Dr. Tom Chastain Named CSS Department Head

Following an extensive national search, long-standing OSU graduate, faculty member and professor of 28 years, Dr. Tom Chastain has been named the new Department Head for Crop and Soil Science.

Dr. Chastain earned a B.A. in Biological Sciences from California State University, Chico, and an M.S. and Ph.D. in Crop Science at OSU. He served as Assistant Professor of Seed Physiology for two years at Washington State University, for three years as Assistant Professor at OSU’s Columbia Basin Agricultural Research Center in Pendleton, and for 28 years as Professor of Seed Crop Physiology and Ecotology at OSU’s Department of Crop and Soil Science in Corvallis. During his time at the Corvallis campus, he has served in several leadership roles including Associate Department Head for three years, and for nine months as Interim Department Head.

“Dr. Chastain is a four-time winner of the Outstanding Teacher award in the Department of Crop and Soil Science and has been recognized with numerous other awards for his teaching. He conducts research on physiology, ecology, and management of seed crops with a focus on the development of science-based management practices for seed crops and on increasing our understanding of the underlying biological processes limiting greater economic and environmental efficiency of seed production. The author or coauthor of nearly 250 scientific and extension publications, he has been a frequent guest speaker at extension and grower meetings, as well as field days.

In addition, he has served in elected office in professional societies and organizations, and on the editorial boards of two journals including a five-year stint as associate editor of Agronomy Journal.

Dr. Chastain succeeds Jay Noller, who previously held the position of Department Head prior to being appointed the Director of OSU’s Global Hemp Innovation Center. Dr. Chastain will transition from his interim role to permanent department head effective May 1, 2020.

New Animal & Rangeland Sciences Department Head

Oregon state university has hired a new Department Head of Animal and Rangeland Sciences. Dr. Carol Lorenzen, is a professor in the Division of Animal Sciences at the University of Missouri, and an International Marketing Specialist in the USDA Agricultural Marketing Service (USDA-AMS). Dr. Lorenzen brings extensive experience in teaching, research, and outreach to the role. She is also a recognized national leader with the USDA, American Meat Science Association, and the National Cattleman’s Beef Association, among other renowned organizations.

For more information: https://agsci.oregonstate.edu/anrs/article/dr-carol-lorenzen-lead-department-animal-and-rangeland-sciences-osu

Scott Duggan
Central Oregon Agriculture is a bi-monthly newsletter produced by the Central Oregon Extension offices and the Central Oregon Agricultural and Extension Research Center (COAREC). The intent of this newsletter is to extend agricultural research-based information, to solve problems, develop leadership and manage resources wisely. Please direct comments and changes to the mailing list of your local County office.

◆ Mylen Bohle, Editor, (541) 447-6228
◆ Carol Evtouik, Ag Newsletter Coordinator, (541) 447-6228

Central Oregon County Extension Offices
(all area codes are 541)

Central Oregon Agricultural Extension Service
541-447-6228

Crook County Extension Service - Phone 447-6228, 498 SE Lynn Blvd., Prineville, OR 97754

Deschutes County Extension Service - Phone 548-6088, 3800 SW Airport Way Bldg. #4, Redmond, OR 97756

Jefferson County Extension Service - Phone 475-7107, 850 Dogwood Lane., Madras, OR 97741

Warm Springs Indian Reservation - Phone 553-3238, 1110 Wasco St., PO Box 430, Warm Springs, OR 97761

Central Oregon Agricultural Research and Extension Center
850 Dogwood Lane, Madras 97741

◆ Extension Service & Experiment Station Web Sites

Crook County: http://extension.oregonstate.edu/crook

Deschutes County: http://extension.oregonstate.edu/deschutes

Jefferson County: http://extension.oregonstate.edu/jefferson

Warm Springs: http://extension.oregonstate.edu/warmspings

Central Oregon Agricultural Research Center: http://oregonstate.edu/dept/coarc/index.php

