SHARPSHOOTER
OREGON SOCIETY OF SOIL SCIENTISTS

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What's Inside This Issue:

PRESIDENT'S MESSAGE

by Josh Owens

Hello everyone, the OSSS Klamath County Summer Tour, August 5th & 6th, is quickly approaching and we have many more details to share with you. Klamath County is really big so we can't cover everything, but we have a lot of great things lined up along the Sprague River, Agency/Upper Klamath Lake, Fort Klamath, Klamath Marsh, and Miller Lake. Please register for the tour by filling out and sending in the registration form below, or by going online to www.oregonsoils.org.

Location:	Sun Mountain Ranch 57715 Crater Lake Hwy (Hwy 62) Fort Klamath, OR
Registration Fee:	$50/person

Sun Mountain Ranch is about 5 miles north of Fort Klamath. The ranch house has 4 bathrooms, sleeps 15, has a good size kitchen, and you are welcome to stay as part of the tour registration fee. It is on 280 acres with Annie Creek running through it, so you can camp out if you prefer. For more lodging options see the tour details after the itinerary.

To keep costs down we will be carpooling/caravanning for the Friday and Saturday tour transport. Drivers will be compensated for fuel expenses. If you are willing to provide transportation for the tour please contact Cory at pastpresident@oregonsoils.org and let her know how many passengers you can accommodate.

Chris Gebauer, Soil Survey Project Leader with the NRCS, and Michael Hughes, Fluvial Geomorphologist with the Klamath Tribes (and soon to be Director of Environmental Sciences and Asst. Professor in the Dept of Natural Sciences at the Oregon Institute of Technology) will be showing us around for most of the tour. Here are the details.

Pre-Tour-Thursday, August 4th: Tour participants and guests are welcome to Sun Mountain Ranch anytime after 4:00 p.m. Snacks and drinks hosted by Klamath Falls NRCS employees at 6:00 pm at Sun Mountain Ranch

Friday, August 5th

9:00 to 9:15 Meet in Chiloquin, Location TBD (Chiloquin is 30 minutes from Sun Mountain Ranch)

9:45 to 10:00 Sprague Valley Overlook – What do we need to know about a river to restore it? Meander cutoffs and channel change analysis using LiDAR and aerial imagery.

10:30 to 11:15 Yainix Ranch – Riparian wetland and vegetation recovery

11:45 to 12:15 Beatty Gap Overlook - What do we need to know about a river to restore it? Landscape history and fluvial geomorphology interpretation

13:00 to 14:00 Chiloquin - Lunch on your own

14:15 to 15:45 Wood River Wetland / Agency Ranch / Upper Klamath NWR – Emergent wetland restoration in peat soils

16:30 to 17:00 Hoxie Soil – Humic Cryaquepts; meadow near the Lost Creek Trail; influence of diatomaceous materials on soil morphology and physical properties.

18:00 Return to Sun Mountain Ranch, catered dinner

Saturday, August 6th
We hope that you will join us to look at these cool and unique soils, but you are welcome to go check out other parts of the county on your own. There is a list of other attractions below. (If you are planning on traveling north directly after the tour you may want to drive separately.)

9:00 to 10:00 Fort Klamath Museum, History of Klamath County by Todd Kepple, Manager, Klamath County Museum

11:00 to 11:30 Chinchallo Soil (Typic Cryaquents) at Klamath Marsh National Wildlife Refuge. Using iris tubes and piezometers in soil survey.

12:15 to 12:45 Chemult – Lunch on your own

13:15 to 14:00 Castlecrest (Taxadjunct) Soil (Andic Haplocryods) at Mount Thielsen Wilderness. The first mapped Spodosols in the pumice zone. The road to this stop is a little rough and steep, 15-minute uphill walk required.

15:30 Return to Sun Mountain Ranch – Kick back and relax; you are welcome to stay until Sunday afternoon. Crater Lake is only 20 miles away. Meals on your own, kitchen available.

Tour details:

If you would like to stay with us at Sun Mountain Ranch, and we hope that you will, please coordinate with Cory at pastpresident@oregonsoils.org and let her know if you are planning on staying in the house or camping on the property, or if you are willing to camp if the house fills up. It can get pretty cold at night, no campfires allowed, cook stoves ok.

Other lodging options include:
Jo's Motel in Fort Klamath (josmotel.com) has rooms and camping;, Collier Memorial State Park just off Hwy 97 is 20 minutes away and has camping on a first come first serve basis; Klamath Falls is about 40 minutes to the south and has a number of hotel options.

