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PRESIDENT'S MESSAGE

by Josh Owens

Hello, OSSS Members!

My favorite season in the Willamette Valley has always been summer, especially because of all the great tastes and smells that can be found. Nothing reminds me of home more than the taste of a ripe boysenberry (I especially like to make pies out of them), or the smell of hay being cut, wheat being harvested, and even manure being spread. But what I like the most is that, although I have lived in this valley for most of my life, every year there are new sensations to be discovered. For the OSSS, summer involved a two day field trip to Klamath County with about two dozen participants, and now we are starting the process of becoming a fully incorporated non-profit and tax-exempt organization. There are many more details inside this issue.

As for what is to come, mark February 23 and 24, 2012 on your calendars

for the OSSS winter meeting in Portland, which is really going to be the Soil Water Conservation Society's Soil Quality Workshop, conceived and organized by Teresa Matteson of the Benton SWCD. The OSSS will help plan and coordinate some of the activities, and possibly have some breakout sessions tailored to OSSS members, but for the most part this will just be a great opportunity to share all of your awesome soil skills and meet other people dedicated to conserving our soil resources. More details will follow in the next Sharpshooter and we will send out a notice once registration opens.

The OSSS winter meeting is also when we elect new Board members and this year we will be looking for people to fill the Westside Director, Secretary, and Vice President positions. Serving as a board member is a great way for early and mid career people to get valuable leadership and networking experience, and for late career people to share the experience they have gained. Having people from a wide range of backgrounds serving on the Board makes us a stronger organization so I hope you will consider serving. Both the Westside Director and Secretary are two year terms. The Westside Director acts as a liaison between our membership in Western Oregon and the Board, and contributes articles to the Sharpshooter. The Secretary is important for the business side of running the organization and maintaining records. If you become Vice President for another year. This is a three year commitment, and the middle year is when you will be doing the most work, which includes running the day to day business of the OSSS, and planning the Summer Tour and Winter Meeting. If you are thinking about running for one of these positions and would like more information please contact the current board members. Contact information is available on the last page, or online at <u>www.oregonsoils.org</u>

I hope to see you at the Winter Meeting-Soil Quality rules!!

WESTSIDE NOTES

by James Cassidy

Onward and Upward!!! — OSU Introductory Soil Science Class goes BIG TIME!!!

For the past ten-plus years, Oregon State University's Department of Crop and Soil Science has offered two introductory soil science courses to undergraduate students – CSS 205 and CSS 305. A merger is underway combining these two courses into one larger course with expected enrollment to top out at about 200 students by winter term. Soil Science is on the rise as many disciplines continue to realize what we as soil scientists have known all along – IT'S ALL ABOUT SOIL!!!!

Though these two classes were originally designed to serve separate populations, over the past six years the course objectives and mode of delivery have become increasingly similar over time (not in small part because they both have been taught by the same instructor for the past five years – guess who that might be?). The complexities of managing two separate courses with overlapping schedules, equipment, and lab space had become quite burdensome to the department and confusing to students and so, after much discussion, we've decided to merge the two classes into one course and offer the new class year-round – fall, winter, and spring terms. This will simplify our teaching schedule, allow us to use resources more efficiently, and provide a more elegant delivery of the material.

Historically, CSS 205 was designed for non-majors and satisfied the Science Baccalaureate Core requirement for undergraduates seeking a degree from OSU. As such, it drew from a very broad spectrum of majors – from Apparel Design and Music majors, to Anthropology and Business. A very popular class (always full), the class has served as a valuable recruitment tool attracting some of our best students. Over the seven years that I have taught the class, we have seen at least half a dozen students change their majors to Soil Science and dozens more add a Soil Science minor. Surprising and unlikely major switches from Music, Philosophy, Dance, Art/New Media, Math, History, and Anthropology have added exciting new perspectives to the discipline. The value of tapping this diverse market of students cannot be overstated.