Central Oregon Agricultural Extension Service Staff

◆ Nicole Strong, Regional Director, 829-1270
◆ Mylen Bohle, Crops, Cereals, Hay, Pasture, Irrigation, Soil Fertility, 447-6228
◆ Amy Jo Detwiler, Horticulture, 548-6088
◆ Scott Duggan, Livestock, 447-6228
◆ Jeremiah Dung, Plant Pathology, 475-7107
◆ Glenda Hyde, FCH, Master Food Preservation, 548-6088
◆ John Spring, IPM & Weeds, 475-7107
◆ Toni Stephan, Horticulture and Small Farms Instructor, 548-6088
◆ Clare Sullivan, Small Farms/Specialty Crops 548-6088
◆ Carol Tolleson, 475-7107
◆ Heike Williams, Bees & Pollinators, 475-7107
◆ Tracy Wilson, Ag Literacy Coordinator, 475-7107

Websites

OSU Extension Publications Catalog https://catalog.extension.oregonstate.edu
OSU Extension http://extension.oregonstate.edu
Oregon’s Ag Progress https://oap.oregonstate.edu
OSU Ag Information http://oregonstate.edu/colocal/coarc/index.php
Central Oregon Ag Information http://extension.oregonstate.edu
OSU Extension Central Oregon Ag Research and Extension Center
850 Dogwood Lane, Madras 97741

Central Oregon Hay Growers’ Association
Deadline is fast approaching. If producers are wanting to join the Central Oregon Hay Growers’ Association (COHGA). COHGA is funded by $100 annual membership fee, of which $30 funds the Oregon Hay and Forage Association (OHFA) (www.ohfang.org), $35 funds the COHGA general business (www.hayfinder.org), and $35 of the membership dues are specifically earmarked to help fund local forage research trials. The COHGA awards 1 to 3, $1,000 scholarships annually for graduating high school seniors to attend an agriculturally related college, university, or trade school that will have a career impact on the future of agricultural industry. The OHFA publishes the Oregon Hay Directory, and sponsors the OHFA Fall Forage Seminar, which precedes the Oregon Hay King Contest, at a different site annually. Call 541-447-6228 to get an application for membership.

Mylen Bohle

Central Oregon Aquatic Invasive Species Training
This Free online training will be held from 8:00 to Noon on June 9th. The training is about current and potential aquatic invasive species in Central Oregon—how to identify them and what their ecologic and economic effects are and to encourage and facilitate early detection. To register and for more info, call 541-549-7727 or email Beth Johnson at elizabeth.johnson@usda.gov.

Mylen Bohle

Irrigation Techniques and Troubleshooting for Experienced Farmers
Hansen Irrigation Design will be talking about setting up or maintaining irrigation systems for small-scale commercial production. Topics include: pressure issues, screens and filters for drip systems, determining output, irrigation scheduling, fertigation, etc.. It is Free, but registration is required to access Zoom details, for call-in info go to: https://tinyurl.com/ycoy74ir

Clare Sullivan and Laurie Wayne, HDFFA

Central Oregon Ag Newsletter
For those of you who are still receiving the C.O. Ag Newsletter via mail which is mailed and emailed out every 2 months; we are also sending out a C.O. Ag E-News, via email, only, every two weeks with updates. If you are receiving only the hard copy, you are missing out on other articles of agricultural interest, educational events, etc.in between the hard copy newsletter. I know many of us (including me) do not like reading long documents on-line, but you may want to rethink how you are receiving the newsletter. We will continue to send out the newsletter via the U.S. Mail system to those who still want to receive it that way. Call your respective Extension Office if you would like to make the switch. Contact information is on the 2nd page.

Mylen Bohle

Deschutes County-Free Yard Debris Collection
During a wildfire, most homes are lost when falling embers smolder and ignite vulnerable areas around homes. Reduce the risk of losing your home to wildfire and take advantage of free yard debris disposal at local collection sites.

Recycle your needles, leaves, branches and brush for free.