There are not many restaurant or grocer options, so come prepared. There is a small grocer and deli in Fort Klamath at Jo's Motel.

It has been a wet year in Klamath Falls so the mosquitoes might be hanging on a little longer. If you don't like getting bit, bring repellant and wear long sleeves/pants.

Other things to do:

- Hiking in wilderness areas: Sky Lakes, Mountain Lakes, and Mt. Thielsen
- Amazing Fishing on the Williamson River
- Canoe/kayak local lakes and rivers, The Wood River is a popular kayak destination and Upper Klamath NWR has a kayak trail.
- Bird watching
- Lava Beds National Monument
- Collier State Park and Logging Museum
- Scenic waterfalls and hikes along the Rogue River
- Crater Lake National Park

OSSS Klamath County Summer Tour, August 5-6, 2011
Sun Mountain Ranch, Fort Klamath, OR

Mail-in registration form, or you can register and pay online at www.oregonsoils.org

Name(s) of all registrants_____

Primary contact e-mail or phone_____

Other e-mails or phones where notifications should be sent_____

_____

Will you be staying at Sun Mountain Ranch?_____
how many camping?_____
in-house?_____

Estimated Arrival Time_____

Registration Fee: Total Registrants_____x $50 each =_____

Please make checks payable to Oregon Society of Soil Scientists and mail to:

Oregon Society of Soil Scientists
P.O. Box 2382
Corvallis, OR 97339

Oregon Society of Soil Scientists
Klamath Summer Tour, August Friday 5th & Saturday 6th 2011
Sun Mountain Ranch, Fort Klamath, OR

Join us as we traipse about Klamath County and learn about: restoration in the Sprague River, peat wetlands adjacent Agency Lake, diatomaceous materials in meadows and marshes, Klamath County history, and a soil in the Mt. Thielsen Wilderness Area that is not to be missed!

Registration is $50/person and includes camping/lodging at Sun Mountain Ranch from Thursday evening to Sunday afternoon, and dinner on Friday. The tour will finish Saturday afternoon so you can spend time relaxing or exploring. More details and register online at www.oregonsoils.org

WESTSIDE NOTES

by Cameron Bergen

A benchmark year for a benchmark soil

Brogan Rabe with Jory soil in the Starker Forest, Benton County, Oregon.

Thanks to the combined efforts of OSSS members and soil enthusiasts, the Fine, mixed, active, mesic Xeric Palehumults, a.k.a. Jory, was officially recognized by the passage of House Concurrent Resolution 3 as the state soil of Oregon. The nearly two decades-long campaign was finally resolved on May 23, 2011 when the Senate voted 18 in favor and 12 against to give the soil official status. (To see how your representative, voted go to http://gov.oregonlive.com/bill/2011/HCR3/)

The Natural Resources Conservation Service (NRCS), the Smithsonian Institution, and many soil advocates have long recognized Jory as being the prime candidate for state recognition. The Soil Science Society of America asked Oregon soil scientists to designate a state soil in the early 1990s. A committee of soil scientists (some reading now) after much time and deliberation reached the consensus that Jory was the perfect candidate. Several attempts over the years to gain the attention of state representatives regarding the issue unfortunately did not yield desired results, until now.

The NRCS lists Jory as a benchmark soil. A benchmark soil is a soil with: a large extent, a key position in the soil classification system, a large amount of compiled data, having special importance to one or more significant land uses, or significant ecological importance. A similar list of qualifications was used to justify Jory for state recognition. The Jory series occupies approximately 300,000 acres (4th in surface area for the state) and is found primarily in the Willamette and Umpqua Valleys. Jory is economically significant, supporting a large cross section of Oregon crops including Douglas-fir, Christmas trees, filberts, berry crops, grass, wheat, and grapes. Ecologically, Jory soils function as a filter for our water resources and by all indications will play an important role in the mitigation of the increase of carbon dioxide in the atmosphere.

In addition to having demonstrated economic and ecologic relevance, Jory was shown to have educational value as well. Adding to testimony from Scott Burns and Jay Noller, this point was made clear by Kaelyn and Brogan Rabe. Wearing T-shirts dyed with Jory (5YR 4/4 dry), Kaelyn described her blue ribbon science fair project “soil as the earth’s skin,” concluding that “learning about soil is important so we can manage our resources properly.” Brogan’s testimony described a plant/soil interaction project he had completed and his personal soil anecdotes brought smiles to the room. The case was made, that by garnering state recognition, Jory would be added to the Oregon Blue Book, the official state directory and fact book, a tool commonly used by primary and secondary educators to develop course material. Inclusion in the book will result in a diverse number of educational opportunities for soil outreach.

