

AgWeatherNet, Pygmy Rabbits, Watershed Stewards

Posted by [steven.reynolds](#) | January 30, 2008

AgWeatherNet Hits the Palouse

The Washington State University AgWeatherNet team recently installed a weather station at WSU's Spillman Agronomy Farm located two miles southeast of Pullman. The station is equipped with sensors for monitoring and recording air temperature, wind speed and direction, relative humidity, solar radiation, leaf wetness, soil temperature and moisture at a depth of eight inches, and rainfall.

AgWeatherNet provides online access to raw data derived from a network of 77 publicly owned, regional weather stations. Most stations are located in the irrigated regions of eastern Washington state and provide updated data at 15-minute intervals.

WSU's Lind Dryland Research Station in Adams County was also recently added to the AWN network, and eight additional dryland locations are planned.

"Given the inclement weather conditions, we are extremely pleased with the expansion and retrofit progress currently being made by our field technical coordinators, Will Corsi and Evan Zumini," said Bob Krebs, AWN Project Operations Manager.

The expansion is a part of an overall project to retrofit and expand the

existing network of regional weather stations from 57 to over 120. The project is expected to be completed by March of 2009.

Registration to the AWN network (<http://weather.wsu.edu>) is free and open to the public. Once registered, users may log in at any time to view or download data.

-Deb Marsh, Crop and Soil Sciences



Will Corsi, AgWeatherNet technical coordinator, near a recording station.

Toxin Tolerance

The endangered pygmy rabbit subsists almost entirely on sagebrush, which is avoided by most herbivores because it contains toxic levels of terpenes. Terpenes, compounds produced by plants, are believed to be a defense mechanism against munching herbivores. Understanding such adaptations for tolerance to toxic plants is central to understanding plant-animal interaction – that’s why associate professor of natural resource sciences Lisa A. Shipley focused on conducting experiments, learning field techniques, and sharing insights and information with other researchers interested in the same topic during her sabbatical.

Shipley spent the first six months of her leave in Australia, where ancient, infertile soils give rise to communities of plants with particularly high levels of diverse toxins. As a result, most arboreal herbivores there have adapted to eating toxic plants such as eucalyptus. Working primarily in Bill Foley’s lab at Australian National University, Canberra, Shipley learned that specialist

animals do indeed have a better ability to process and detoxify terpenes.

Once she returned to WSU, Shipley applied what she learned in Australia to her pygmy rabbit research. Drawing on her field experience, she collected pygmy and cottontail rabbits for captive work. Feeding trials conducted on the animals revealed that the pygmy rabbit can subsist exclusively on sagebrush, even if only for a short time.

“The pygmy rabbit is a bit of an enigma,” she said, “because it’s the only known mammal that can survive on this diet. We want to find out how.” Although the biological reason remains unknown, Shipley’s research is zeroing in on the answer.

–Phil Cable, Marketing, News, and Educational Communications



Natural resource scientists Rod Sayler and Lisa Shipley holding pygmy rabbits.

For more information about pygmy rabbit research, watch this short video:
<http://tinyurl.com/26so87>

WSU Extension Offers Watershed Stewardship Training

WSU Extension’s Watershed Stewardship Training Program begins March 28. The program is now accepting applications for the course, which runs through May 16. Sessions are held Fridays from 9 a.m. to 4 p.m. in Renton, with three field trips on Saturdays.

WSU Extension Watershed Stewards is a group of nearly 300 community-based volunteers who teach youth and adults how to become better stewards of Washington’s environment. WSU experts train stewards in salmon recovery efforts and how to get involved; hands-on site restoration skills including invasive plant removal techniques and provide examples of low-impact development strategies specific to the region.

In exchange for over 70 hours of classroom and field training, volunteers commit to giving 60 hours of their time to a stewardship project of their choice.

Watershed Stewards make a difference by leading stream clean-up efforts with homeowners association groups, teaching water conservation and stewardship to Girl Scouts and other youth groups, volunteering with one of Watershed Stewards partnering organizations as a leader or educator, and by participating in opportunities available at WSU Extension events, creating their own projects, and working with municipal governments.

Visit the Extension Watershed Stewards Web site to see spotlights on current steward projects, learn more about volunteer opportunities and to apply for the program. The application deadline is February 29th. For more information and an application, please contact Tara Zimmerman at (206) 205-3203 or tara.zimmerman@kingcounty.gov. The application is also available online: <http://www.king.wsu.edu/enviro/index.htm>.



The Pacific Northwest Watershed (outlined in yellow in the map) is home to five species of salmon, which have long been at the heart of the culture and livelihood of coastal dwellers.

Leave a Reply

You must be [logged in](#) to post a comment.

[CONTACT](#)

[DIRECTORY](#)

[LOCATIONS](#)

ABOUT

[Executive Leadership](#)

[CAHNRS](#)

[Administration](#)

[Locations](#)

[Departments](#)

[Latest News](#)

[Learn About](#)

[CAHNRS](#) ▶

ACADEMICS

[Degrees](#)

[Graduate](#)

[Studies](#)

[Scholarships](#)

[Internships](#)

[Careers & Clubs](#)

[Visit Academics](#) ▶

RESEARCH

[Centers &](#)

[Facilities](#)

[Grant Resources](#)

[Intellectual](#)

[Property](#)

[Weekly](#)

[Published](#)

[Research](#)

[Safety](#)

[Visit Research](#) ▶

EXTENSION

[About Extension](#)

[Programs](#)

[Publications](#)

[Locations](#)

[Impacts](#)

[Visit Extension](#) ▶

ALUMNI

[Where to Give](#)

[Ways to Give](#)

[Scholarship](#)

[Donor Profiles](#)

[ReConnect](#)

[Magazine](#)

[Connections](#)

[Magazine](#)

[Archive](#)

[Visit Alumni](#) ▶

FACULTY & STAFF

[Quick Links](#)

[Business](#)

[Services](#)

[Budget &](#)

[Finance Unit](#)

[Civil Rights](#)

[Compliance](#)

[Strategic](#)

[Planning](#)

[Visit Faculty & Staff](#)

▶