The other course, CSS 305, has served in one form or another as the boiler-plate, introductory class for decades and is designed for students receiving a degree in which an introductory soils class is required for their Program of Study. CSS 305 originally targeted those seeking a crop and soils degree and so, the information presented catered to those objectives and outcomes. However, over the years, a much broader environmental soil science perspective has emerged and the course has changed to include a wider swath of subject areas including: nutrient and energy cycling, pollution, mitigation and reclamation, human health, sustainability, wild-land management, and more. Over the past seven years that I have been teaching the class (and for at least a decade before my time), we have seen an increasing diversity of students and majors taking this class. Just this last winter term, 25 different majors were represented in a class of nearly 100 students and the trend seems likely to continue along this trajectory. The increasing diversity of students and majors served, a growing understanding of the roll soils play in so many environmental issues and academic disciplines, important student recruitment opportunities, and ever-increasing enrollment numbers all played a part in the decision to combine the courses and streamline our efforts to improve the service to our students and the state. The new course will retain the CSS 205 designator and the Bacc-core status that comes along with it, but will also retain much of the rigor and learning objectives of the longer-running CSS 305 course.

The effort required to pull-off such a merger is not trivial. We are preparing to run ten lab sections (many simultaneously), purchase all new lab equipment, schedule and train half a dozen teaching assistants, design and manufacture new apparatus and lab space. We are using and developing new electronic, on-line student evaluation systems and peer-review methods to help relieve the paper-pushing for our teaching assistants. All of this with a September 26th deadline approaching. In addition to all the new items that need to be created and retooled, my colleague Julie Pett-Ridge and I are taking this opportunity to implement all the little changes and improvements that we have wanted to make to the class but never had the time. Frankly, it's been a blast to be involved in such an undertaking; we are committed to designing a class that maintains the high standard of scientific rigor the class has been known for and still be accessible to students coming from a non-scientific background – a high-wire act to be sure. This class is going to be better than ever and we are going to be turning

on and turning out more interested, interesting, excited students than ever who understand how important this most fundamental resource is to our future. Chalk one up for soil!!!

EASTSIDE NOTES

2011 OSSS Klamath Basin Summer Tour

by Sarah Jane Hash and Ed Horn

The 2011 OSSS Summer Field Tour was held August 5 and 6 in Klamath County. President Josh Owens and past president Cory did an outstanding job of making sure the tour participants were well-fed, well-housed, and well-educated by the many local soils experts who gave their personal time to lead and teach the group. The tour weekend kicked off on Thursday evening at Sun Mountain Ranch as old and new friends gathered for Mexican food and margaritas, generously prepared and delivered by Klamath County NRCS staff. Later in the evening, a few folks braved the mosquitoes to lounge and chat on the front porch while cribbage, karaoke, and hula-hooping contests dominated the indoor social activities.

Saturday morning, the group gathered at Chiloquin High School to get an overview of land use and fluvial geomorphology in the Sprague River Basin from Michael Hughes (Director of Environmental Sciences/Assistant Professor, Department of Natural Sciences, Oregon Institute of Technology).



Stop 1 – Sprague River Dam Removal – From the high school parking lot, the group walked up to look at a reach of the Sprague River in Chiloquin Canyon. This high-gradient reach of the river (about 0.1%) was dammed by the Bureau of Indian Affairs in 1914 for developing irrigated agriculture. A fish ladder was installed but was not functional in passing the now endangered Lost River and shortnose suckers and historically, salmon. The dam was removed in 2008 to allow sucker passage to upstream spawning areas. Oregon State University, the Klamath Tribes, and USGS are monitoring sediment transport and changes in bathymetry (underwater topography), but the watershed response to the dam removal has been less dramatic than expected. Unexpected consequences of the dam removal are logs trapped behind the dam that were buried in the sediments. Now exposed, they are free to float down the river and can be seen strewn about the river

Stop 1 - Michael Hughes talks about channel change after the Sprague River dam removal.

channel (see stop 1 photo). We were impressed with how natural everything looked. It is hard to tell that there was ever a dam present at this location. Vegetation is being monitored to document what is coming back after exposing the inundation area. The initial response was for the alluvial terraces to dry out and for invasive grasses to colonize the area.