◆ Grass clippings, brush, plant prunings, pine needles, pine cones, weeds, trimmings and branches, stumps or trees (no larger than 12” diameter).
◆ NOT accepted: Sod, soil, rocks, lumber, metal, trash or plastics of any kind, including plastic bags, and any stumps or trees larger than 12” diameter.

For more information and participating sites contact: 541-322-7129 or visit www.FireFree.org.

Lars Santana
Limited Irrigation and Rain this Year?
The “Drought” word is certainly creeping into more and more conversations as we head toward summer. Following are some Extension Service bulletin or other website links that will help with managing forage and livestock during drought conditions. We are all hoping for more precipitation, but just in case, this information will offer some help.

Alfalfa Irrigation and Drought – Idaho

Drought Advisory: Managing Pastures and Haylands - Oregon
https://extension.oregonstate.edu/crop-production/pastures-forages/drought-advisory-managing-pastures-haylands

Deficit Irrigation of Alfalfa and Grasses: What are the Impacts / Options? - California

Controlled Deficit Irrigation of Alfalfa: Opportunities and Pitfalls - California
https://ucanr.edu/sites/adi/files/204411.pdf

Forage Production with Limited Irrigation - Nebraska
http://www.ianrpubs.unl.edu/economic/live/g2012/build/g2012.pdf

Managing Alfalfa During Drought – New Mexico
http://aces.nmsu.edu/pubs/_circulairs/CR646/

Managing Drought Stressed Pastures - Wisconsin

Irrigation System Evaluation - Washington
https://pubs.extension.wsu.edu/wsu-drought-advisory-irrigation-system-evaluation

Alfalfa Irrigation with Reduced Water Supplies - Washington
https://pubs.extension.wsu.edu/wsu-drought-advisory-alfalfa-irrigation-with-reduced-water-supplies

Agrimet Crop Water Use Program
A tool for help to guide irrigation needs is using the Agrimet Crop Water Use program. For much more detailed information on all of the crops, one can log on to the Agrimet site at: http://www.usbr.gov/pn/agrimet/. There is general information about the program, weather data, crop-water use information, graphs, maps, news, relevant links, and other information. You can follow the crop water use for these many locations even beyond Central Oregon sites). The green up date or emergence date, canopy closing date, daily water use (ET), 7 day predicted use, and 14 day predicted use, are just some of the information you will find within each site’s table. Start-up dates may be / are different for each site for each crop..

Agrimet is working in partnership with WSU to incorporate Agrimet data into WSU’s Irrigation Scheduler. To customize crop consumptive water use specific to your field or fields go to http://weather.wsu.edu/is/. The site is updated and is free, but you must register to gain access.

Predicted Crop Water Use (Evapo-transpiration or ET) for some selected crops in Central Oregon as of May 3, 2020.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Christmas Valley</th>
<th>Bend</th>
<th>Powell Butte</th>
<th>Madras</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grass Hay</td>
<td>4.3</td>
<td>6.1</td>
<td>6.6</td>
<td>6.6</td>
</tr>
<tr>
<td>Alfalfa</td>
<td>4.1</td>
<td>4.9</td>
<td>4.9</td>
<td>4.9</td>
</tr>
<tr>
<td>Pasture</td>
<td>3.8</td>
<td>4.0</td>
<td>4.2</td>
<td>4.2</td>
</tr>
<tr>
<td>Lawn</td>
<td>4.9</td>
<td>4.9</td>
<td>5.3</td>
<td>5.3</td>
</tr>
<tr>
<td>Winter Grain</td>
<td>5.6</td>
<td>6.0</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Spring Grain</td>
<td>2.0</td>
<td>3.3</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Spring Grain</td>
<td>0.6</td>
<td>1.6</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Spring Grain</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Spring Grain</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Kentucky bluegrass</td>
<td>N.A.</td>
<td>5.6</td>
<td>6.1</td>
<td>6.1</td>
</tr>
</tbody>
</table>

There are four different Spring Grain emergence dates for each site.
Water use is predicted based on the plants receiving optimal water and fertilizer and never experiencing any stress.

