$60. Additional classes will be offered monthly and take place either at Lifeline Training Center in Portland or at the OAN offices. For more dates, details and registration, visit www.OAN.org/CPRClass.

#### MARCH 5

#### **PLANT NERD NIGHT**

Plant Nerd Night is returning for 2023 with a new venue, a new day of the week, a new time - but one thing isn't changing. "The name Plant Nerd Night is staying, even though it is in the afternoon," head plant nerd Mike Darcy said. The event is produced by Darcy in cooperation with the Hardy Plant Society of Oregon. The annual tradition, where specialty growers give fun presentations on interesting and unusual plants, will take place at 2 p.m. Sunday, March 5 at Lake Oswego High School Auditorium (2501 Country Club Rd., Lake Oswego, Oregon). Doors will open at 1 p.m. and those interested should line up ahead of time to be assured of a seat. Admission is free. Participants will get a goody bag that includes a FREE Retail Nurseries and Garden Centers Map, courtesy of Plant Something Oregon and the Oregon Association of Nurseries. For more information, visit HardyPlantSociety.org/ Plant-Nerd-Night and MikeDarcy.com.

#### **APRIL 7-8**

#### **HORTLANDIA**

The Hardy Plant Society of Oregon sponsors this annual plant and art sale at The Westside Commons (formerly the Washington County Fairgrounds), N.E. 34th Ave. and Cornell Road, in Hillsboro, Oregon. Vendors from all over the Northwest will provide the latest plant introductions alongside old favorites. Handmade, one-of-a-kind garden art made from materials like metal, wood, glass, ceramic, fabric and stone will be on display throughout the event. Admission is free. For more information, log on to HardyPlantSociety.org.



#### **APRIL 14**

#### **NEW VARIETIES SHOWCASE — TIER 1 SUBMISSIONS DUE**

**Growers and breeders** — Enter your plants by April 14 to be included in Tier 1 of the New Varieties Showcase, presented by the 2023 Farwest Show. Tier 1 entries will be showcased in the July edition of Digger magazine and online at **FarwestShow.com**. To be eligible, plants must be new to the marketplace in the last two years, be available from at least one 2023 Farwest Show exhibitor, and represent an improvement over existing selections. Entries are available by calling 503-682-5089 or www.FarwestShow.com/New-Varieties-Showcase-Submissions/.

#### **APRIL 15**

#### HORTICULTURAL SCHOLARSHIP APPLICATIONS DUE

Do you know a high school, college or graduate student who is considering a career as a nursery or landscape professional? If so, April 15 is the last day to apply for the 20 scholarships supported by the Oregon nursery industry and offered by the Oregon Nurseries Foundation. Awards range from \$500 to \$1,500, and are sponsored by individuals and OAN chapters. Log on to www.OAN.org/ONF for more information, or contact OAN Director of Finance and Administration Stephanie Weihrauch at 503-582-2001 or Scholarships@OAN.org.

#### **APRIL 22**

#### **EARTH DAY**

Earth Day is an annual reminder about the importance of caring for the environment, and recognizing the role that nurseries play in mitigating the effects of climate change through carbon sequestration, environmental stewardship and community service. Learn more at www.EarthDay.org.

#### **APRIL 29-30**

#### **OREGON AG FEST**

Ag Fest is an annual fun-filled event where families will learn about local agriculture. The two-day event, aimed to help Oregonians better understand where their food, fiber and flora come from, is a unique learning experience. Hands-on exhibits make learning about Oregon's vast agricultural industry educational and entertaining. The ag-stravaganza will take place on the last weekend of April at the Oregon State Fairgrounds, 2330 17th St. N.E., Salem. The cost is \$9 each for anyone 13 or older; younger kids get in free. Discounted tickets are available from www.OrAgFest.com and from Wilco stores.

#### **APRIL 30**

#### **ARBOR DAY**

The last Friday in April is nationally recognized as Arbor Day, when we celebrate the important role trees play in our lives, and a good day for garden centers to host tree planting events and environment-related activities. For more information, visit www.ArborDay.org.



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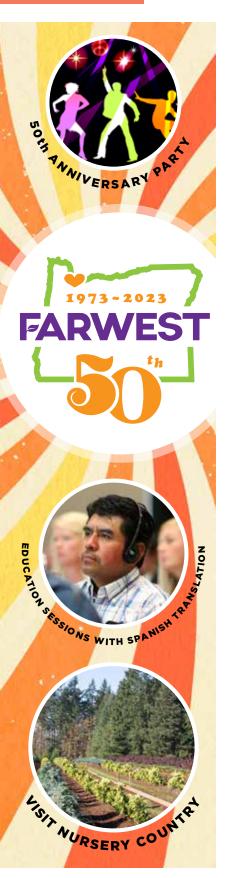






### **Northwest News**

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



## FARWEST SHOW TO CELEBRATE 50TH ANNIVERSARY IN 2023

The biggest nursery trade show in the west, the Farwest Show, will celebrate its 50th anniversary this coming August.

The show will take place August 23–25, 2023 at the Oregon Convention Center in Portland, and will include special festivities looking back on five decades of making nursery industry connections. Booths are available now, tickets will go on sale April 1, and a full slate of seminars and social events is planned.

"Not many nursery trade shows have lasted five decades, through all the changes in the industry and all the transformations in how sales happen," said Allan Niemi, who has served as director of the show since 2008. "Farwest has done it, so we're going to have a party to celebrate! We are extraordinarily proud of what the show has done for our growers, and really nursery professionals from all over the country. It's brought people to Oregon where they can see the difference that Nursery Country offers."

The first Farwest took place in 1973 in the exhibition halls at Portland's Memorial Coliseum arena. "All shows lead to Portland, September 11–13 for the Farwest Nursery, Garden and Supply Show: the biggest, boldest nursery show ever staged in Farwest Country," trumpeted the August/September 1973 issue of *Digger* magazine.

"It was just an exciting adventure," said the late Arda Berryhill, who owned **Berryhill Nursery** (Sherwood, Oregon) with her husband Roger, and was inducted as a member of the Oregon Nurseries' Hall of Fame, in the August 2020 issue of *Digger*. "Nothing like it had ever been done. All of us were so excited to see customers from the Midwest and East that we'd never had contact with, most of us. It brought us some customers that we'd never seen."

Turnout at the first show was 120 exhibitors and 1,500 attendees from 27 states and three countries (the U.S., Canada and the Netherlands). The show was hailed as a success, and the next year, it doubled in size. A few years later, in 1977, the only edition of Farwest to happen outside of Oregon took place at Seattle Center. It was successful, but growers decided they just wanted the show to take place in Oregon.

And why not?
Farwest has continued to grow over the years, right along with Oregon's nursery industry. It made the big move to the gleaming new Oregon Convention Center in

1991. The center has since been expanded and Farwest expanded right along with it.

LARIETIES SHOWLE

"It sounds corny, but the show came alive," said former OAN executive director and honorary lifetime member Clayton Hannon in the August 2020 issue of *Digger*.

During the 1990s, Oregon nursery sales doubled from \$299 million in 1990 to \$642 million in 2000, and has continued to grow. The Great Recession from 2008–2012 saw sales subside, largely due to the housing crash, and the show contracted accordingly.

Nursery sales have normalized since then, resuming their prior growth. In 2020, the most recent year tallied, Oregon registered \$1.2 billion in sales. More than three-fourths of Oregon's production is sold out of state, with the majority headed east of the Mississippi River.

"We pride Farwest on being the greenest show in the industry," Niemi said. "Most of our growers are located within a few hours' drive in the Willamette Valley, where the conditions for growing lush and beautiful trees and shrubs are as good as it

gets. There's a long growing season, winter cold for dormancy, great soil, adequate water supplies, and growers who just know what they're doing. You can meet them at Farwest and see

their plants. It's worth coming to see and experience."

For more information, contact Allan Niemi at **ANiemi@OAN.org** or 503-582-2005, or log on to **www.FarwestShow.com.** 

Oregon legislators (left to right): Rep. Paul Holvey (D-Eugene), Rep. Shelly Boshart Davis (R-Albany), Sen. Bill Hansell (R-Athena) and Sen. Daniel Bonham (R-The Dalles).









#### STATE LEGISLATURE WEIGHS **AG OVERTIME RELIEF BILLS**

Four bills have been introduced in the Oregon Legislature offering farmers various degrees and forms of relief from the new agricultural overtime requirement passed in the 2022 session.

The 2022 bill overrides the federal agricultural overtime exemption in Oregon, requiring farmers to pay overtime to workers for the first time. It established overtime pay thresholds of 55 hours in 2023 and 2024, 48 hours in 2025 and 2026, and 40 hours in 2027. It also set up a fund employers could apply to for tax credit relief, which will decrease over time.

The four bills include one offered by the Democratic majority and three supported by Republicans.

The Democratic bill, House Bill 2058, lets producers apply for a loan of up to \$15,000 repayable in two years. It was introduced at the request of the House Committee on Business and Labor, chaired by Rep. Paul Holvey (D-Eugene). The bill is intended as a bridge to help farmers in the first year of agricultural overtime until they can claim their 2023 tax credit in 2024. The bill advanced to the state Joint Ways and Means Committee in February.

"This loan program is not a huge help, but Democrats have a duty to pass it because they put the program into last year's legislation," OAN Executive Director Jeff Stone said. "A drafting error made the program impossible to implement. This corrects that."

House Bill 2469 and Senate Bill 457 both would create an Agricultural Worker Overtime Relief Program. Workers could apply for payments in lieu of overtime

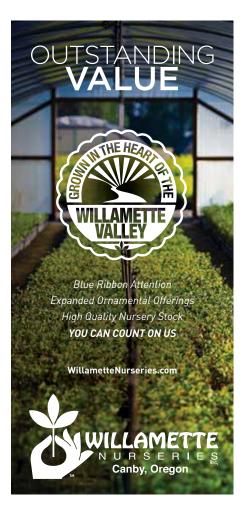
for hours worked between 40-48 in a given workweek. Employers would still be responsible for overtime above 48 hours, except during a 15-week peak labor period of their choosing, when the overtime threshold would be 55 hours. The tax credits in the 2022 bill would go away.