Stop 2 – Drew's Road Overlook – The group moved on to the Drew's Road overlook to talk about channel processes in the lower-gradient (0.03%) portion of the Sprague River and how these processes are influenced by local geology. Uplifted diatomaceous lacustrine mudstone is exposed in the road cut-bank at the overlook. As a field identification aid, this diatomaceous mudstone is soft and, when dry, will readily stick to your tongue as opposed to ash or pumice, which will not. This rock, which also underlies the Sprague River Valley, crumbles when dry but is quite resistant to erosion and water percolation when saturated. As a result, the river has a higher width-to-depth ratio than expected. The resistant bed material also inhibits growth of native riparian vegetation and induces the stream to avulse and create cut off meanders as opposed to incising for channel adjustment. Restoration efforts have not always recognized these characteristics as a natural part of the unique geomorphic environment. Note the cutoff meander in the river channel below the hill slope (see stop 2 photo). Cutoff meander creation was at



Stop 2 - Drew's Road overlook: James Cassidy tries the tongue and bite test on a sample of local diatomaceous lacustrine

its highest level in the 1940s possibly as a means of adjusting to the increasing agricultural disturbance happening in the valley at that time.

Stop 3 – Yainix Ranch – The ranch owners Taylor and Becky Hyde and family were gracious enough to let us lunch along the banks of the Sycan River while cajoling with their goats, hogs, dogs, cats, and a vocal group of cows that got separated from the herd. Discussions continued. Listing of suckers and salmon has strained relationships between Tribes, fisherman, farmers and ranchers, and federal regulatory agencies. The Yainix owners, agencies and Tribes agreed to a multi-party grazing management and monitoring strategy designed by Sustainable Northwest and the National Riparian Service Team to restore Proper Functioning Condition (PFC) to the river. Unique details of a conservation easement use investor funds to allow the Hydes to graze sustainable



Stop 3 – Sycan River channel and Yainix Ranch: riparian vegetation recovery after grazing modification. Thistles always do well.

numbers of cattle and implement riparian and wetland restoration plans while maintaining financial solvency. The greenline method of riparian monitoring is one of the tools being used to determine ecological stability. The monitoring is showing that greenline stability rises and falls depending on if the system is aggrading or degrading. The model emerging to demonstrate a positive restoration trend from the multivear monitoring is for the greenline stability fluctuations to gradually get smaller from year to year. The Yainix Ranch is unique for another reason. It sits at the head of an alluvial fan resulting from a post-Mazama outburst flood (Sycan Outburst flood). Though the causes of the damming of the Sycan River or the breaching of the dam are unknown, researchers believe that a pyroclastic flow or heavy ash fall probably created the dam at a natural constriction. The flood inundated the Sycan and Sprague Valleys, depositing 45-350 cm of sediment in the inundation zone. The flow was about 5,775 m^3/s, or

approximately 25 times greater than the largest recorded modern flood on the Sycan. This outburst flood deposit is now seen as a high terrace deposit that flanks the younger floodplain. The deposit contributes a large amount of coarse bedload to the Sycan River, resulting in bar development and floodplain widening downstream of the confluence with the Sprague River.

Stop 4 – Wood River Wetland Restoration – After lunch, the group headed to Wood River Wetland, a 3,200acre emergent wetland restoration project on the north end of Klamath Lake. Andy Hamilton, a fisheries biologist with the BLM, led a discussion of the site history and intensive restoration efforts. Historically there were vast wetlands surrounding Agency and Upper Klamath Lake. As these wetlands were drained in the 1940s and the original deep meandering Wood River channel was diked, widened, and straightened to provide more land for farming and grazing, the buffering effect these wetlands had to filter excess nutrients from the surrounding

uplands was lost. The land was grazed extensively for 50 years and as a result, water guality of the lakes and Klamath River has declined. The tract was purchased by BLM and its partners in the early '90s and an intensive twophase restoration effort began. However, some unique challenges presented themselves. Fifty years of altered hydrology had resulted in over six feet of subsidence in the peat soils. The land surface was substantially lower than the surface of the lake, so simply reconnecting the area to the lake would result in open water-not emergent wetland. A time- and dollar-intensive effort to control water supply to the wetland began. Water is pumped out of the area in the winter when the supply is too great, and water is pumped into the area in the summer when the supply is too low. Monitoring shows that the peat soil is reaccumulating at a rapid rate (in soil scientist time frames)-about one inch a year-so the base level of the wetland should theoretically recover in