Shearing School
Oregon Shearing School – May 14-17, 2020, in Roseburg, OR. Email John Fine at johnandpeggyfine@charter.net or visit https://sheeporegon.com/.

Mylen Bohle

Scott Duggan
The Oregon Conservation Reserve Enhancement Program (CREP)
Do you have a stream or natural pond on your property in need of Riparian Restoration? The Conservation Reserve Enhancement Program can provide funding for planting, fencing, seeding, livestock water development and other practices to enhance habitat and improve water quality. This program serves Crook, Deschutes & Jefferson County. For more information, contact Victoria Fischella, CREP Planner for Jefferson, Crook and Deschutes Counties at: 541-699-2936 – Victoria.Fischella@usda.gov – USDA Service Center: 625 SE Salmon Ave. Suite 6. Redmond, OR 97753

Victoria Fischella

Resources for Managing Stress, Anxiety or Depression
Farm life can be demanding and stressful at any time, but ranchers and farmers are facing extreme stress during the Covid-19 pandemic. If you or someone you know is struggling with anxiety, depression, extreme stress or another mental health concern, know you are not alone.

The following resources may be helpful in finding relief for you, family members, employees or friends.

• Staying Strong in Trying Times: Mental Health in Agriculture: https://extension.oregonstate.edu/smallfarms/southern/events/staying-strong-trying-times-mental-health-agriculture
• Important Questions for Your Therapist and Insurance Carrier: https://adaa.org/sites/default/files/Questions-Therapist-Insurance.pdf
• What to Do When You Can’t Afford Therapy: http://careforyourmind.org/what-to-do-when-you-cant-afford-therapy/#more-1447

Scott Duggan

Information on Covid-19 for Ranchers and Farmers
Sheep Industry News: https://sheepusa.org/
Goat Industry News: https://americanigoatfederation.org/
Pork Industry News: https://www.pork.org/
Beef Industry News: https://www.ncba.org/

I wanted to provide information about the American Sheep Industry weekly broadcast, SheepCast, keeping you up to date on the latest happenings in the sheep industry. This week’s SheepCast looks at the assistance available to sheep producers and is available to sheep and wool producers discussing the market impact from COVID-19. This week the broadcast also takes a quick look at the new WOTUS rule. Here is the link to the broadcast: https://soundcloud.com/user-637754734/asi-sheepcast-coronavirus-assistance

Scott Duggan

Irrigation Field Days May 12-13 and 19-20 Cancelled
The irrigation field days were tentatively planned for May 12-13 and May 19-20 for Jefferson, Crook, Deschutes, and Lake counties, respectively. With COVID-19 having a direct or indirect effect on our lives - the field days are cancelled. The field days were to show case producers who have converted MESA system pivots and linears to LESA/LEPA//MDI systems, upgraded pumps to VFD's, and converted a pivot to sub surface drip irrigation system, etc. Energy Trust of Oregon and WY'east RC & D have cost share dollars for helping to convert systems. On average, producers are reducing energy and water use around 18%. Producers with water shortages are seeing a dramatic increase in yield. For those Producers with wheel lines and hand lines, there are cost share dollars to help replace parts to increase water use efficiency through a reduction in power use.

Mobile Drip Irrigation (MDI) Bulletin http://irrigation.wsu.edu/Content/Fact-Sheets/MDI.pdf
(LESA = low elevation sprinkler application, LEPA = low energy sprinkler application, MDI = mobile drip irrigation.)

Mylen Bohle

OSU Extension Fire Program to Host Preparedness Webinars
Oregon State University’s new Forestry & Natural Resources Extension Fire Program will host a series of three webinars in May to promote wildfire preparedness and prevention.