Rep. Shelly Boshart Davis (R-Albany) is sponsoring the house version, while the senate version is backed by Sen. Bill Hansell (R-Athena). The OAN supports both versions. Neither had gotten a hearing yet as of press time.

"This employer relief concept was proposed by the industry and Republicans in the 2022 negotiations but wasn't approved. It offers stronger support for farmers while delivering more dollars to the worker," Stone said.

"The chances are less that the employer will just cut hours to avoid







#### **Northwest News**

Field of pears. Taken in 2020, this photo shows a 13.5-acre field covered with escaped Callery pear trees, seeded by two original trees planted in 2010. For more information, log on to https://bygl.OSU.edu/Node/1476. PHOTO BY JOE BOGGS / THE OHIO STATE UNIVERSITY

paying overtime. We hope we can get the Legislature to see that this benefits everyone. We've always been willing to implement an ag overtime pay program that farmers could afford."

Senate Bill 448, introduced by Sen. Daniel Bonham (R-The Dalles), would repeal agricultural overtime entirely, and tax credits along with it. Its chances are very unlikely given that the Legislature that passed agricultural overtime has not changed hands. No hearing had been scheduled as of press time.

The OAN Advocacy Team will continue to monitor these bills and any others in the workplace regulation space that may be introduced.

If you have comments or wish to help with written or verbal testimony when the time comes, please email Jeff Stone at JStone@OAN.org.

#### OHIO'S **CALLERY PEAR TREE BAN TAKES EFFECT**

The Callery pear tree (Pyrus calleryana) is no longer legal to sell, grow or plant in Ohio as of 2023. In 2018, Ohio gave landscapers, growers and nurseries five

years' notice of the impending ban on the once-popular ornamental trees.

The ban was imposed because of the tree's invasive properties and likelihood to cause economic or environmental harm. There is no requirement for the removal of existing plants, but the Ohio Department

PLANTED VS. ESCAPED PEARS **ESCAPED TREES 2 PLANTED TREES** 

> of Natural Resources (ODNR) Division of Forestry encourages control and removal to benefit native forest ecosystems.

> "Callery pear often dominates young, regenerating forest areas and inhibits the growth and establishment of native plant species," Chief of the ODNR Division of





U.S. Secretary of Agriculture Tom Vilsack PHOTO COURTESY





Forestry Dan Balser said. "Halting the further sale and intentional propagation of Callery pear will help reduce the further introduction of this environmentally harmful tree species."

Callery pear is an ornamental species native to regions of Asia. It was introduced to North America in the early 1900s for agricultural use. It quickly became a favorite in landscaping for its adaptability, flowering, fall color and rounded crown. One of the more well-known cultivars is Bradford pear (P.c. 'Bradford').

"They're extremely hardy," University of Cincinnati (UC) biologist Theresa Culley said in a UC press release. "They can grow pretty much anywhere. They have abundant flowers that attract all kinds of pollinators so they end up with abundant fruit that birds disperse."

UC manages a southwest Ohio for-

est known as the Harris Benedict Nature Preserve, where Callery pear trees are sprouting in clearings.

"Seedlings of pear trees are now also showing up in the forest understory. They are very difficult to remove because they have a very long taproot," Culley said.

A similar ban will go into effect in South Carolina starting in 2024.

#### VILSACK TOUTS DISASTER AID IN NEXT FARM BILL

In a speech delivered at the annual meeting of the American Farm Bureau Federation, U.S. Secretary of Agriculture Tom Vilsack said he wants the next Farm Bill to include reforms for disaster relief and focus more on farmers who haven't done as well financially in recent years as larger producers.

Toward that end, Vilsack announced

a new round of assistance under the temporary Emergency Relief Program, which USDA created with \$10 billion in ad hoc disaster funding authorized last year for losses in 2020 and 2021. The latest round of payments will primarily benefit farmers who didn't have crop insurance or coverage under USDA's Non-insured Crop Disaster Assistance program.

Vilsack also announced a new USDA program to expand fertilizer production. In an attempt to make more fertilizer available or the 2023-24 crop year, USDA will soon begin accepting public comments on environmental and related aspects of 21 potentially viable projects to increase fertilizer production totaling up to \$88 million. These applicants have requested grant funding through the first round of the department's newly established Fertilizer Production Expansion Program. >>



#### **Northwest News**

Vanessa Finney, Executive Vice President of MANTS Baltimore (top right and bottom left), promoted the show from the floor with Joe Juricic of Landscape Hub (top left) and Jennifer Franciotti of WBAL-TV (below, right).

PHOTOS COURTESY OF MANTS

#### **MANTS SEES STRONGER TURNOUT AT 2023 SHOW**

After several years complicated by COVID, green industry professionals attended MANTS 2023 in droves. Nursery Management magazine reported strong attendance in Baltimore, Maryland, for the January 11-13 trade show, with 11,300 registered attendees. Additionally, 3,499 non-exhibiting companies were represented at the show; 85% of attendees identified themselves as either the final decision maker or those who influence their companies' purchasing decisions.

Monrovia president and CEO Jonathan Pedersen said that the company's recent research into consumer behavior bodes well for the industry. They found that the "COVID gardeners" who picked the hobby up during the pandemic are still actively gardening. They are spending less,





but they haven't become discouraged and haven't disappeared.

"It's a positive sign that we are going to be able to keep a lot of those newcomers into gardening and landscape projects," Pedersen said.

#### **Announcements**

#### OAN ADDS REPRESENTATIVES TO HRI BOARD

The Horticultural Research Institute (HRI) announced the addition of five new trustees to its board, including two current Oregon Association of Nurseries members — Shane Brockshus of **Bailey** Nurseries (St. Paul, Minnesota) and Mike Hiller of KCK Farms (Dayton, Oregon). Other new trustees include Jim Eason of Eason Horticultural Resources





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(Ft. Wright, Kentucky); Matt Sawyer of Bennett's Creek Nursery (Smithfield, Virginia); and Lloyd Traven of Peace Tree Farm (Kintersville, Pennsylvania).

They join fellow OAN members currently serving as trustees, Ben Rough of J. Frank Schmidt & Son Co. (Boring, Oregon) and Maria Zampini of UpShoot **LLC** (Fairport Harbor, Ohio).

HRI also announced new board leadership for 2023 including OAN member President-Elect Leigh Geschwill of F and B Farms and Nursery (Woodburn, Oregon). Ken McVicker of Woodburn Nursery & Azaleas (Woodburn, Oregon) concluded his time of service with HRI's trustees as immediate past president in 2022.

HRI was established by industry leaders on the premise that no one could better direct needed research to advance horticulture than the very people who work in it.

#### **GARDEN BUREAU NAMES 2023 PLANTS OF THE YEAR**

What do Celosia, Spirea, broccoli, orchids, Rudbeckia and Amaryllis have in common? They've all been named a "Plant of the Year" by the National Garden Bureau (NGB).

Each year, the NGB selects one annual, one perennial, one bulb crop, one edible, one houseplant and one shrub as their "Year of the" crops. Plants are

chosen because they are popular, easy-togrow, widely adaptable, genetically diverse and versatile.

Retailers looking to promote these plants can download free presentations of the "Year of the" plants here. Additionally, interesting and informative "Did You Know" signs and posters are available on each "2023 Year of the" plant page. You can find them all at www.NGB.org/Year-Of-Plants-2023/.



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#### **Northwest News**

# In Memoriam DON DIERINGER

Retired longtime rhododendron grower Donald Jerome Dieringer passed away. Services were held February 3, 2023 in Portland.



Mr. Dieringer was born in 1925. He attended Central Catholic High School and Franklin High School in Portland. He worked in the Kaiser shipyards, helping build victory ships before and during World War II, and served in the Merchant Marines.

After the war, Don married his neighbor and sweetheart Mary Angela Wager. They went on to be married for 72 years. Throughout his life, including within weeks of his passing, Don would sing his favorite love song, "I Only Have Eyes for You" to his beloved wife.

Don then went to work for his neighbor, Theodore "Van" VanVeen Sr., owner of Van Veen Nursery, becoming Ted's protégé and eventually the general manager of the nursery. In 1971, he then ventured out on his own with his two eldest sons to form Dieringer Nursery Company. There, he produced world-class rhododendrons for almost 25 years until retiring in 1995. The nursery continued on under the stewardship of his sons.

Like his mentor, Ted, Don played a role in the founding of the first Farwest Show in Portland.

Don enjoyed landscaping his yard and putting his mechanical knowledge to work around the nursery and at home. He enjoyed time outdoors, fishing for salmon and trout, and skiing with his family and friends. He was known as an engaging conversationalist, loving husband, and a devoted and active member of the Catholic faith.

Don was preceded in death by both parents and seven of his siblings. He is survived by his wife, Mary Angela; sisters Bernadette Richardson and Joyce Bourg (Ed); brother David; children Jeff, Greg, Linda Goering (Randy) and Tom (Adina); eight grandchildren; and four greatgrandchildren.

# Water, water everywhere?



Western nursery associations team up to tackle the rising tide of water woes

BY JON BELL

LENDA MOSTEK, executive director of the Colorado Nursery and Greenhouse Association, has a colorful way of sizing up one of the bigger issues facing the Centennial State's nursery industry.

"Whisky is for drinking, water is for fighting," she said, quoting a phrase often attributed to Mark Twain.

And if that's Mostek's shot, this chaser from Amy Graham, president and CEO of the Texas Nursery & Landscape Association (TNLA), is just as good: "Water is the new oil, that's for sure," she said.

Water has always been a key ingredient for the entire nursery industry, not just in Texas, but in Oregon, the Pacific Northwest and across the whole country. Without it, there would be no plants, no trees, no nurseries.

It's also long been an area of contention, with everyone from nursery growers and farmers to cities, tribes, environmental groups and neighborhoods doing whatever they can to get the water they need. And these days, what with drought, climate change and continued population growth — and the development that comes with it — water has become a bigger issue than it's ever been.