Stop 4 – Wood River Wetlands: Members old and new check out the organic matter and diatomaceous earth deposits in the Lather soil type.

about 75 years! On our stops in this area we augered out an example of the Lather soil type mapped in the surrounding wetlands, which included hemic and sapric organic materials. Organic soils are classified on how decomposed the organic component is based on percent of fiber visible after rubbing with fingers. Fibers are pieces of plant tissue in organic soils that show evidence of the cellular structure of the plants from which they are derived. The surface tier of the Lather soil has a rubbed fiber content from 10 to 30 percent, which classifies it into the hemic category (Fibric = least decomposed >75% rubbed fiber visible; Hemic = intermediate decomposition > 17% & <75% visible rubbed fiber; Sapric = most decomposed <17% visible rubbed fiber). Included with this soil type are lenses of diatomaceous sediments, thus the "Diatomaceous/Limnic" classification below. These diatomaceous materials when wetted-up produced a jelly like blob that will stick to your finger (see photo). Lather muck is classified as "Diatomaceous, euic, frigid Limnic Haplohemists."



Stop 4 – Diatomaceous lens is surrounded by organics.



Stop 4 – Diatomaceous jelly-like blob hanging from finger when wet.



Stop 4 – Hemic and Sapric organic material in the Lather series.



Stop 4 – Andy Hamilton explaining BLM's River Restoration Project, with OSSS President Josh Owens provided support.



Stop 5 - Nostoc pruniforme-Mare's Eggs

Stop 6 – Fort Klamath Historical Monument – Saturday morning started at the Fort Klamath Museum where Todd Kepple, the museum manager, gave a comprehensive history of Native

agricultural activity in the Klamath Basin. He even showed some excerpts from early soil surveys completed for the area. For some of us folks that were on the 2005 Summer Tour at Lava Beds National Monument in California, we visited Captain Jack's Stronghold. The park service interpreters did a great job immersing us in the Modoc leader, Captain Jack's plight dealing with the encroachment of white settlers onto their traditional home lands, the harassment from the Klamath Indian tribe when moved to the Klamath Indian Reservation, and in frustration, numerous clashes with the military forcibly trying to place Captain Jack and his band of Modocs on a

reservation. Anyway, it was at this location on

October 3, 1873, that Captain Jack, John

American and European settlement and

Stop 5 – Mares Egg Spring – A few of us that didn't mind the mosquitoes and getting our feet wet, waded down through the sedges to get a look at these fascinating organisms! They were located in Crane Creek close to the spring on the west side of the Wood River Valley. Mare's Eggs (Nostoc pruniforme) is a form of cyanobacteria that form colonies of small cells that combine into gelatinous spheres of various sizes (see picture). They are rare and fragile and their survival depends on constant water temperatures of 39 to 43°F, with sufficient water depth to provide the thermal layer that protects the eggs from changes in water temperature (see stop 5 photo). Look, don't touch!

The group returned to Sun Mountain Ranch and enjoyed a delicious catered barbeque dinner and socialized for the remainder of the evening.



Stop 6 – Captain Jack, John Schonchin, Black Jim, and Boston Charley gravesites at Fort Klamath Historical Monument.

Schonchin, Black Jim, and Boston Charley were hanged and buried here at the Fort Klamath site (see Stop 6 photo).