May 8 - Wildfire Awareness Webinar
10:00 am - 11:00 am PDT Online
May 15 - Fire Behavior and Home Ignition Zone (HIZ) Webinar
1:00 pm - 2:00 pm PDT Online
May 22 - Fire Adapted Communities and Ready, Set, Go! Webinar
1:00 pm - 2:30 pm PDT Online
To register go to: https://extension.oregonstate.edu/program/all/fire-program/events

Debbie Wood, Crooked River Weed Management Area
Growing Degree Days and Precipitation Update as of May 5 & 6, 2020

http://uspest.org/OR/index.html is the site to log onto to monitor GDD’s and to check on precipitation for many different weather station sites. Agrimet weather stations are used for this information. There are different methods to calculate growing degrees, and different crops have different base temperatures for growth.


<table>
<thead>
<tr>
<th>32 degree F base temperature</th>
<th>Christmas Valley</th>
<th>Bend</th>
<th>Powell Butte</th>
<th>Madras</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDD’s as of May 5, 2020</td>
<td>706</td>
<td>1146</td>
<td>1104</td>
<td>1298</td>
</tr>
<tr>
<td>Compared to 2019</td>
<td>Same</td>
<td>10 days ahead</td>
<td>7 days ahead</td>
<td>16 days ahead</td>
</tr>
<tr>
<td>2020 Compared to 30 year Avg.</td>
<td>2 days ahead</td>
<td>19 days ahead</td>
<td>11 days ahead</td>
<td>11 days ahead</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>41 degree F base temperature</th>
<th>Christmas Valley</th>
<th>Bend</th>
<th>Powell Butte</th>
<th>Madras</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDD’s as of May 5, 2020</td>
<td>710</td>
<td>647</td>
<td>741</td>
<td>828</td>
</tr>
<tr>
<td>Compared to 2019</td>
<td>10 days ahead</td>
<td>10 days ahead</td>
<td>16 days ahead</td>
<td>21 days ahead</td>
</tr>
<tr>
<td>2020 Compared to 30 year Avg.</td>
<td>11 days ahead</td>
<td>12 days ahead</td>
<td>11 days ahead</td>
<td>13 days ahead</td>
</tr>
</tbody>
</table>

Growing Degree Days for 50 degree F Base Temp Using “Growing Degrees” for Corn, Soybeans, and Grapes as of May 5, 2020.

<table>
<thead>
<tr>
<th>50 degree F base temperature</th>
<th>Christmas Valley</th>
<th>Bend</th>
<th>Powell Butte</th>
<th>Madras</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDD’s as of May 5, 2020</td>
<td>336</td>
<td>307</td>
<td>331</td>
<td>356</td>
</tr>
<tr>
<td>Compared to 2019</td>
<td>7 days ahead</td>
<td>8 days ahead</td>
<td>10 days ahead</td>
<td>13 days ahead</td>
</tr>
<tr>
<td>2020 Compared to 30 year Avg.</td>
<td>17 days ahead</td>
<td>16 days ahead</td>
<td>16 days ahead</td>
<td>10 days ahead</td>
</tr>
</tbody>
</table>

Precipitation from January 1, 2020 to May 6, 2020 for Agrimet weather stations sites in Central Oregon.

<table>
<thead>
<tr>
<th>Month</th>
<th>Christmas Valley</th>
<th>Bend</th>
<th>Powell Butte</th>
<th>Madras</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inches</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>0.92</td>
<td>0.94</td>
<td>0.86</td>
<td>1.00</td>
</tr>
<tr>
<td>February</td>
<td>0.15</td>
<td>0.01</td>
<td>0.27</td>
<td>0.24</td>
</tr>
<tr>
<td>March</td>
<td>1.04</td>
<td>0.47</td>
<td>0.52</td>
<td>0.77</td>
</tr>
<tr>
<td>April</td>
<td>0.35</td>
<td>0.17</td>
<td>0.61</td>
<td>0.49</td>
</tr>
<tr>
<td>May (up to 6th)</td>
<td>0.18</td>
<td>0.01</td>
<td>0.13</td>
<td>0.06</td>
</tr>
<tr>
<td>Total</td>
<td>2.64</td>
<td>1.64</td>
<td>2.39</td>
<td>2.56</td>
</tr>
</tbody>
</table>