# In the Southwest,

water supplies have plummeted.

Lake Mead, the country's largest reservoir and the source of water for nearly 20 million people, is expected to drop to a record low this year — after an already low year that uncovered four sets of human remains in locations that were underwater for decades.

The Colorado River gets siphoned off so much that it rarely makes it all the way to the Pacific Ocean anymore.

And in Oregon, water rights, irrigation needs and conservation efforts tangle up in a way that makes any forward progress on effective water policy nearly impossible.

All of this — and more — has an impact on nurseries across the West. And even though plenty of water issues are local, the bigger picture affects the entire industry. Which is why the Oregon Association of Nurseries is spearheading a collaboration with other nursery associations across the West to work together to ensure that the industry is united in its efforts to keep nurseries well-watered long into the future.

It's an effort that Mostek, in another colorful assessment, sizes up well.

"We've got to hang together or surely we'll hang apart," she said.

#### Waterlogged

Compared to other states, Oregon has fared fairly well in the water world. Certainly, some areas of the state are more arid, but the storied Willamette Valley, home to the bulk of Oregon's nurseries, is hardly ever dry thanks to the region's reliable rainfalls. The bigger issues in the Beaver State are usually water rights and passing good water policy.

"Water policy is hard to pass, even more so than land use policy," said Jeff Stone, OAN's executive director.

Stone has been involved in multiple efforts over the years to push for bet-

ter water policy. One, aimed at allowing more water from the Columbia River to be used for agriculture, "failed gloriously," he said. Another came in the form of Senate Bill 839, which brought together a diverse group of interests — cities, moderate environmental groups, irrigators and others — and led to the creation of a state water investment fund for water development projects like storage, expanded infrastructure and more. The legislation passed and was widely celebrated, but Stone said its potential was subsequently watered down through the rule-making process and as the various parties involved returned to their turf war strongholds.

"It really was a celebration of how we could all work together," Stone said, "but it never really delivered. It needs to be redone."

#### Water across the West

In Texas, Graham said the nursery industry, despite being on the top five list for agricultural sales, fights an uphill battle for water with the state's other heavy hitters: cattle and cotton.

"Beef is king in Texas," she said.
But there are urban water concerns at play as well, in large part because TNLA represents not only nurseries and growers, but landscape contractors as well.

And in Texas, some communities have imposed steep watering restrictions or even written them into planning and development policy. Such restrictions can often limit the establishment and long-term health of landscapes.

"Putting in new neighborhoods is the bread and butter for our growers and landscape contractors. And the fact of the matter is, if we don't have someone to sell the nursery crops to, then nobody's buying plants and flowers," Graham said. "Housing and construction, that's where you see an awful lot of trees and new plants being put in. When you see water



restrictions, that starts to taper off and so do our sales."

Mostek said Colorado nurseries have, for the most part, been able to stay afloat when it comes to water. Some growers who had junior water rights lost crops and plants over the past couple years of the COVID-fueled nursery boom because they couldn't water as long into the season as they needed. Unlike in Texas, though, there haven't been heavy residential watering restrictions — yet.

"We are always on the alert for that," Mostek said. She also said that it would be nice if Colorado got to use more of the water from the Colorado River, but most of the water rights for it are downstream in California, Arizona and New Mexico. Changing that would be a heavy lift because of decades-old compacts in place. She also said more could be done in the realm of conservation, especially when it comes to use-it-or-lose-it water rights.

"The way the rules are, there's no motivation to conserve," she said. "I think we could see some savings there."

In Arizona, dealing with low water and conservation has long been at the



Containers at Civano Nursery, the largest plant nursery in Tucson, Arizona, with a garden center and 70 acres of farm land. PHOTO COURTESY OF CIVANO NURSERY

forefront for the state's comparatively small but thriving nursery industry.

"For us, low water use is something we've been dealing with for years," said Cheryl Koury, executive director of the Arizona Nursery Association. "Arizona's had to be at the forefront of managing water supplies."

Koury said earlier battles, in the 1980s and 1990s, revolved around removing turf from landscapes altogether as a way to conserve water. But that wasn't an answer to the water question when it comes to plants, which still need water to thrive even if they're low-water varieties.

Koury also said that growers in Arizona have learned to be incredibly efficient with their water and have made great strides in conservation, water reuse and water recycling.

"I think the main message for our growers is to know where their water supply is coming from and how many years they'll have it for," she said. "There is going to be

competition for it, from builders, agriculture, city planners. There are a lot of Native American water rights here too. It's tough."

#### **United front**

Tough indeed for nurseries all over the West. And that realization is what's behind the effort to get associations to band together and assemble a united front. With Oregon effectively leading the way, nursery associations from Texas, Colorado, Idaho, Arizona and Washington have banded together in a sort of western water coalition to start working on solutions to the water issues that pose concerns now and into the future. The group first met this past October in Ft. Worth, Texas, to lay the initial groundwork.

Stone said the idea is to tackle issues that impact all nurseries as a collective and to rope in a range of different interests and political leanings.

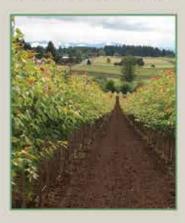
"A water problem in Arizona is just as pressing as one in Washington,"







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#### WATER, WATER EVERYWHERE?

he said. "And why Texas? I recruited Texas because I want to have Ted Cruz and Ron Wyden lobbying together for us."

A similar unified approach paid off handsomely with the passage of President Biden's \$1 trillion bipartisan Infrastructure Investment and Jobs Act in 2021. Dan Keppen, executive director of the Family Farm Alliance, an Arizona-based non-profit advocacy organization, said he and others worked for a few years to assemble a broad coalition of rural and urban interests and a list of infrastructure needs for when an infrastructure bill came due.

The coalition wanted to make it clear that things like water storage, water recycling, dam safety and other areas are critical infrastructure, just like roads and rails.

When the bill passed, it included \$8.3 billion for western water projects. Keppen said the vastness of the coalition that

signed onto a letter of support was key.

"When they saw all those organizations, including the Oregon Association of Nurseries, we knew that we were going to get some traction," he said. "And we did."

It's that kind of group effort that Stone and the other western nursery associations hope will make a difference moving forward.

A starting point is developing some specific messaging that all the associations can use to educate consumers on not only wise water use, but how the nursery industry itself is a champion of conservation and efficient user of water. Stone said it's also about coming up with strategic plans and finding collective ways to secure state and federal dollars that can benefit the bigger picture.

"If you get the right perspectives in the room, you can think creatively," he said, "and it's easier doing it this way than just having one state do it. I hope that, with time, we'll be able to create the momentum to get things moving. It's the people who matter, and in the West, the right people are present."

The long-term vision, Stone continued, is to ensure that nurseries all over the West can have a bright, saturated future.

"The ability to grow and ship your plants are two things that we want to give every nursery operator," he said. "It's hard to make a go at this, and water is such a big factor. We are just trying to take one of the big question marks and make it not as big for our nurseries."

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





# Ponds with new purpose

Capturing more "free" water, containing runoff and reusing costly fertilizer are benefits of keeping nursery ponds in tip-top shape

#### BY PETER SZYMCZAK

Willow trees are planted around the pond at Woodburn Nursery & Azaleas in Woodburn, Oregon. The trees provide erosion control for the pond and supply grafting stock for new trees.

PHOTO BY PETER SZYMCZAK

IKE ALL IRRIGATION SYSTEMS, nursery ponds require maintenance for continued smooth operation. In addition to routine inspection, testing and maintenance of pipelines, pumping plant components and other mechanical components, most ponds will require periodic cleaning, regrading and removal of sediment.

Making sure that nursery ponds are proactively maintained and operating at peak efficiency not only prevents negative water quality impacts, it also saves money in the form of water, fertilizer and environmental costs. Oregon has established laws to protect water quality, including laws that address agricultural activities that can negatively impact water quality.

"With droughts occurring with more frequency, having a backup supply of water is a big benefit to keeping a pond," said Rod Park, owner of **Park's Nursery** for over 40 years. "I only have 8,000 square feet of containers for growing liners, but if I lost that because I

couldn't irrigate, I'd lose a whole growing cycle, maybe more."

While the benefits of having a pond are clear, maintaining ponds is a murkier matter.

"Nobody's written a manual on how to maintain these ponds because a) no two ponds are built the same, and b) we're in a bit of a legislative regulatory gray area," said Chris Poulsen, an environmental engineer with

#### Farallon Consulting.

Poulsen rifled off a list of maintenance questions every nursery owner should consider: "Is the pond adequately sized and does it function? Is there algae or an invasive species problem? Does the pond contain contaminants, whether that's silt or pesticides or herbicides? Is there another issue that would prohibit the grower from reusing the water or discharging it?"

#### Keeping ponds clean

If one thing is certain, pools of algae are not what nursery ponds were intended



#### PONDS WITH NEW PURPOSE

to be. Neither were ponds meant to harbor built-up layers of fertilizer-laden sediment, the dredging and dispersal of which requires additional labor, time and money. Yet, those are issues that can occur when a pond isn't maintained properly.

They're issues Tom Fessler has managed to avoid at Woodburn Nursery & Azaleas in Woodburn, Oregon. Through various ways, starting with proper planning, through good stewardship and by using the latest technology, Fessler has figured out how to make ponds work for him and his operation, instead of the other way around.

"If you install [a pond] right, you don't have to dredge the bottom or anything," Fessler said. "The newer ones we line with rubber, and we have another claylined pond that collects runoff. We utilize shrubbery and a French drain to minimize silt, and we've also started using radio wave frequencies to keep the ponds clean."

A nurseryman since 1968, Fessler makes nursery pond maintenance sound simple, but it's water wisdom he's gleaned over decades of constantly innovating, with radio wave frequencies being the latest technology he's tapped into.

Adding chlorine to a pond is a common way to control algae blooms, but Fessler thinks he's found a better way that doesn't require adding more chemicals into the mix.

"We've started using radio wave frequencies," Fessler said. "The cost was reasonable, and it's proven to be a better option over chlorine. It keeps what fertilizer is there and helps with the disease and algae."

