From the Director

Philip B. Hamm

Did you know that HAREC has nearly 30 year-round folks (half supported by state funds & half by grant funds)? In addition, there are also 20+ students working on research projects under the watchful eyes of our faculty.

Field day season started with Grass Seed Field day in mid-May, next was Wheat Field day, and culminating with Potato Field day in late June. Several hundred people attended our field days and we thank Crop Production Services & Syngenta Crop Production for supporting these events.

The failure of the OSU Service District in May was unfortunate & requires that we continue to find other ways to support the station’s budget. About ten years ago, the state budget cuts required all experiment stations to come up with 25% of their base budgets from local sources.

We have been fortunate in the past to find most of what we need, but significant sources have cut their support because of financial issues of their own. We are working diligently to search out new options.

While the Service District did not pass, there are plenty of other great things to report.

We completed our new conference room, the Plant Pathology & Entomology laboratory remodels, & soon our station’s sixth greenhouse will be complete.

We are truly thankful for the funding, which came from many sources, but I want to single out the Port of Morrow & their building crew for erecting the conference room & greenhouse. Not only are they great folks to work with, but they provided quality work. I also want to acknowledge Threemile Canyon Farms for their significant contribution to the new conference room.

These added facilities will enable our faculty and staff to research and provide the latest information in support of our stakeholders.

Our faculty & staff continue to do great things and I encourage you to communicate your needs and concerns to them or to me.

Be sure to mark your calendar for Hermiston Farm Fair, Nov 28-30th at the Eastern Oregon Trade & Event Center. This and other winter events will present opportunities for us to share information from research conducted through the year.
Every Drop Counts

By Scott Lukas
Assistant Professor
Horticulture

Every drop counts when it comes to saving water.

This summer the Horticulture program is focusing on evaluating the potential for sub-surface drip irrigation in onion production.

Drip irrigation is shown to be highly effective in onion systems in Malheur County where the soils are heavier than in Hermiston.

The coarse sandy soils of our region are well drained, meaning that the irrigation water wants to go downwards instead of sideways towards the crop roots.

The intent of this season’s trial is to model the distribution of water delivered from drip lines with different flow rates to determine the feasibility for onion systems in the sandy soils of the Lower Umatilla Basin.

With 200 sensors buried underground, we hope to develop a model of water movement in the soil to create recommendations for the use of drip irrigation in onion crops. We are also evaluating fertilizer losses to determine if increasing water use efficiency can also reduce nitrogen leaching.

Lukas will have preliminary recommendations to present at the Hermiston Farm Fair this winter. The trial will be repeated next season with the final results available to stakeholders in the fall of 2019.

Irrigated Agricultural Entomology Program (IAEP)

By Silvia Rondon, Professor

The Rondon IAEP lab focuses on the ecology and management of insects in irrigated crops in the Columbia Basin.

- Congratulations to Josephine Antwi. Josephine recently was appointment Assistant Professor in Biology at University of Mary Washington, Virginia. Way to go Jo !!!
- Welcome to Pahoua Yang. Pahoua joined the IAEP group during the summer 2017 and she will study Colorado potato beetles in the Basin.
- Welcome to Maria Montes de Oca, BioTech 1. Maria is an undergraduate student at OSU. She will study alternative control methods against potato psyllids.
- The IAEP welcomes Craig Arnold, Raegan Aldred and Benjamin Moore. The students will work with us during the 2018 season.

Website:
https://extension.oregonstate.edu/people/silvia-rondon
PIVOTAL MOMENTS | SUMMER 2018

Agricultural Sciences & Natural Resources, Family and Community Health, 4-H Youth, Forestry & Natural Resources, Extension Sea Grant, and Open Campus programs. Oregon State University, United States Department of Agriculture, and Oregon counties cooperating. The Extension Service offers its programs and materials equally to all people.

Plant Biology Lab

By Aymeric Goyer
Associate Professor
Plant Biologist

The Plant Biology Lab welcomes two new students.

Max Combest is a Master student in the Department of Botany & Plant Pathology at Oregon State University. Max is native from Kansas and got his Bachelor of Science degree in Biochemistry from the University of Kansas. Max, who has been in Corvallis taking classes, moved to Hermiston on June 15, just in time to attend our potato field day and get acquainted with the station’s research and extension activities.

Max’s research focuses on furthering our understanding of resistance mechanisms against Potato Virus Y and other major potato pests.

Max received a fellowship from the National Institute of Food and Agriculture, and his research is funded by grants from the Northwest Potato Research Consortium.

Maël Picard is an international intern from France. He is studying physical measurements as an undergraduate student from University of Rennes I, France.

Maël has embraced the American culture and he is very eager to learn new technologies and improve his English.

His project focuses on the effect of low temperature storage on the phytonutrient content of potato tubers.

Maël has processed hundreds of samples and used a machine called High Performance Liquid Chromatography (HPLC) to quantify molecules such as vitamin C, vitamin B1, and sugars.

What’s That Rock?
Exploring 4-H in Summer School

By Anna Browne
4-H Latino Outreach & Open Campus
Umatilla & Morrow Counties

Summer School students in Irrigon and Umatilla had the opportunity to participate in an “Explore 4-H” series this month. This series of 4-H classes is designed to introduce non-traditional students to programs and projects available as part of the youth development program.

The program focuses on the history of 4-H, 4-H basics like the pledge, emblem & motto, and familiarizes students with a club-like setting; complete with club president & other officers for the week.

These clubs focused on a mini-study in geology in addition to 4-H basics. Club members collected & identified rocks, learned about rocks types and the rock cycle. The final activity consisted of an exploration of types of fossils and clubbers even created their own take-home dinosaur fossil dig.

None of the students who participated in this club, had heard of 4-H prior to this exploration series. This series introduced students to new opportunities and offerings through the 4-H program.

What’s That Rock?
Exploring 4-H in Summer School

The series will continue in Boardman later this summer.

Explore 4-H Opportunities: https://extension.oregonstate.edu/4h
Hydrate for Your Health!

Angie Treadwell
SNAP-Ed Coordinator
Umatilla & Morrow Counties

It’s summer and we all need to make sure we are taking in enough fluids as the temperatures rise.

SNAP-Ed finished the school year with a series of hydration lessons in several classrooms in Umatilla and Morrow counties.

Through hands-on activities and active games, students learned why adequate fluid intake is important, warning signs of dehydration and how to choose healthy beverages.

Teachers were pleased to report a marked increase in student water consumption after the lessons.

SNAP-Ed provided water bottles that students kept on their desk and drank from throughout the day.

Students loved the Food Hero Peach Carrot Smoothie.

You can find the recipe at: http://foodhero.org/recipes/peach-and-carrot-smoothie