Stop 7 – East side of Klamath Marsh – After exploring the museum and the historical fort buildings, the group headed north to the Klamath Marsh National Wildlife Refuge. Chris Gebauer, NRCS Klamath Soil Survey Project Leader, and Jason Outlaw, NRCS Resource Soil Scientist, led a discussion about using IRIS tubes (IRIS stands for "Indicator of Reduction in Soils") and piezometers in soil survey (see Stop 7 photo). The discussion also provided a good review of redoximorphic processes in soils and the conditions necessary for hydric soils to develop. Many seasonally-saturated soils in the Klamath basin that are expected to behave as hydric may not be because the wet season occurs during colder months, when soil temperatures inhibit bacterial processes responsible for iron reduction. The group looked at a Chinchallo soil (loamy over ashy or ashy-pumiceous, mixed over glassy, superactive, nonacid Typic Cryaquents), which consisted of mucky silt deposits on top of diatomaceous earth over coarse Mazama ash at depth. The diatomaceous earth deposits are nearly impermeable when saturated, and water flowing into the marsh from the surrounding uplands is often held under pressure in the coarser pumice deposits beneath. When the saturated diatomaceous earth is breached as we saw when augering through them, the water wells up, filling the soil pit—in artesian fashion! Chris also talked about the unique soil classification problems with Chinchallo. It does not have enough organic matter for a

Histosol. The diatomaceous or limnic family class can only be used with Histosols, therefore the current classification of "Loamy over ashy or ashypumiceous, mixed over glassy, superactive, nonacid Typic Cryaquents" doesn't describe the diatomaceous characteristics of this soil. For the diatomaceous horizons field texturing estimates were around 10 percent clay and lab measured clay came back at 42 percent. Using lab measured clay values would be misleading. The E horizon (eluvial) designation for the diatomaceous horizons does not describe what is going on with these horizons. A more appropriate designation



Stop 7 – Jason Outlaw (left) and Chris Gebauer (right) standing near the type location of the Chinchallo series (Klamath Marsh National Wildlife Refuge).

would be a Ldi (limnic diatomaceous) or Cdi (C diatomaceous) nomenclature replacing the Eg (Eluvial gleyed) designation if allowed. A hypothetical classification to better describe the pedon might be "fine silty over sandy, diatomaceous over glassy, nonacid Limnic Cryaquept." However, adjustments to our current classification system would need to be made for this to happen.

Stop 8 – Spodosol – After leaving Klamath Marsh, Chris Gebhauer led the group up the eastern flanks of the Cascades driving into the Winema National Forest, north of Miller Lake, near the Mt. Thielsen Wilderness to look at the first Spodosol mapped in Oregon's pumice zone. The soil is mapped as a Timbercrater taxadjunct (ashy-pumiceous, amorphic Andic Haplocrvods) and occurs under a mountain hemlock/pinemat manazanita plant association. While the E and Bs horizons were thin, they were quite distinct. The Timbercrater taxadjunct has a thin Oi (organic folist) Oe (organic hemic), E (elluvial) and Bs (illuvial sespioxides) horizon within 10 to 15 centimeters of the surface. It would be easy to miss if you were not looking for it. Although this is the first mapped occurrence of a Spodosol in the pumice zone, it is believed to be of moderate extent west of the Cascade crest. Taxadjuncts are used in soil surveys when there are not enough acres of a soil to warrant setting up a new series. An established series with similar characteristics managed the same is used for the name until there are sufficient acres for a new series. The example use here is the Timbercrater taxadjunct, which is a Spodosol vs the Timbercrater series that is an Andisol classified as (ashy-pumiceous, amorphic Typic Vitricryands). Chris Gebauer provided us the



Stop 8 - Timbercrater spodosol.

following information about the genesis of Spodosols and how to distinguish them from Andisols. Spodic Horizon Genesis

- A spodic horizon is an illuvial layer with 85 percent or more spodic materials. Spodic materials contain
 illuvial active amorphous materials composed of organic matter and aluminum, with or without iron. The
 term "active" is used here to describe materials that have a high pH-dependent charge, a large surface
 area, and high water retention. In uncultivated soils the spodic horizon normally lies below an albic
 horizon.
- Spodic horizons form only in humid environments. They are commonly associated with cold or temperate climates but also can occur in hot climates.
- The types of vegetation and litter covering the surface are important in the formation of spodic horizons. In cool climates spodic horizons occur in soils that have heath vegetation (Erica and Calluna) or forest (broadleaf or coniferous) vegetation. In a mixed forest, the spodic horizon generally is more strongly expressed under certain species, such as hemlock (Tsuga Canadensis) or kauri (Agathis australis), than under other species.
- A spodic horizon forms mostly in sandy, sandy-skeletal, coarse-loamy, loamy-skeletal, coarse-silty or andic soil materials.
- Under optimum conditions, a spodic horizon can form within a few hundred years. Its biological destruction can be equally rapid, at least in some cultivated soils where lime and fertilizers are applied.
- Most spodic horizons have accumulated organic matter, aluminum, and iron. As far as its known, aluminum is always present and may be essential. Most all spodics have a maximum content of organic matter, iron, or aluminum in their upper few centimeters.