Fessler is referring to the Agrimaxx ESP (Energy System Plus), an electronic device that can allegedly "restructure" water: "Water that passes through the controlled electrostatic field in the unit is treated by a patented wave which creates improved taste, reduced odor, scale reduction and reduction of other significant problems in water sources," the manufacturer claims on its website (www.Agri-Maxx.com).

"We guarantee that Agrimaxx will save a minimum of 20% water and 20% fertilizer, and 20% increased yield," said Mike Crist, president/CEO of Agrimaxx.

The Agrimaxx installs into a pond

### **Point vs. Nonpoint Source**

A point source, as its name implies, can be easily identified; for instance, a pipe from an industrial or wastewater treatment plant. The Environmental Protection Agency (EPA) enforces regulations that have largely reduced the impact of point source pollution.

Unlike point sources, nonpoint sources include a wide range of land uses forestry, urban and suburban communities, agricultural cropland and animal

feedlots. Water runoff containing fertilizers, pesticides, animal manure and soil erosion are all examples of agricultural nonpoint sources of pollution.

Visit www.EPA.gov/NPS/Basic-Information-About-Nonpoint-Source-NPS-Pollution for more information about nonpoint source pollution.

either via a frequency-transmitting box that floats on the surface of a pond or, less frequently, through electronic leads drilled into a pelican box residing within the pumphouse, where silt and other contaminants can build up over many seasons of use, clogging and corroding discharge pipes.

"We've found that the restructured water can actually descale the pumpback system," Crist said.

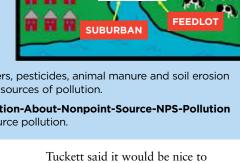
#### **Engineering capacity**

Using radio wave frequencies to keep ponds and pumpback systems clean has also caught the attention of Ronald Tuckett, plant protection manager, at Monrovia in Dayton, Oregon, although more so as a curiosity than due to need. Another veteran nurseryman, Tuckett has overseen all irrigation systems, as well as pest control and landscaping, for nearly 30 years at the nursery. Fortunately for him, Monrovia's ponds were well engineered and haven't required more than occasional maintenance.

"Last year, we drained one of our ponds to work on a recycling pump that had gone out, but then after it was fixed, the pond filled right back up with rainwater," Tuckett said.

Tuckett oversees seven ponds of various sizes at the nursery. All are man-made. One is an on-stream reservoir. The largest pond contains about 45-acre feet of water, with about 150-acre feet total.

"We collect rainwater during the winter as much as we can," Tuckett said. "Last year, with the late rainy season up until May, we didn't have to start pumping water from the river until June. It's always good when we don't have to pay for water."



NONPOINT

CROPLAND

expand the water storage capacity of the ponds and thereby capture more "free" water, but space is an issue: "We just don't have room to expand, and it's expensive," Tuckett said.

It's cost-prohibitive to enlarge an existing pond for several reasons, foremost among them being the permitting process and navigating the regulations that govern bodies of water in the United States.

"Nurseries that are interested in upgrading a pond would first need to know whether it's listed as a Water of U.S., which depends on how [the pond] drains and how it flows," said Poulsen, who has engineered ponds for wineries, aggregate producers, manufacturing facilities and livestock operations.

"So, before you do anything, you have to get an approval from the Department of State Lands and Habitats. Then you'll certainly be testing the quality of the sediment in the pond. If the sediment is contaminated, you'll have to dispose it ....

"It's quite a quagmire," Poulsen said.

#### Adapting to change

Maintaining a pond to save water, reuse fertilizer and contain runoff makes perfect sense, but the practice is not that simple.

"The issue is that nursery ponds, for the most part, were created in a previous regulatory climate," Poulsen explained. "Subsequent legislation, and a lack of clarity at the regulatory level as to who administers the provisions of that legislation, may nullify, or at least complicate, the nurseries' ability to deal with their ponds as originally intended."

Legislation includes the Federal Water

Pollution Control Act, originally passed in 1972 and amended with the Clean Water Act of 1977 and amended again by the Water Quality Act of 1987.

On the state level, growers should also be aware of Senate Bill 1010, the landmark legislation that was passed in 1993 and established the Agricultural Water Quality Program. The program created 38 agricultural water quality management areas in Oregon, along with specific agricultural water quality management plans and rules designed to reduce nonpoint source pollution (see sidebar, "Point vs. Nonpoint Source").

Senate Bill 1010 gave Oregon landowners the flexibility to address specific problems on their property. Sedimentation and retention ponds became common ways whereby growers could collect water for reuse while mitigating fertilizercontaminated water runoff. If runoff does occur and results in potential pollution problems, ODA works with the landowner to resolve any violation(s).

"All our circumstances are different that is one of the main points we made to DEQ," said Rod Park, one of the architects of Senate Bill 1010. Park served on OAN's Executive Committee alongside Clayton Hannon, then the executive director of the OAN; Park and Hannon partnered with Bruce Andrews, then-head of Oregon's Department of Agriculture.

"We've had 30 years now of the system in place," Park said. "Capturing excess rainwater is something we didn't anticipate when the bill was created, but it's turned into a really beneficial byproduct - 'free' water," Park said.

Free comes with a price, however, and the cost of maintaining a pond can be attributed to changes in climate as well as regulations.

"There are now high-intensity summer rain events that occur and that cause problems for nurseries in the summer as well as winter," said Kevin Fenn, Water Quality Program compliance leader with the Oregon Department of Agriculture. "Nurseries should have management practices in place that even when those big rain events occur, they have the





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#### **PONDS WITH NEW PURPOSE**

capacity to handle them."

Fenn emphasized that it is illegal to discharge contaminated wastewaters into designated Waters of the State. To mitigate runoff when large storm events do occur, nursery owners should plant vegetation along ponds and streams for bank stability and to filter surface runoff.

"Nurseries should have cover crops in bare root nursery areas, on steep ground, and areas that are not in production anything that can be done to limit the nonpoint source runoff," Fenn said.

Fenn also cautioned nurseries from using mapped streams as part of their tailwater recovery systems. "That is not in compliance with rules," Fenn said.

Another maintenance tip Fenn recommended is emptying a pond before the stormwater season. "That way, when the runoff does connect to surface waters, it

Restructured water. Radio wave frequencies are transmitted from a box that floats on the surface of a pond. The waves purportedly "restructure" the pond water, keeping it algaefree and ready for reuse.

PHOTO COURTESY OF AGRIMAXX



will have the potential to have less contamination in it. ... The best sites have valves, so during the summer they can collect all their water through their tile lines and then pump the water back to their reuse ponds. Then during the winter, they can open those valves and let it go, because they can't keep that stormwater on site."

When in doubt, test the water. (For a

list of analytical laboratories in Oregon, log on to https://Catalog.Extension.

OregonState.edu/em8677/html).

"It's always a good idea to sample your water and see if those nutrient levels are low," Fenn said. "If not, run [the pond water] through some type of a wetland feature or create a field that you can apply that water to."

Nursery owners who monitor water inputs and outputs will have a much better time maintaining their pond, and they'll have less interaction with the ODA.

"Whether weekly or monthly or depending on the situation, making sure that every grower has some sort of testing schedule that they're adhering to is crucial," Fenn said.

Peter Szymczak, OAN publications manager, is managing editor and art director of Digger magazine.







# High times for low-water plants

Retail garden centers increasingly turn to drought-tolerant varieties that beat the heat

BY TRACY ILENE MILLER

Achillea 'Moonshine' (upper left) adapts well to most levels of sun or shade and moisture. something that not all drought-tolerant plants will do.

PHOTO COURTESY OF AL'S GARDEN & HOME

Agastache 'Electric Punch' (upper right) flowers continually from May through October and attracts pollinators.

PHOTO COURTESY OF XERA PLANTS

HE SUMMER OF 2015 was a turning point in the Northwest, which suffered the longest heat wave in 75 years. Portland had more days above 90 degrees Fahrenheit than any other year in recorded history up to that time. That year marked a noticeable shift in nursery customers seeking low-water plants to include in their yards.

But 2015 had nothing on 2021, the year of the heat dome, with some of the most extreme weather events globally and record-breaking high temperatures in the Pacific Northwest and into northern California, western Nevada and British Columbia, which broke a temperature record hotter than Texas's.

That year marked a sharp upturn of customers specifically looking to not only include plants with modest water needs, but to actually transition or replace lawns and plants with water-conserving landscapes, said Greg Shepherd of Xera Plants, a Portland, Oregon-based nursery that specializes in climate-adapted plants.

The shift is not only regional; it is being

felt across the industry and across the country. Nothing marks that more than online mainstream reporting. From Southern Living to the Los Angeles Times to Real Simple magazine, the attention of the mass market is sturdily fixed on low-water plants, sometimes referred to as drought-tolerant or climate-adapted.

"As customers are increasingly aware of water usage and water limitations, we are definitely seeing a sharp increase in demand for drought-tolerant plants," said Darren Morgan at Shonnard's Nursery, Florist and Landscape (Corvallis, Oregon).

As well, the plant breeding industry has its full attention on producing more plants that have better drought tolerance and are more heat tolerant and resistant, said Judy Alleruzzo, house plant and perennial buyer at Al's Garden & Home (Portland, Oregon) and co-host of the Garden Time podcast.

In part one of this two-part story, we'll discuss some of the most popular lowwater perennials and ornamental grasses

#### **LOW-WATER PLANTS**

making their mark in the market today. In part two, coming in the June issue, we'll talk about low-water shrubs.

#### **Perennials**

Like many of the plants in the lowwater plant category, *Achillea* (yarrow) species and hybrids fit into the trend of home gardeners investing in landscapes that support pollinators and wildlife. These plants, as a group, sell well for their versatility.

"They bloom for very long periods of time through the summer and are attractive to many different pollinators," Morgan said. "Our local native *Achillea millefolium* is a sterling example, with white flowers — though yellow and pinkish plants crop up in the wild — borne for many weeks in the middle of summer in anything except the darkest or the wettest environments."

