

Researchers grow more sustainable turfgrass

By **SIERRA DAWN McCLAIN**
Capital Press



Sierra Dawn McClain/Capital Press
Alec Kowalewski, center, and research team members look at plots of turfgrass that have been mowed at varying frequencies and heights.

CORVALLIS — Across the drought-stricken Western U.S., some cities and states have temporarily banned watering “non-functional turf,” including lawns.

Other municipalities, domestic and international, are restricting fungicide use on landscapes.

These and other developments have cast a sudden spotlight on turfgrass management, an important and often-overlooked field of study, and the innovators behind it — people like Alec Kowalewski, Oregon State University turfgrass specialist.

BeaverTurf, Oregon State’s turf management program, is exploring how to grow turfgrass on sports fields, golf courses and parks in a way that’s more environmentally and economically sustainable.

Kowalewski leads a “dream team” of doctoral researchers who are exploring how to grow turfgrass with less water, testing which cultivars are disease-resistant, experimenting with fungicide alternatives, irrigating with wastewater, documenting which varieties are safest for livestock consumption and exploring how management practices can impact carbon sequestration.

“I’m very proud of the team I have. It’s truly a world-class team,” Kowalewski said.

He and the researchers, like game pieces on a checkerboard, were standing on an experimental plot with hundreds of square test blocks, each containing a different grass cultivar.

The researchers under Kowalewski say he’s not only an innovator but a teacher and adviser who empowers other

innovators to shine.

This year, Kowalewski said he’s excited about many of the projects his team is taking on.

One project looks at soil health and the potential to sequester carbon in turfgrass systems. Emily Braithwaite, faculty research assistant, said recent climate extremes have created a “sense of urgency” in the turfgrass industry for ways to limit emissions and be more sustainable.

The project uses a carbon-capturing device, tracks how much carbon plants absorb while photosynthesizing and explores how management practices impact carbon storage.

Tests so far have found that grass is healthier and stores more carbon if it’s mowed frequently — about once a week — to 4 inches tall rather than taller or down to stubble.

In watering, too, frequency matters. Irrigating a plot four times a week at just a quarter-inch leads to healthier, better carbon-storing turf than a plot that’s watered excessively but less often.

“See how much greener this is,” said Wrennie Wang, research associate, pointing at a block.

This “less water, more often” concept can save water

during droughts.

The researchers are also interested in irrigating turf with effluent water, or “gray-water,” non-sewage wastewater that comes from sources such as sinks and showers.

Clint Mattox, another research associate, is exploring alternatives to fungicides. Mattox is testing less toxic products, including sulfur and mineral oils.

Research associate Chas Schmid is leading a study in the National Turfgrass Evaluation Program for which turfgrass seed breeders submit entries. Schmid tests the entries, looking for which cultivars “rise to the top” as most disease-resistant, sustainable and attractive.

“It’s like a beauty pageant for turf,” Schmid said.

Another project will study endophytes, microbes that live in some turfgrasses.

Endophytes can make grass more disease-resistant, which is great for landscaping. But grass with high endophyte levels can be toxic to livestock. Although grass seed breeders have a general idea of which cultivars have endophytes, a comprehensive study has never been done. This fall, the researchers will document endophyte levels in hundreds of cultivars.

WANTED

Miracle-Ear Hearing Centers are looking for qualified people to test their latest product, The Miracle-Ear Ready-Fit RISK FREE!



Here’s the catch: You must have difficulty hearing and understanding in background noise and your hearing must fall in the range of the hearing aid. People that are selected will evaluate Miracle-Ear’s latest advanced digital hearing solution — the Miracle-Ear Ready-Fit.

You will be able to walk in to our office and walk out knowing how much help there is for you. Candidates will be asked to evaluate our instruments for 30 days (risk free*). At the end of the 30 days, if you are satisfied with the improvement in your hearing and wish to keep the instrument, you may do so at tremendous savings. But this is only for a limited time! Schedule your Appointment Now! Don’t wait until it’s too late!

SOME FEDERAL WORKERS AND RETIREES MAY BE ELIGIBLE FOR HEARING AIDS AT NO COST! That’s Right...No Co-Pay! No Exam Fee! No Adjustment Fee!

BCBS federal insurance pays the total cost of 2 Miracle-Ear Audiotone Pro aids. Most federal government employees and retirees are eligible. You may even be covered if you have other non-federal insurance coverage. Special factory pricing is available for non-qualifiers. See store for details & accurate coverage.

AT THESE PARTICIPATING LOCATIONS ONLY!!



Miracle-Ear Center
Youngs Bay Plaza
173 S. Hwy 101
Warrenton, OR 97146
(503) 836-7921

Miracle-Ear Center
2505 Main Ave N, Suite C
Tillamook, OR 97141
(503) 836-7926

Visit us online
www.miracle-ear.com
Use code **21SepOffer**

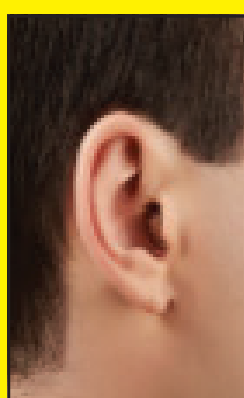
Another Great Way to Save! Make your appointment today!



BUY 1 GET 1 50% OFF

HURRY! Offer ends 9/23/2021
Miracle-Ear

Good only from participating Miracle-Ear representatives. One coupon per purchase. No other offers or discounts apply. Discount does not apply to prior sales. Offer valid on ME-5, ME-4, ME-3, ME-2 Solutions. Cannot combine with any other offers. Cash value 1/20 cent.



Save on one of our smallest custom digital hearing aids!

NOW BUY ONE GET ONE FREE!

HURRY! Offer ends 9/23/2021
Miracle-Ear

Valid at participating Miracle-Ear locations only. Limit one coupon per purchase. May not be combined with other offers and does not apply to prior sales. Cash value 1/20 cent.
Risk Free Offer- The aids must be returned within 30 days of delivery pursuant to terms of your purchase agreement and 100% of the purchase price will be refunded. **Hearing test is an audiometric test to determine proper amplification needs only. These are not medical exams or diagnoses. Blue Cross Shield, the Blue Cross, the Blue Shield, BCBS, and Federal Employee Program are a registered trademark of Blue Cross Blue Shield Association. Blue Cross Blue Shield Association and its independent licensees are not affiliated with, nor do they endorse or sponsor, the contents of this advertisement. Trademarks referring to specific providers are used by Miracle ear for nominative purposes only: to truthfully identify the source of the services about which information is provided. Such trademarks are solely the property of their respective owners.

GET TO THE POINT.

Expert Service. Guaranteed.

Trust your vehicle safety to the professionals at

DEL'S O.K. TIRE



Toyo Tire Special

Offer valid from September 7th through October 9th, 2021

TOYO TIRES



UP TO \$150 OFF

Your purchase of 4 tires with Online Redemption Claim.

YOUR #1 SOURCE FOR TIRES
CUSTOM WHEELS • AUTOMOTIVE SERVICES

Hours:
Mon-Fri 8-5

503-325-2861
For emergencies
503-325-0233

35359 Business
Hwy 101
(Miles Crossing)
Astoria, OR