Distinctions between Spodic Horizons and Andic Soil Materials

- The central concept of andic soil materials is that of a soil developing in weatherable, silica-rich parent materials, such as volcanic ejecta or volcaniclastic materials, which have a colloidal fraction dominated by short-range-order minerals or aluminum-humus complexes.
- The dominant process in soils with andic soil materials is one of weathering and mineral transformation. Translocation within the soils and accumulation of the translocated compounds are normally minimal.
- The central concept of soils with spodic horizons is one of aluminum or aluminum and iron, and organic matter illuviating and precipitating when critical levels are reached. Some areas in Alaska, periodically receive volcanic ejecta. These areas also have climatic and vegetative conditions conducive to the formation of spodic materials. The soils in these areas of Alaska, exhibit features of both andic and spodic materials. Because it represents evidence of eluviations, the albic horizon is used to separate Andisols from Spodosols; however, a layer of volcanic ash should not be mistaken for an albic horizon.



The tour concluded here. After a group photo many folks headed home, and others staved on another night at Sun Mountain Ranch. The tour was an overwhelming success. Thanks Josh and Cory - It is a lot of work to put these events together and have them run smoothly. Josh wishes to thank Chris Gebauer (NRCS), Jason Outlaw (NRCS), and Michael Hughes (OIT) for helping plan, organize, and make presentations on the tour. Thanks to Todd Kepple (Klamath Museums Director) and Andy Hamilton (Fisheries Biologist, BLM, Klamath Falls) for coming out to give presentations. Thanks to the

2011 Summer Tour Group

Hyde Family at the Yainix Ranch for letting us look at their property, and Michael Johnson (USFWS) for letting us on to the Agency Ranch and Klamath Marsh NWRs. Last but not least, thanks goes out to Leslie Kelley and everyone else in the Klamath Falls NRCS office for providing the Thursday evening welcome dinner. Many others put in a tremendous amount of effort to make the tour fun and informative for everyone. Thanks to all the OSSS members and tour guides who contributed!

STUDENTS' CORNER

by Alicia Leytem



Report on 2011 Benno P. Warkentin Lecture

A new phenomenon in my life since I started grad school is the formation of "scientific rock stars." I am sure you are all familiar with this concept. As you spend your days reading journal article after journal article in your windowless student office, you begin to recognize that several of the papers you get excited and inspired by are written by just a handful of people. The work of these scientists may form the basis of your research or may excite you about possible careers in your future. In one way or another, they start to form into your personal dream team, and the pedestal you set them on seems to grow. It is amazing how this sense of awe can quickly turn these scientists into personal celebrities, and a chance to directly interact with one of them can send you into uncontrollable nervous twittering. This is the story about a recent visit from one of my scientific rock stars.

Three years ago a new tradition was started in the Crop and Soil Science

Department here at OSU: an annual lectureship in honor of Dr. Benno P. Warkentin. This lectureship was established with the support of Dr. Jay Noller as an opportunity for the graduate students to invite and host a visiting soil science scholar of their choice. Each year the current students nominate, vote on, and finally invite a scientist that we are excited to meet and interact with, as well as somebody we feel will provide an interesting lecture for a wide audience at OSU.

For a little background on the lectureship, let me first introduce you to the honoree. Dr. Warkentin came to OSU in 1978 to serve as the head of the Department of Soil Science, a position he held for ten years. He stepped down as department head to continue his research until his retirement in 1997. Throughout Dr. Warkentin's career his research focused on the interactions of soil and water, including physical-chemical properties of clay surfaces and their relation to soil structure, vadose zone influences on soil water quality and quantity, and later on the history of soil science and how ideas and concepts in the field changed through time. He also played an important role in the addition of Andisols as the tenth soil order in the USDA soil taxonomic system.