Achillea adapts well to most levels of

sun or shade and moisture, something that not all the plants in the drought-tolerant category will do, he explained. They're easy to care for and deer resistant, and breeders have introduced a selection of short to tall varieties that bloom more often, Alleruzzo said.

"Once people discover *Achillea*, they become true believers," she said. The long-standing, larger variety 'Moonshine' (zones 3–9, 1–2 feet tall × 2 feet wide) has "beautiful, sulfur yellow blooms, stunning."

For smaller gardens, the newer dwarf 'Little Moonshine', at only 12–14 inches, is turning into a popular addition in container gardens, as is the ssimilarly sized New Vintage<sup>TM</sup> series, which comes in several eye-catching colors.

Agastache (hyssop) makes up some of Xera Plants' best-selling perennials, Shepherd said, and the nursery's introduc-

tion *Agastache* 'Electric Punch' is a standout with 3-foot stems producing vibrant orange flowers that fade to pink as they age. Flowers continually bloom from May through October and are attractive to pollinators. It's quick to establish, easy to grow and attracts hummingbirds, which is always a selling point, Shepherd said.

Calamintha needs a little more watering than other low-water plants, Shepherd said, but it's a reliable seller that is a good filler, which is what often captures customers selecting this plant. It does not spread by underground runners, produces white clouds of flowers for a long bloom season and mixes well in borders. Calamintha nepeta 'Montrose White' (zone 4, 2 feet × 2 feet) is a tough, tidy, low perennial that attracts many pollinators.

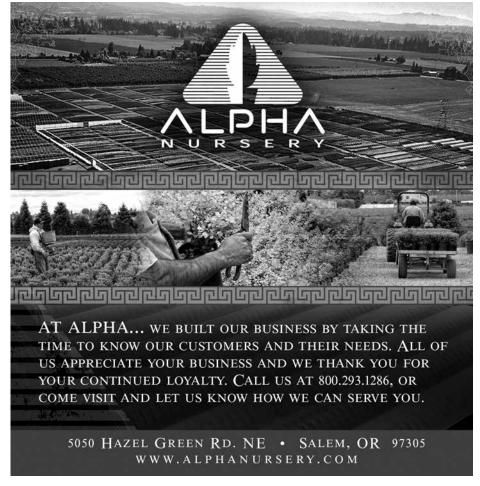
Ceanothus (California lilac) is the largest genus of native shrubs. It is the hardiest of the evergreen and blue-flowered species, Morgan said, with excellent varieties such as the fast grower 'Victoria' (zone 8, 10 feet × 10 feet) and the denser, compacter 'Skylark' (zone 7, 1–2 feet × 2–3 feet), with yellow variegated leaves.

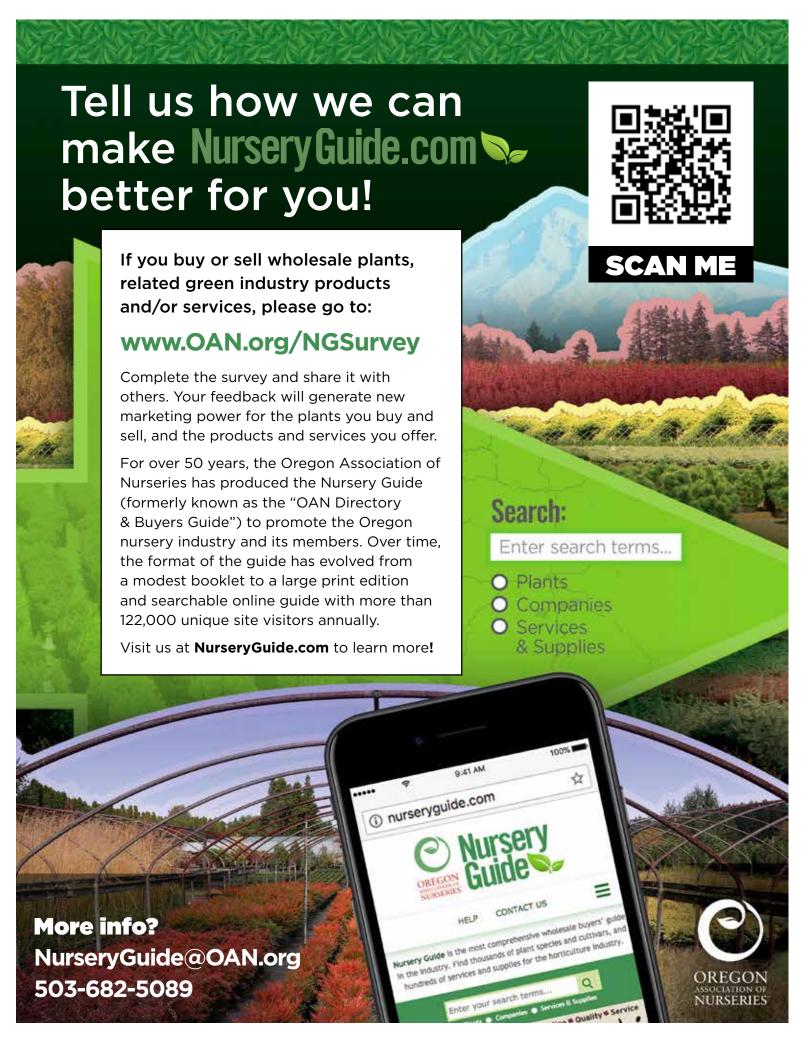
"All of these California lilacs are evergreen, and they bloom heavily in the spring and often again more lightly in the fall," he said. "The blue flowers are lightly scented, and very attractive to bees of all sorts." Shonnard's also sells a lot of *C. impressus*, which Morgan said is not as hardy in Oregon.

Clarkia is a long-blooming annual that reseeds year after year, Shepherd said, to yield a flowering patch. "They germinate with the fall rains, overwinter and then bloom. If you are okay with self-seeding, that and meadowfoam (Limnanthes alba) perpetuate year after year, and are supportive of native insects as well."

Clarkia amoena ssp. lindleyi 'Farewell to Spring' (zone 6, 2 feet tall), like other West Coast native annuals, thrives without irrigation, and reseeds and germinates on its own.

Echinacea (coneflower) is the most popular low-water flowering plant Shonnard's sells, even as Morgan said there are other perennials with better drought tolerance. There is great





#### **LOW-WATER PLANTS**

Top row, left-right: Spanish Lavender (Lavandula stoechas); Ribes 'King Edward VII' (Red Currant) PHOTOS COURTESY OF AL'S GARDEN & HOME

Bottom row, left-right: Gaillardia Photo by Darren Morgan; Grevillea 'Neil Bell' Photo Courtesy of Xera Plants

variation in types, and they make up a huge volume of sales in low-water plants.

Epilobium (Zauschneria) septentrionalis 'Select Mattole' (California fuchsia, zone 7, 6 inches tall × 2 feet wide), sometimes called hummingbird fuchsia, is a West Coast native perennial that Xera Plants can barely keep on the shelf because of its name recognition. A low grower, it has a long bloom season of vibrant orange trumpet-like flowers on silver foliage needing minimal water.

Gaillardia (blanketflower) is "more consistent in overall performance than the similar looking *Echinacea*," Morgan said, but equals it in display and pollinator suitability, and will outperform it. *Gaillardia* flowers in vibrant yellow, orange and red, and will bloom spring to summer or all summer long. The native *Gaillardia aristate* (zone 3, 2–3 feet tall) is one of the larger blanketflowers, with boldly bicolored yellow and orange petals.

Morgan counts *Hesperaloe parviflora* (red yucca, zone 5) as an up-and-coming plant in the low-water plant category, that he highly recommends. The durable evergreen with yucca-like lower foliage bears 5–6-foot spikes of orange flowers in the summer. "Except for water-logged soil, it is a solid performer" and attracts hummingbirds.

Lavandula is an "iconic" plant, Alleruzzo said, known by many gardeners who rush to any sale of the plant even more so than they do to general perennial sales. Once established, it is drought tolerant, a great pollinator, deer resistant and useful dry or fresh. It's low maintenance, takes full sun and is forgiving. For customers with limited space and looking for continual blooms, Alleruzzo recommends Lavandula stoechas (Spanish or French lavender) over Lavandula angustifolia (English lavender).

Perovskia atriplicifolia (Russian sage, zones 4–9) has the common trait with yarrow and lavender of being deer resistant, attractive to bees and low care, and showing beautiful gray-green foliage. Like lavender, it is also sometimes listed as a subshrub for its size (usually 3–4 feet tall and wide) and woodiness. Alleruzzo said



"As customers are increasingly aware of water usage and water limitations, we are definitely seeing a sharp increase in demand for drought-tolerant plants."

#### Darren Morgan

Shonnard's Nursery, Florist and Landscape

newer breeding is bringing on compact growers that will appeal to customers, like *P. atriplicifolia* 'Little Spire' and *P. atriplicifolia* 'Bluesette', which has the same long blooming period and other attributes, but half the size of the species.

An older classic, *Rudbeckia fulgida* 'Goldsturm' (black-eyed Susan, zone 9, 2 feet at maturity) "is still a top perennial, with masses of black-centered yellow flowers produced over a very long summer bloom season, whether irrigated or not," Morgan said. It grows at a moderate pace to fill as much space as you allow it to

take, he said. "'Goldsturm' makes up a lot of our sales." It's reliable, with a bold presence in tough conditions.

Stonecrop had a recent nomenclature shift from *Sedum* to *Hylotelephium*, but everyone is still calling it *Sedum*, Alleruzzo said. Stonecrop comes in many forms, from creepers to uprights; they are easy for beginners, attract pollinators and take almost no care.

Old-fashioned 'Autumn Joy' (*Hylotelephium* 'Herbstfreude', zones 3–9, 1–2 feet tall and wide) still outsells newer varieties, Alleruzzo said, because of its great performance in low-fertility and lowwater situations, bursting with flattened heads of rosy-colored star-like flowers that turn coppery in fall.

A lower-growing option is *Sedum spurium* 'Dragon's Blood' (4–6 inches tall × 24 inches wide), which starts burgundy in summertime, greens up as it matures, turns a darker burgundy in the fall and keeps its foliage during the winter.