**Fertilization Timing This Year – How did you do?**

Hopefully, this was a way better year than last year for applying fertilizer and pesticides in a timely manner. With the loss of Ammonium Nitrate fertilizer, we have to fertilize with Urea, for most inorganic farms. Coated urea (with the right coating) will lessen the volatilization of N, if we know we cannot irrigate in a timely fashion. The time between application and when irrigation water is available for the last few years, has been/is greater than 30 days (the coating is only good for 30 days) for fertilizing pastures. Do we take a chance and depend upon rain (need / want a ½ inch) to leach the N into the soil? No moisture or a light shower will / can increase volatilization before enough water is applied. Below are the predicted T-Sum Nitrogen Timing dates for grass pasture and hay fields for 2020, after the fact.

2020 T-Sum (degrees F) N Fertilization Dates in Central Oregon. (“Simple average” calculation is used to calculate for GDD’s.

<table>
<thead>
<tr>
<th>Grass Pasture* 0-60 lb/ac N (360 GDD’s)</th>
<th>Christmas Valley</th>
<th>Bend</th>
<th>Powell Butte</th>
</tr>
</thead>
<tbody>
<tr>
<td>4360 feet</td>
<td>April 9</td>
<td>March 2</td>
<td>February 27</td>
</tr>
<tr>
<td>Grass Hay* 60-90 lb/ac N (360-720 GDD’s)</td>
<td>April 9</td>
<td>March 2</td>
<td>February 27</td>
</tr>
<tr>
<td>Grass Hay* 100 lb/ac N or Greater (720 GDD’s)</td>
<td>May 6</td>
<td>April 13</td>
<td>April 13</td>
</tr>
</tbody>
</table>

*if earlier pasture forage production is desired and optimized hay production is desired.

**Central Oregon Wine and Grape Growers’ Association**

The Central Oregon Wine and Grape Growers’ Association (COWGGA) is planning a virtual meeting educational session in the future. Board of Directors are: Kerry Damon, President, Dan Tippy, Dina Barker, and Robert Sowers. Questions about COWGGA, contact Kerry Damon at 541-280-6243. COWGGA web site: http://www.centraloregonwine.com/.
Citizen Science EDRR Volunteer Training
We offer a 2.5-hour training where you will learn how to identify priority invasive species, how to record basic data and how to report findings on EDDMapSWest, a national early detection reporting system. Participants learn plant identification through a PowerPoint presentation and live material. Participants also learn methods of manual removal and which species you should not attempt to remove. Trainings will equip volunteers with the knowledge necessary to conduct invasive plant surveys in order to support local land managers that need your help. Your efforts will directly support the maintenance of healthy ecosystems. Volunteers will receive an invasive plant identification booklet along with survey forms. We ask that volunteers who sign up conduct 1 - 2 surveys over the field season.

Webinar: Madras & Prineville, OR
Wednesday, 05/20/20, 12:00pm - 3:00pm
Hosted by: Debbie Wood, Coordinator with Crooked River Weed Management Area
RSVP: https://www.pnw-ipc.org/events/madras-prineville-invasive-plant-id-training
*All trainings are eligible for up to 2.5 WSDA, SER, and SES/PWS recertification credits.

Calendar
May
8     Wildfire Awareness Webinar (see article)
9-24  Deschutes County Free Yard Debris Collection (see article)
11    Irrigation Techniques and Troubleshooting for Experienced Farmers (see article)
14-17 Shearing School (see article)
15    Fire Behavior and Home Ignition Zone (HIZ) Webinar (see article)
20    Citizen Science EDRR Volunteer Training (see article)
22    Fire Adapted Communities and Ready, Set, Go! Webinar (see article)
June
9     CO Aquatic Invasive Species Training (see article)
      All Oregon State University Ag Experiment Station Field Days in June are cancelled