For the spring 2011 lecture the graduate students decided to invite Dr. Ray Weil from the University of Maryland. Dr. Weil is the co-author of "The Nature and Properties of Soil" (Brady and Weil), which is used as the primary textbook in all of our introductory soil science classes. Ryan Costello, a current master's student in our department, had met Dr. Weil at the 2010 SSSA conference – and was extremely excited to invite one of his scientific rock stars to our department. Although we thought it was a long shot – Dr. Weil agreed to come, and we excitedly began our preparations.

Dr. Weil arrived on May 23, presented a public lecture on May 24, and left on the 25th. Although it was a short visit – we had his schedule packed! On the first night we had a fantastic meet and greet at Jay Noller's art studio. I was responsible for taking Ray out for dinner before hand, my first chance to pick his brain about international development work and impress him with my scientific know-how. In the tradition of full disclosure, I should let you know that before we started to eat he opted to take a short nap on the waterfront. (*Side note to other budding scientists:* if your first opportunity to interact with one of your scientific rock stars leads to them napping – it's most likely a reflection of their busy travel schedule and not their lack of interest in you or your research. Since you'll never know whether or not this is true – I suggest you believe it.)



Graduate student dinner with Ray Weil at Gathering Together Farm. From left: Ryan Costello, guest Ray Weil, Alicia Leytem, Jed Cappellazzi, Myles Gray, John Yeo, Shannon Andrews, Lisa Gitelman, Priscilla Woolverton, and Yulin Sun.

Before his lecture the next day we took him on a tour of our teaching soil pits, and set up several meetings with interested faculty. In the afternoon Ray delivered a fantastic lecture entitled "Foot soldiers in the African green revolution: applying soil science to fight poverty and enhance food security." His lecture discussed his work with the Millennium Villages Project, an organization that is working toward reaching the millennium development goals within small village clusters throughout Africa. We held the lecture in ALS 4000 – which was completely packed to the gills with students and faculty! We finished off Ray's visit with a graduate student dinner at Gathering Together Farm – a chance for all of us to have some more personal interactions with him. It was a fantastic meal, with outstanding company, in a beautiful environment, and a great way to end his visit.

This year the graduate students have already begun to discuss whom they want to invite for the 2012 Warkentin lecture. Much of this discussion has been focused on fundraising opportunities, as funding has become much tighter and from now on we will need to raise most of the money needed to support a visiting scholar. I would love to see the Oregon soil community help support this event in the future, and I will keep you all updated on fundraising activities that you can help with as they arise.

As a final note, I wanted to let all of you know that as a result of Ray's visit, and my personal interactions with him, I am currently working on an application for a Fulbright Student Fellowship to work with the Millennium Villages Project. If I am lucky enough to receive this funding, than I will spend about a year in Tanzania working with farmers and scientists to explore the impacts of the project on soil quality, crop production, and weed suppression. With my fingers crossed I will be submitting my application within the next couple of weeks.

MEMBER SPOTLIGHT

~ Jaimee Davis ~

My name is Jaimee Davis (formerly Hammit). I was born in Columbus, Ohio, but grew up in Virginia for most of my life. Went to Virginia Tech and graduated with a B.S. degree in Crop and Soil Environmental Sciences. Shortly after graduating, I got a job with SETEC (Soil & Environmental Technology), a small company that does septic system evaluation and soil mapping contracts. I worked with them in southeastern Virginia for a couple of months on septic work before moving to South Carolina for them to work on a soil mapping contract they had with Champion (now International Paper). I mapped approximately 20,000 acres of timberland. IP was interested in identifying wet areas, areas with large gullies, soils with shallow bedrock and soils with fertility limitations – basically areas where getting the timber may be more trouble than it's worth. While with SETEC, I also assisted with some mapping on the Arnold AFB in central Tennessee. I absolutely loved mapping, but realized my real passion was wetlands and hydric soils. I moved to Illinois to work for a company called V3 Consultants. I primarily conducted wetland delineations, wrote Wetland Delineation reports and worked on the management of wetland mitigation areas, including herbiciding and conducting prescribed burns. After doing that for a couple of years, I went to work for the U.S. Army Corps of Engineers, Chicago District. After five years there, I transferred out to the Portland District and have been here for five years. I was just recently selected as the Mitigation Program Manager. I work with people who want to set up a wetland or stream mitigation banks. The Corps regulates wetlands and "waters of the U.S" under Section 404 of the Clean Water Act and these banks can serve to offset those impacts for both the Federal program and the Oregon Department of State Lands removal-fill program.