Cistus (rockroses) as a group are excellent sellers, Morgan said. "The old classic Cistus × 'Purpureus' (purple rockrose, zones 8–11, 4 feet tall × 4–6 feet wide) is one of the showier and larger types," and as an evergreen, satisfies the request by gardeners, especially those who move from warmer clients, for year-round interest.

Another bestseller is *Cistus* × *skanbergii* (dwarf pink rockrose, zones 8–10, 2–3 feet high × 4–5 feet wide), a low-spreading variety needing little care. Morgan's favorite, the variegated *Cistus* × *hybridus* 'Mickie' (zones 7–10, 18 inches high × 36 inches wide) "is a very low-spreading rockrose with white flowers [from May to July" with stunningly bright yellow variegated leaves. It sells out as soon as I have it."

#### **Grasses and sedges**

Pennisetum spatheolatum (veldt grass, to zone 7, 20 inches tall × 3–4 feet wide) is a semi-evergreen to evergreen grass native to South Africa that does well without water and blooms all summer on 3–4-foot stems. The mound is









#### **LOW-WATER PLANTS**

Iris × pacifica 'Tawny Meadow' needs regular watering through the first summer to establish, then none in subsequent years. It's also adaptable to many types of soil, including clay soils.

PHOTO COURTESY OF XERA PLANTS

graceful, with movement from the flowering heads, Shepherd said, and it's an easymaintenance grass that only needs to be cut back once in spring.

As a solidly drought-tolerant grass, Morgan recommends the consistency of the compact *P. alopecuroides* 'Hameln' (fountain grass, zones 5–9, 2–3 feet tall and wide). Dense clumps shoot out arches of bottlebrush blooms that change colors in fall, when the leaves turn from yellow to bronze.

Sesleria autumnalis 'Campo de Azul' (to zone 5, 1 feet tall × 2 feet wide) is also one of Xera's best-selling grasses, a durable, moderate-sized grass that fits with other low-water perennials and shrubs, Shepherd said. An evergreen, it forms expanding clumps of stiff, upright foliage and gray/black flowers frosted with light yellow pollen.

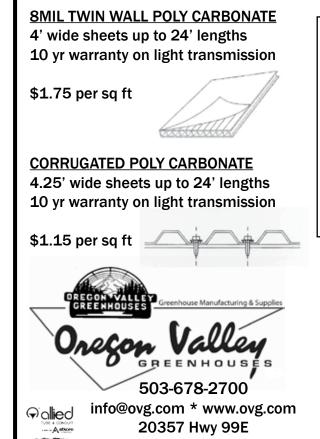


#### The new, low-water normal

With the varied and expanding selection of low-water plants, the expectation is that incorporating them into the garden will become the new normal, Alleruzzo said. "I just think it is a great opportunity for all of us in the garden industry to have a new palette, have new plants, and educate our customers."

"More customers are transitioning away from lawns, to diverse gardens that don't need a lot of resources," Shepherd said. "They will want those resilient landscapes going forward that make it through summer drought but also through ice storms."

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



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# Finding your flow

Today's technology can automate every aspect of irrigation, saving labor and water, but it comes with a price

BY MITCH LIES

Drip filter stations, such as pictured above, are becoming increasingly popular in pot-in-pot systems.

PHOTO BY JOSHUA KRAEMER

TTH IRRIGATION CONTROLS at your fingertips and data on soil moisture levels and plant stress a click away, today's nursery producer has more control over plant health than at any time in history. And with labor and water at a premium, adopting technology that can save resources while optimizing plant health gets more important each day.

According to Paul McFadden, an agricultural irrigation business consultant out of Escondido, Calif., the nursery and greenhouse industry is generally ahead of most agricultural industries when it comes to adopting advanced irrigation technology. That's particularly true when it comes to indoor production, he added.

"Nursery growers seem to be taking the leadership in that area," McFadden said. "And I think one reason for that is because it is a controlled environment, and it is a longer-term crop in some cases. With the regulation of heat and cooling and light and humidity, you can control

that a lot easier inside than outside."

That said, acquiring a comprehensive understanding of how to utilize available technology can be a Herculean task, McFadden said. Starting small, he said, may be the best option.

"Stick to the basics, know your system, maintain your system," he said. "Then, if you have a need for soil moisture sensing or automation and you have the aptitude, then go slowly and learn about the product and the company behind it."

#### Remote control

With advanced systems, such as those available through Netafim and Rivulis, farmers can not only access information on plant stress and soil moisture, but can also automate a system to ensure plants get water when needed.

Adopting automation means that pumps turn on and valves open at predetermined soil moisture levels, which saves work and water. However, it is an option that many

#### FINDING YOUR FLOW

growers aren't ready to embrace, according to Scott Brault of Ernst Irrigation in St. Paul, Oregon.

"Growers still want that control," Brault said. "They want to be able to start and stop that machine. But it is definitely going in that direction, where you plant it and then walk away from it."

One piece of irrigation technology that growers are adopting on a widespread basis, according to Joshua Kraemer of Orchard & Vineyard Supply (OVS) in McMinnville, Oregon, is monitoring soil

moisture with soil sensors. And it is providing significant benefits, he said.

"A lot of people who are running pot-in-pot nurseries are implementing soil sensors, and it is really saving a lot of water and growing phenomenal plants," Kraemer said. "It is amazing what nurseries can do now with soil sensors and digital ag systems.

"In the old days, you would have your manual soil sensor, flow meter, and then pay somebody to go out to the field to collect the data."

The piecemeal approach that has permeated the advent of irrigation technology, in fact, has been one of the biggest impediments to widespread adoption of the technology, according to McFadden.

"This has been going on for 20, 30 years," McFadden said. "Somebody will come up with a better soil moisture monitor or a weather station or something like that where they will bring it to market, try and get that product up and running, and then they get it to a point where they can't scale it any further. And they have



to sell it through distributors, so they go to irrigation companies and the irrigation companies are designers and installers and sometimes maintainers of systems. But they typically don't have a service model as part of their offering, and unless you have a dedicated person to bring in new technology, it is pretty hard to support it."

#### **Biggest mistake**

Even today, according to McFadden, growers aren't getting the full benefit of irrigation technology, often because they aren't getting the most out of their equipment.

"I think universally, the number one issue that I've seen in my career is distribution uniformity and system maintenance," McFadden said. "And that is backed by 20 years of data by the folks at the Irrigation Training Research Center in Cal Poly and by the Center for Irrigation Technology at Fresno State."

Research consistently has shown that irrigation systems are not operating at full capacity, McFadden said. "Systems that are designed to operate at a 0.9 or a 0.92 distribution uniformity, after a year or two typically are down in the 0.8 range," he said.

McFadden added that research from Fresno State shows a lot of permanent crop irrigation systems are operating at 0.5 or 0.6 distribution uniformity (DU), which is a measurement of the difference between water and nutrients coming out of the first emitter and the last emitter in a system.

"So, there is a difference there where folks aren't flushing lines, aren't cleaning emitters and as a result, to compensate for that, they have to overirrigate by that 10% or whatever that delta is, so that all the plants in the field are getting equal amounts of water and nutrients. Hence the additional cost, and so forth," McFadden said.

"So, say if you are operating at 30% less efficiency, in order to overcompensate, you have to irrigate 30% more to push that water to the bottom of a field or the last emitter so that last plant gets adequate water and nutrition. But conversely, on the front end or the end where it is operating at optimum, you are getting 30% more

than you need, so those plants are also suffering," he said.

McFadden added that he believes the single most important piece of equipment in an irrigation system is a flow meter. "You can't run a car very long without a fuel gauge," he said. "You may have a well-running car, but if you can't monitor it, you can't manage it.

"Technology is glitzy and everybody thinks it is going to solve all your problems," McFadden said. "But it is like cars: If your car is not running well and you need a tune-up, all the technology you strap on that thing isn't going to make it any better."

Steve McCoon of Nelson Irrigation in Walla Walla, Washington, said keeping things simple and reliable sometimes is the best approach in getting the most out of today's irrigation technology.

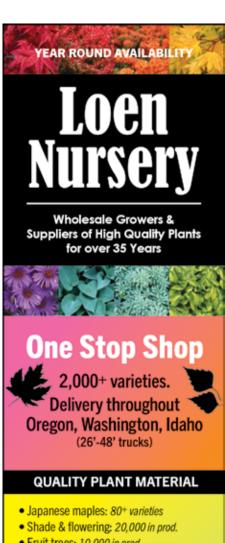
"For us, it is about reliably turning things on and off wirelessly," McCoon said. "The system we sell, the TWIG wireless control system, is an automated system. There is a place where you can monitor a flow meter, so you know there is water flowing through pipe. You can monitor a pressure sensor, so it will be able to tell you what the pressure and flow rate is to the pipeline, and you can hook up a wind gauge and align it to shut down if it is too windy to run your sprinklers.

"You can operate up to 100 TWIG decoders on a single controller with the TWIG apps. They are easy to program and there are no subscriptions fees. But that is about as fancy as it gets," he said. "We wanted it to be very simple and very reliable."

#### Benefits vs. costs

In the end, the decision to invest in irrigation technology comes down to analyzing the benefits versus the costs, according to sources. And today, with ag overtime coming onboard in Oregon, and increased costs and demands associated with water use, investing in irrigation technology is becoming more and more reasonable.

"The growers I deal with are definitely just trying to cut work hours," Brault said. "They have to deal with the overtime laws now. They are looking to



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shave off anywhere they can. And this technology helps them to do that."

"I think it is worth investing in technology — with some conditions," McFadden said. "The farmer has to be willing to invest in the time to learn it and teach their people how to use it. And the company that is building this equipment has to be able to support it. And then it has to perform because the farmer is going to have to pay for it."

In many cases, upfront costs are substantial, Kraemer said. But, in the right circumstances, return on investment can be as little as one year.

"When you have an irrigation system where everything is automated, including filtration, solenoid valves, pumps, fertilizer injection, line cleaning, soil sensors and a platform that can be controlled remotely with a mobile device, you have all the management tools you need to make snap decisions that are accurate and at your fingertips," Kraemer said.