Brian Rabe, a member of the original State Soil Committee, brought a concerted effort to the process and reached out to the OSSS community to rally support for the measure. During his testimony, Brian helped to connect representatives to the soil by pointing out that all of their districts have at least a little bit of Jory. In his testimony, Scott Burns connected the entire state to Jory. Scott described Jory as a symbol of unity for Oregon,

referring to the soil formation process. Jory parent material originated on the east side of the state and was transported and weathered on the west side, a (geologic) process connecting east and west. Finally, Richard Page was present to testify to the historical nature of the soil's name. He is a 5th generation Oregonian and descendent of James Jory, the 1847 settler from Cornwall, UK. Richard described the family history and concluded that the Jory name is symbolic of the pioneering spirit of Oregon. All told, the sincere and articulate efforts of dedicated educators and soil enthusiasts helped to convince the Seventy-sixth Legislative Assembly of Oregon to designate Jory soil as the official soil of the State of Oregon.

A special thanks to Representative Mitch Greenlick of Portland for sponsoring the Measure. Additional thanks to Scott Burns; Jay Noller; Brian, Kaelyn and Brogan Rabe; and Richard Page for taking time to provide both written and spoken testimony in favor of recognizing Jory as Oregon's official state soil. And thanks to all the OSSS members who took the time to contact their representative to demonstrate support for the resolution.
Here are three other news links to the State Soil:

http://www.oregonlive.com/politics/index.ssf/2011/05/jory_soil_not_just_any_dirt_is.html
http://www.gazettetimes.com/news/opinion/article_cead3a30-9fba-11e0-8de2-001cc4c002e0.html
http://www.opb.org/thinkoutloud/shows/live-salem-0527/

EASTSIDE NOTES

by Sarah Jane Hash

Individual competition in a wet pit at the 2011 National Collegiate Soil Judging Contest.

Oregon State University hosted the 51st Annual National Collegiate Soil Judging Contest in central Oregon April 25-30, 2011. The annual gathering, hosted by a different university each year, brings the top three teams from each of the regional contests together to face off for the national trophy--a traveling sharpshooter--and bragging rights as the nation's best soil judgers. Over 100 college students from 21 colleges and universities traveled to Bend to attend this year's competition. Most teams arrived on Monday, and then visited 18 practice pits around the region from Tuesday to Thursday. They were exposed to a wide variety of soil environs, from eolian-covered volcanic tuffs near Terrebonne to outwash sands and gravels mixed with Mazama ash deposits near Sunriver. Most of the students had never seen Andisols before. Many come from east-coast schools where older, well-developed soils and finer textures dominate. On Tuesday night, Dr. Scott Burns (Portland State University) gave a phenomenal overview lecture on the geology and soilscapes of Oregon (with a little bit of terroir tossed in), and did a great job of setting the stage for the week's activities. Wednesday night's banquet brought all the teams together for good food, conversation, and door prizes donated by local businesses. Cory Owens (NRCS Resource Soil Scientist and past OSSS president) made an appearance at the banquet to talk about potential career tracks with NRCS and other government agencies, and also to announce that the highest-scoring, non-graduating individual would receive a summer internship in the NRCS soil survey office of their choice--an amazing opportunity!

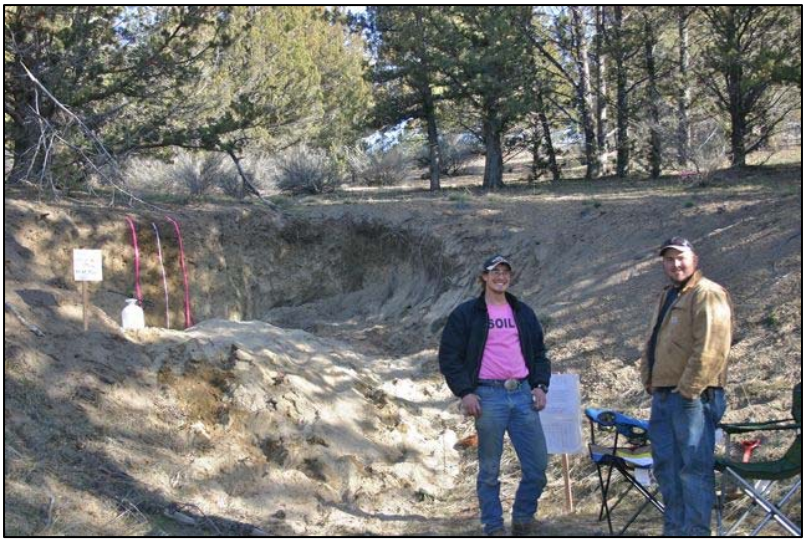
Brrrrr! Snowy day for the individual competition in Sunriver.