Jaimee Davis looking for hydric soil indicators in the soil along a waterway in the Ojito Wilderness in San Ysidro, NM.

My husband Kevin and I met out in the Pacific Northwest (he was living in Kirkland, WA), but like me, he grew up in the southeast in Knoxville, TN. We have been married for a little over two years and live in Beaverton. We don't have any kids yet, but are looking forward to starting a family. We have two cats and I'm continually trying to talk my husband into getting a dog. We enjoy hiking, backpacking, gardening, and going to see live music.

OSSS PAST PRESIDENT PARTICIPATES ON SSSA EDUCATION TASK FORCE!

by Cory Owens

I had the opportunity to travel to the Soil Science Society of America's national headquarters in Madison, WI this past June to participate on the Certified Professional Soil Scientist (CPSS) Education Task Force. I joined a group of people from all around the country representing soils from different sectors including consultants, academics, and government. Our task was to evaluate the current educational requirements for professional certification, which hadn't been reviewed in over ten years and bring them up-to-date. We examined core soils curriculum from universities around the country, education requirements from other professional certifications such as geologists and engineers, qualification requirements for private and federal jobs, and education requirements of states with licensing to guide our process. I am very pleased with the results that do a better job emphasizing the core soils disciplines (biology, pedology, genesis and geomorphology, physics, chemistry, fertility, etc.), leaving room for folks to meet the additional course work from a larger variety of disciplines including

engineering, agronomy, environmental sciences, etc. The new requirements will be reviewed and voted on by the National Certifying Board this October in San Antonio. I'll be at that meeting so I'll keep you posted!

INCORPORATION AND NON-PROFIT STATUS FOR THE OSSS

by Ryan Stewart

For many years the Oregon Society of Soil Scientists has existed as an informal association. This has served us well because it allows for a lot of flexibility, which is important when organizations are starting up and trying to figure out what works. Thanks to all the great leadership over the past 30+ years the OSSS has become a stable organization that serves soil scientists and other natural resources students and professionals, and has really outgrown the association structure. Therefore, this past spring the Board of Directors voted to pursue incorporation and non-profit status for the OSSS.

The main advantages of incorporating as a Non-Profit are that the OSSS can have its very own bank account that is not affiliated with a personal account, and the OSSS now has limited liability, which puts more legal protections in place for individuals involved in the organization. There are also more reporting requirements and we have to ensure that we operate in compliance with Oregon Revised Statute 65. This will be a challenge in the beginning as we work on putting by-laws and standard procedures in place, but in the end there will be more guidance for new board members to make their transfer easier, and it will also increase our institutional memory.

The application for incorporation was accepted by the Oregon Secretary of State on July 20, 2011. The Board of Directors has begun the process of revising and approving new OSSS By-laws, which will be structured to ensure the organization's legal compliance. Once the revised by-laws are approved, the Board will next apply for 501(c)3 non-profit tax exempt status with the IRS. Tax-exempt status will simplify the financial reporting requirements, allow for personal donations to be deducted, and allow the OSSS to apply for grants, if needed in the future.

This effort has been spearheaded by Ryan (Treasurer) and Josh (President) and we hope to be done before we leave the board of directors in winter 2013, it can be a long process. We are in the process of creating/revising our by-laws and we would welcome your suggestions. Stay tuned for more updates as the OSSS undergoes this organizational evolution.

DATES TO REMEMBER

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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: <u>https://www.soils.org/meetings</u>

February 23-24, 2012: Oregon Society of Soil Scientists 2012 Winter Meeting: "Soil Quality Workshop," Portland, Oregon. For the latest information visit the OSSS web site at: <u>http://www.oregonsoils.org/?page_id=5</u>

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