"I have seen nurseries implement digital ag modern irrigation practices and have a return on investment of around one to two years," Kraemer said. "And that is on the labor savings alone. That isn't including the improved yield and grade and loss of material, which is often hard to calculate."

The costs for these types of comprehensive systems can be out of range for smaller nurseries, Kraemer said. But, even then, he said, those interested should check with their local Natural Resources Conservation Service to see if grants are available to implement systems.

The biggest misstep Brault sees when it comes to irrigation technology is growers not giving it a chance.

"I'd say the biggest mistake is being leery of technology," Brault said.

"With modern digital technology, we have the ability to revolutionize the efficiency among water usage and labor savings," Kraemer said. ©

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

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# Water right transfers: The future of water allocation in Oregon

N THIS YEAR'S WATER ISSUE of the Digger, you've had an opportunity to read about the importance of this vital resource. In recent years, the Oregon Water Resources Department (OWRD) has come under intense pressure from the press and Secretary of State's Audits Division to better manage the state's water.

For nursery and greenhouse growers, this means it is increasingly unlikely that you will be able to acquire new water rights. Oregon's surface streams have been closed to new irrigation water rights for many years due to over-appropriation. However, in most parts of the state, OWRD has continued to issue new groundwater rights.

In 2022, that changed when the Oregon Water Resources Commission instructed OWRD staff to stop issuing new groundwater rights unless sufficient hydrologic data exists to show the new

use would not impair the aquifer or hydrologically connected streams. OWRD plans to schedule rulemaking in 2023 to make this a formal legal position.

As a result, growers will be left with one primary mechanism to acquire new water rights — the process known as a water right transfer. This article provides an overview of water right transfers, including key considerations for growers.

#### Water right basics

OWRD manages water use through a permitting system based on the prior appropriation doctrine, often referred to as "first in time, first in right." The priority system gives a significant advantage to older or "senior" water rights, which OWRD must assure are fully satisfied before junior water rights can divert or pump.

Once a landowner goes through the permitting process, OWRD issues a water



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.

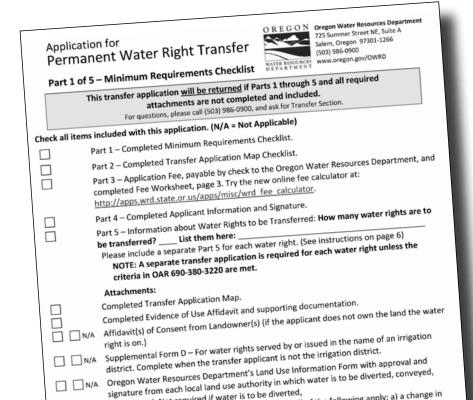
right certificate, which is akin to holding a deed for the use of that water. Generally, ownership of a water right for irrigation or nursery use is conveyed with the underlying land to which the water right is "appurtenant."

A water right certificate contains the essential attributes of the water right. including place of use (POU), point of diversion (POD) (for surface water) or appropriation (POA) (for groundwater), type of use and priority date. Often a certificate also includes conditions, such as a requirement to measure and report water use. Water must be used consistently with the terms of the certificate.

#### Water right transfers

A water right's essential attributes can only be changed through the OWRD transfer process. If a transfer is successful, OWRD issues a new water right certificate describing the changed attributes. Importantly, the priority date remains the same as the original water right, making a transfer a valuable tool in the face of increasing water scarcity and regulation.

A transfer application moves through an administrative process, much like the steps to acquire a water



right permit. This is a technically complex process that requires a certified water rights examiner (CWRE) to submit a transfer map in support of the application. The process involves multiple steps that take approximately one year to complete. However, if the transfer is opposed, it can take much longer.

OWRD reviews transfer applications based on several criteria, dis-cussed below:

Water use subject to transfer. The right proposed for transfer must meet the definition in ORS 540.505 as a "water use subject to transfer." This includes certificated water rights, court decreed water rights, and permits and completed transfers for which proof of beneficial use (completion) have been submitted to OWRD. At the time of this article, OWRD has determined that certificated reservoir rights are not subject to transfer if the application proposes to change the POD or POU.

Water right not subject to forfeiture. The right must have been used over the past five years and must not be subject to forfeiture.

Same source. If the transfer involves moving the POD/POA, it must develop water from the same source as the original POD/POA. For example, if the water right names the Molalla River as the source, an applicant could not propose to move the POD to the Pudding River. If the transfer involves a well, the new well must pull water from the same aquifer as the original well.

No enlargement. The transfer cannot result in an enlargement of the original water right. Enlargement is defined as increasing the rate or volume of water per acre, increasing the number of acres

irrigated, failing to keep the original POU from receiving any irrigation water in the future, and diverting more water at the new POD/POA than is legally available to that right at the original POD/POA.

**No injury.** A transfer cannot injure an existing water right — regardless of whether it is junior or senior. Injury is defined as a proposed transfer resulting in another existing water right not receiving previously available water to which it is legally entitled. This can be a complicated analysis, involving a review of historic use patterns and projected impacts of the new use. In practice, this generally means that (i) "downstream" transfers are more easily accomplished than upstream transfers, (ii) long-distance transfers are more complicated, and (iii) transfers to new a new well located close to another well or stream will be more difficult.

It is important to note that many groundwater rights in the Willamette Valley predate the 1955 groundwater permitting code. These "groundwater registrations" are unadjudicated claims to the use of groundwater. A groundwater registration does not qualify as a water use subject to transfer.

However, OWRD uses the groundwater registration modification process to allow landowners to make many of the same changes that would be allowed in a transfer.

The transfer process is technically and legally complex. It is important to assemble a knowledgeable professional team at the outset of the transfer process. Early identification of potential legal issues and engagement with OWRD can help ensure a successful application.

As a member benefit, the OAN provides its members with legal counsel under the Legal Access program. The program provides up to 30 minutes of free legal advice each month on matters pertaining to your business. To use this benefit, call attorney Steve Shropshire at Jordan Ramis PC at 503-598-5583. Steve is a shareholder at Jordan Ramis PC with offices in Portland, Bend and Vancouver.



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Responsibilities and Qualifications

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- 3) Assist in crew management of field production practices and techniques.
- 4) Assist with supervising and scheduling daily and weekly jobs.
- 5) Must be self-motivated on projects or to work with a group or team.
- 6) Possesses strong communication skills, interpersonal skills and be a person of good character.
- 7) Computer knowledge, skills and abilities, and bilingual (English and Spanish) language desired, but not required.
- 8) Strong work ethic and positive attitude
- Valid driver's license.
- 10) Ability to work with wide variety of agricultural equipment, such as tractors and implements.
- 11) Have leadership skills with ability to make decisions, train and motivate employees.

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

#### **FULL TIME NURSERY OFFICE** STAFF — BAMBOO GARDEN

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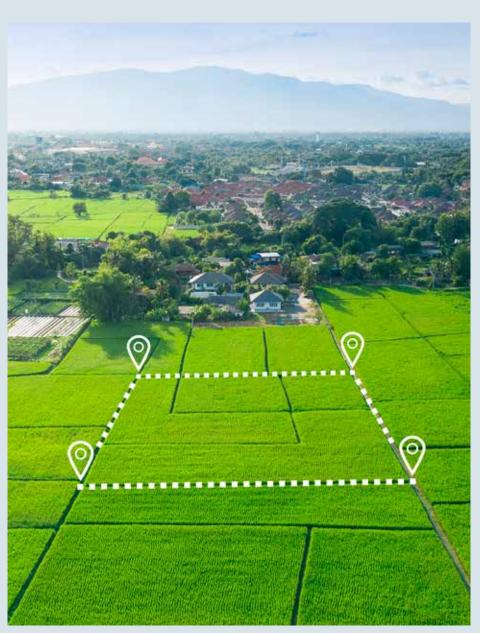
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# A farmland boom

Despite soaring interest rates, farmland values in Oregon show no signs of slumping

BY DANIEL BIGELOW



FTER A RECORD sales year for nursery growers in 2021, the economic outlook for the industry remains mostly positive (McClellan, 2022). One of the main economic issues facing producers is the increasing cost of labor, as general price inflation and a tight labor market have put upward pressure on wages. The rising cost of non-labor inputs, such as energy and fertilizer, coupled with widespread drought-like weather conditions, are among the other concerns cited by growers.

Despite these challenges, many producers have been able to raise prices and maintain existing profit margins without seeing a corresponding drop in sales (Nursery Management, 2022). Consolidation in the industry, however, remains a concern for smaller local producers, even though most growers do not plan to expand their acreage as much as they did in 2021 (Nursery Management, 2022).

All these factors can ultimately impact the price of farmland, as the viability and profitability of nursery operations can affect the demand for land and influence farmland values.

Farmland plays a foundational role in Oregon's agricultural sector. In addition to being a fundamental input to production for most farm operations, farmland (and other farm-related real estate) is the largest asset on the U.S. farm sector balance sheet (USDA-ERS, 2022), making it the primary store of wealth for many producers.

Producers who own land often use it as collateral to secure loans to finance farm-related investments. However,

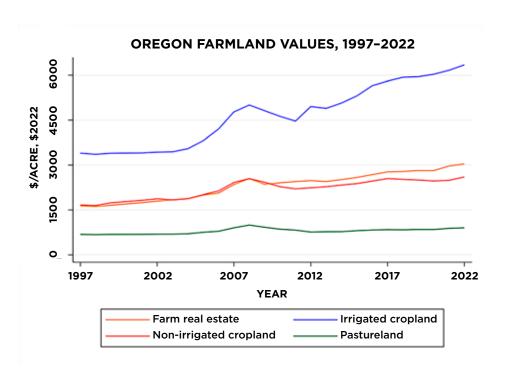


#### **GROWING KNOWLEDGE**

while current landowners will generally benefit from higher land values, the price of land is often considered to be a major barrier for new and beginning producers to achieve a commercially viable scale of production (Brekken et al., 2016).