Virginia Tech soil judgers hard at work on team competition day.

Team competition at Rock Springs Ranch.

After three days of collaborative learning and field practice, the competition began on Friday. The competition had two parts, individual and team. Competitors had to describe the soil profiles in detail, classify the soil, and make interpretations about use and suitability. Spring weather in central Oregon can be quite unpredictable, and Friday's individual competition brought frigid temperatures, snow showers, and collapsing pit faces. Thankfully, good spirits prevailed, aided by warming fires and hot food. Saturday brought warmer temperatures and sunny skies for the team competition at Rock Springs Ranch northwest of Bend. Final results: Individual Competition - 1st place: Brandon Smith, Auburn University; 2nd place: Amanda Padula, University of Rhode Island; 3rd place: Mike Buckles, University of Rhode Island. Team competition - 1st place: Delaware Valley College; 2nd place: West Virginia University; 3rd place: Auburn University. Overall Team rankings (combined scores from individual and team competitions) - 1st place: University of Rhode Island; 2nd place: Auburn University; 3rd place: University of Wisconsin - Platteville. Other participating schools were: Cal Poly - San Luis Obispo, Clemson University, Iowa State, Purdue, University of Arkansas, Utah State, Virginia Tech, Oklahoma State, Northern Illinois, Clemson, University of Tennessee, South Dakota State, University of Nebraska, North Carolina State, Penn State, Texas A&M, and Kansas State.

Cal Poly student poses in front of one of the team competition profiles.



Everyone loves a man in pink!

Mmmmm! Texturing is tasty!

Ron Reuter, Jay Noller, and Will Austin spent several weeks finding, describing, and classifying pits for the week-long practice and competition. Bend-area consultant Steve Wert was instrumental in helping locate pit sites. The Oregon State University Soil Judging team members served as pit monitors and facilitated many aspects of the competition. Other OSU faculty, students and alumni contributed time and energy to make the gathering a big success. Dr. Steve Cattle, a professor from the University of Sydney in Australia, was on hand to observe and learn about running the contest so he can potentially start a national soils contest in his home country. In the end, the goal is to provide an educational, enjoyable, and professionally enriching experience for the visiting students. OSU-Cascades professor Ron Reuter said it well: "The visiting students, coaches, and assistants experienced, perhaps for both the first and last time, the young, dynamic, and variable soilscapes of Central Oregon. Our hope is that they take home a lifetime experience and become better soil scientists because of their experiences here." Thanks to everyone who contributed to a successful competition!

DATES TO REMEMBER

July 27-30, 2011: California Forest Soils Council Field Tour – Mt. Shasta City, CA. Visit their web page for the latest information: http://www.caforestsoils.org/summer-field-tour/

August 5-6, 2011: Oregon Society of Soil Scientists 2011 Summer Tour: Klamath Falls Area. For the latest information visit the OSSS web site at: http://www.oregonsoils.org/?page_id=5

August 16-18, 2011: Northwest Forest Soils Council Summer Field Tour: "Rapid Watershed Assessment Based on Soil Information." Meadow Creek Watershed, Southwest of LaGrande, OR. Contact Shannon.berch@gov.bc.ca or visit http://www.oregonsoils.org/?p=619 for more information

September 15-16, 2011: Washington Society of Professional Soil Scientists 2011 Summer Tour: Ephrata, Washington. Visit their web page for the latest information: http://www.ieway.com/wspss/wspss_events.html

October 16-19, 2011: ASA-CSSA-SSSA 2011 International Annual Meeting: "Fundamental for Life: Soil, Crop, & Environmental Sciences," San Antonio, TX. Visit their meetings page for the latest information: https://www.soils.org/meetings

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Remember all articles submitted to the *Sharpshooter* can be emailed to the Sharpshooter editor at e2horn@gmail.com in most any text, http, or word processing format. Pictures are best in 300 dpi jpg format.

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