Compounding this accessibility issue is the notion that farmland is increasingly being used as an investment by actors outside the farm sector, including both domestic and foreign institutional investors (Hanson, 2022).

In this article, I provide an overview of the most recent publicly available data on farmland values in Oregon. The data are derived from an annual survey conducted by the U.S. Department of Agriculture's National Agricultural Statistics Service (USDA-NASS, 2022a). In the survey, producers are asked to report an estimate of what their land would sell





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for in a market transaction.

It is worth emphasizing that these values are hypothetical, as opposed to being based on observed transactions. If the land that is sold is systematically different from the broader stock of Oregon's farmland, the values discussed here may not line up with observed transaction prices.

The survey data provide information on cropland value (separately for irrigated and non-irrigated cropland), pastureland value, and farm real estate value (all land and buildings). Unless noted otherwise, all values discussed in this article are adjusted for inflation to the year 2022 using the GDP Implicit Price (U.S. Bureau of Economic Analysis, 2022).

#### Increases across the board

According to the most recently published USDA-NASS estimates, after adjusting for inflation, the per-acre value of land in Oregon in all uses has, with few exceptions, increased each year since 2011. Farm real estate value, which accounts for all farmland and other farm-related buildings, increased by 2.4% in 2022 to \$3,040/acre, on the heels of a 5.5% increase in 2021, which was the largest annual increase since 2008. The 2022 esti-



mate is also up relative to its most recent five-year average of \$2,883.

Non-irrigated cropland — which, per the 2017 Census of Agriculture and 2018 Farm and Ranch Irrigation Survey, accounts for 73% of all cropland in Oregon — saw its value rise to \$2,600/ acre. That represented a 4.5% gain, which was the largest 2022 increase of any land value category tracked by USDA and the largest increase in this category since 2008.

The value of irrigated cropland also increased, but by a smaller 2.9% margin, to \$6,350/acre, representing the biggest jump since 2016 in this category. Pastureland values increased by 2% to \$900/acre, less than half of the 2021 increase of 4.5%, which was the largest annual percentage gain since 2008. The 2022 values for all three use-specific estimates are also up relative to the most recent five-year averages.

It bears emphasizing that the increases in the value of Oregon's farmland are increases in real values, after adjusting for inflation. The unadjusted, or nominal, increases are far larger than those reported here. For example, the nominal value of non-irrigated land increased by a whopping rate of 11.1% over the past year.

What this means, in general, though, is that the rate of appreciation in the value of Oregon's farmland is faster than the pace of inflation. Have the returns to farming increased at a similar, aboveinflation clip?

One challenge of studying farmland value in Oregon is the state's highly diverse and varied agricultural sector. It's therefore difficult to make generalized statements about farm-related returns for any specific commodity. This stands in contrast to a state like Iowa, for example. There, we would expect the net returns to cropland to track closely with corn and soybean prices, as these crops are grown on the dominant share of cropland in the state.

#### Cash rents stay flat

As a measure of use-specific statewide net returns to owning farmland, we can

consider cash rents, which are collected annually in another USDA survey (USDA-NASS, 2022b).

Cash rents are a commonly used measure of net operating income, as they partly capture the annual return an off-farm landlord would receive for owning land. However, renting land is less common in Oregon compared to other states.

In 2017, the most recent year of data available, 30% of Oregon's farmland was rented, compared to 39% nationwide (USDA-NASS, 2019), which calls into question how representative rented land is of the broad stock of farmland in the state, especially given that not all land is rented under a cash lease agreement.

With these caveats in mind, both nonirrigated and irrigated cash rents remained flat over the past year, while pastureland rents declined slightly, by 1.7%. Non-



#### **GROWING KNOWLEDGE**

irrigated cash rents, at \$101/acre, are below the recent five-year average of \$105/acre. Irrigated cash rents, on the other hand, are up at \$261/acre, a 4% increase relative to the five-year average of \$251/acre.

The average pastureland rent of \$11.50/acre is down 13% relative to the five-year average of \$13.20. Despite most commodity prices being up, landlords are likely finding it difficult to raise rents given the simultaneous rise in the price of many farm inputs, including labor, fuel, fertilizer and electricity. Rising input costs are partly due to the international trade issues brought about by the Russia-Ukraine conflict (Colussi et al., 2022).

Overall, these trends in cash rental rates suggest that the most recent rise in Oregon's farmland values are not directly attributable to rising farm profits.

#### Factors fueling the boom

Despite cash rents being relatively flat, the USDA numbers suggest that farmland in Oregon continues to appreciate in value. With state-level statistics like this, it is difficult to tease out exactly what is causing land values to increase, but several factors broadly align with these trends.

For one, there are interest rates. Low interest rates bolster the value of farmland by increasing the present value of expected net income derived from land in future years.

Much of the talk surrounding interest rates in recent months has concerned their rapid rise due to tighter monetary policy by the Federal Reserve in efforts to rein in inflation. However, the USDA survey where the land value estimates come from was taken in June of 2022, which preceded the biggest rises in interest rates that started throughout the summer and into fall. As a result, we can attribute some of the gain in value to the low interest rate environment that producers were facing when they answered the USDA survey.

However, even when interest rates begin to rise, it can take several years for higher rates to be reflected in the market for farmland (Basha et al., 2021).

Another factor that is likely keeping upward pressure on Oregon's farmland values is the federal income support provided

by the Inflation Reduction Act stimulus funds (Myers, 2022). Although the act was not passed until August of 2022, there was likely some expectation on the part of producers that federal support was in the offing, as farm income has been bolstered in recent years in response to the Covid-19 pandemic and trade war with China.

Per a recent analysis by Northwest Farm Credit Services (2022), the supply of available land in Oregon remains low relative to demand, particularly from institutional and other investment-oriented buyers. There is also strong demand for rural residential land, which has become more desirable as more and more people are able to work remotely and thus become untethered to locating in close proximity to their office.

In addition, although housing market activity has dampened of late, the price of homes in many parts of Oregon remains high, which puts additional pressure on the expansion of urban growth boundaries and bids up the price of undeveloped farmland in close proximity to the existing boundary.

Daniel Bigelow is a land economist in the Department of Applied Economics at Oregon State University. He can be reached at Daniel.Bigelow@OregonState.edu.

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Our industry stretches the water resource farther than most of those involved in policy acknowledge. Still, there is a battle over whether or not agriculture should have the water it has. There are those who wish for this limited resource to be allocated to other purposes.

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The association is blessed to have some of the brightest minds in the agricultural sector helping our volunteer leaders shape policy that will impact the industry for decades to come. Many of our growers are involved in this policy space, with a full complement of past presidents, current leaders and upand-coming stars.

Jordan Ramis PC, our law firm, brings Steve Shropshire and Marika Sitz to the table. They will forget more about water than I have the capacity to learn. Our water team is respected on both sides of the aisle. It is amongst the best and brightest in the ag, municipal and conservation worlds.

At a tour stop at Wooden Shoe Tulip Farms, organized by an agricultural coalition, I told urban and rural candidates and legislators that water is a tough and no-sonice issue to engage in. I said that if you wish to get yelled at by everyone, just ask to be on a committee that has water as a core policy area. I was not joking.

Water impacts every facet of our state. It makes land use planning seem like a walk in the park. So why do we work so hard? In the water world, there are sharks and there are minnows. We are not going to be minnows.

#### **Urban decision-makers**

There are legislators who get it. Rep. Ken Helm, a Democrat out of Beaverton, understands the complexity, economic and environmental impacts, and political toxicity that comes along with discussing water.

Rep. Helm is the exception who has broad-based water knowledge. The truth of the matter is that most legislators in our state are urban. Some seem to subscribe to the notion that water comes from a tap.

Do I blame them? Heck no. It is up to agriculture to educate decision makers. We do this through tours of nursery and greenhouse operations, multiple ag sector bus tours every other year, and simply taking the time and effort to bring urbanites along.

Issues abound, from water transfers, the ag water quality program that resides in the Oregon Department of Agriculture, to the ever increasing mission creep of the Department of Environmental Quality into ag practices, to how the Water Resources Department is funded.

All of these issues will impact how a nursery industry member does their daily work.

#### What keeps me up at night

Yes, decision makers are urban and don't understand farm practices. Add to that a polarized political atmosphere that places fish over farm families.

Ag is an environmental steward. Farms have made tremendous strides to become more efficient. They have invested in technology that simply did not exist a generation ago.

The weird thing? Nursery industry members did all that work without the dark shadow of regulation hanging over our heads. We did it because it needed to be done.

In the process, we did not establish the baseline. A baseline that advocates for restricting water use — and establishing bone-crushing, non-sensible regulation — now wish to establish.

The first time a resident of a city turns on the tap and there is no water, all bets and protections for ag will go out the window. So, we must work with all sectors to prevent a water war. Drought is a definition of an age gone by. Drought compared to what? We are now in a long cycle of water scarcity. Either we adapt, or decisions get made without our consent.



Jeff Stone
OAN EXECUTIVE DIRECTOR

#### The West works on a plan

I am proud of my colleagues in Washington, Idaho, Colorado, Arizona and Texas for recognizing that in order for our collective industries to survive, we must come together to ensure that water is available for use in sufficient quantity and quality to allow for future growth in the industry.

Water in the west is different. The vast differences between our states related to climate have never been narrower. Together we must demonstrate to the U.S. Congress and our own states that nursery operators are good stewards. We take care of our respective states' natural resources. We have made a commitment to water conservation and water quality improvement in the watersheds where we operate.

In the cacophony of shrill political discourse on climate and water, we recognize and adhere to the philosophy of reasonable engagement when working with other stakeholders and political leaders.

#### The shot clock is running down

At the state and federal level, decision makers lack sufficient commitment to ensure that farms, fish and families will have adequate water supplies into the future. We must be not afraid to advocate for the integration and development of new water storage with conservation incentives.

Through production, tax, and environmental goals and incentives, the nursery industry needs to be a strong voice for the use of both tools to meet both short-term and long-term water supply demands. I feel that our focus will be the difference maker. I urge you all to engage on the water issue. It is the lifeblood of the industry.  $\bigcirc$ 

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