



VOL. XXIII, NO. 3
SUMMER 2010

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PRESIDENT'S MESSAGE

by Cory Owens



OSSS and WSPSS Tackle *Terroir*

As we gear up for the 2010 Summer Tour, ***From Volcanoes to Vineyards*** (check out the registration information in this issue!) the subject of *terroir* is the topic *de rigueur*. Like trying to find a definition of soil, *terroir* has a myriad of similar sounding definitions. My favorite so far is:

A "*terroir*" is a group of vineyards (or even vines) from the same region, belonging to a specific appellation, and sharing the same type of soil, weather conditions, grapes and wine making *savoir-faire*, which contribute to give its specific personality to the wine. (www.terrior-france.com)

If the *terroir* of a wine is its "sense of place" then I hope you will all join me in July as we explore one of Oregon and Washington's premier appellations, The Columbia Gorge American Viticulture Area (<http://www.winesnw.com/gorgehome.html>). We'll be joining up with our neighbors to the north, the Washington Society of Professional Soil Scientist, for

- Half day technical session and banquet on Thursday 7/22
- Full day field tour on Friday 7/23
- Optional, casual field visit on Saturday 7/24

Our technical session is going to be great with topics varying from "The Dirt on Columbia Fish and Wildlife" to "Vineyard Management Techniques and *Terroir* in the Northern Willamette Valley." Dr. Alan Busacca will be our keynote speaker during the banquet bringing us "Geology, Soils, and Winegrape Vineyards of the Columbia Gorge." For a full agenda see the registration information in this issue. Alan has organized Friday's comprehensive tour of the appellation looking at vineyard soils, which is sure to be interesting and fun. The optional, casual field visit on Saturday is designed for folks who want to spend a bit more time poking around a pit in an informal setting.

Registration has been extended till July 9, but act now as transportation limitations have caused us to cap registration at approximately 60 participants. There are plenty of spaces available, but get your name in! If you have any questions about registration feel free to email me at president@oregonsoils.org or call me at 541.967.5925 ext 119. I will be sending out reminders about registration as we approach the dates.

On behalf of Dan Ufnar, WSPSS President, and myself we certainly hope you will join us for what is shaping up to be a fabulous summer tour in one of the best parts of both of our states!



2010 WSPSS-OSSS Summer Tour General Announcement



From Volcanoes to Vineyards in the Scenic Columbia River Gorge



July 22 – July 24, 2010 in Hood River, Oregon
(Thursday, 1-4:30 pm followed by wine tasting and banquet at 6:00 pm; Friday, 9 am – 4 pm, Bus Transportation; and Saturday, 9 am – noon, Carpool)



Pre-registration will run May 10 through July 9, 2010

Receive 12 ARCPACS CEUs for attending Thursday-Saturday!!!

WSPSS & OSSS members: \$85

Nonmembers: \$100

Full-time students: \$50

All fees include: Catered dinner on Thursday evening at the Mt. Hood Winery and lunch on Friday, PLUS bus transportation on Friday. **LODGING IS NOT INCLUDED.**

THURSDAY, JULY 22 – MT. HOOD WINERY, HOOD RIVER, OR

2882 Van Horn Drive (4 miles south of Hood River on Hwy 35, turn left at the yellow blinking light)

11AM-12:30 PM WSPSS Business Meeting—refer to WSPSS Website for details
(<http://www.ieway.com/wspss/>)

1PM-5PM Summer Tour Technical Session

1PM-1:15PM Introductory Remarks and Welcome by WSPSS & OSSS

1:15PM-2:00PM *Developing a Site Selection GIS for Inland Grape Production*, Ian Yau, WSU Graduate Student

2:00PM-2:45PM *The Successful Vineyard: A Struggle between Vine, Soil and Climate*, Patricia A. Skinkis, Ph.D., Viticulture Extension Agent Oregon State University

2:45PM-3:00PM Break

3:00PM-3:45PM *Vineyard Management Techniques and Terroir in the Northern Willamette Valley*, Kathryn Barnard, PSU Graduate Student

3:45PM-4:00PM Break

4:00 PM-4:45PM *The Dirt on Columbia Fish and Wildlife*, Dick Wallace, NW Power and Cons. Council

4:45PM- 5:00PM Closing Remarks and Announcements

5:00PM-6:00PM Break, on your own

6:00PM-8:30PM Social Hour and Catered Dinner, Mount Hood Winery

6:00PM-6:45PM Social Hour. Mount Hood Winery wines and a local microbrew will be available by the glass to purchase, appetizers will be served

6:45PM-8:30PM Dinner and Dessert
Geology, Soils, and Winegrape Vineyards of the Columbia Gorge, Dr. Alan Busacca, Vinitas Vineyard Consultants, LLC

FRIDAY, JULY 23 – FIELD TOUR:

Join us on for a day-long field trip to examine the geology and soils of the Columbia Gorge and the terroirs of vineyards in this wonderful wine-growing region. Terroir involves the complex interplay of climate, soils, geology, and other biophysical factors that influence the character and quality of wine grapes. Our trip will take us from the high-rainfall, conifer-covered western Gorge area with its volcanic soils and cool-season white wine-grape and Pinot noir vineyards to the dry, sagebrush-covered eastern Gorge with its flood-derived and eolian soils and big red-wine grape vineyards with varieties like Cabernet Sauvignon and Barbera. Lunch will be at Maryhill Museum of Art.

The trip will depart from Mount Hood Winery at 8:00AM with stops along the Columbia Gorge AVA and the adjoining western part of the Columbia River AVA and return by 5:00PM. Motorcoach transportation, snacks, lunch, and wine tasting are included in your Summer Tour registration fee. The trip will be led by Dr. Alan Busacca, Emeritus Professor of Soils and Geology, Washington State University, and owner of Vinitas Vineyard Consultants.

SATURDAY, JULY 24 – FIELD VISIT (OPTIONAL)—POLSON'S CHERRY ORCHARD

OSSS member Dick Polson has graciously offered to host a short site visit to his newly established cherry orchard. The site visit is arranged for one last look at soils along the gorge for those of us who just didn't get enough soils on Friday. Mr. Polson will share his experiences with establishing a fruit crop along the Columbia. For those of you looking for alternatives, the Hood River area is surrounded by recreational outdoor activities; *please see suggestions and links below.*

LODGING OPTIONS:

Late July is high season for vacationers in the Columbia Gorge and hotels and campgrounds are commonly completely booked, so we strongly recommend that you make reservations early for this event.

A block of rooms is being held for WSPSS and OSSS members *for the night of July 22 only* at Sunset Motel, 2300 Cascade Avenue, Hood River, OR 97031. They are holding 5 double queen bed rooms at \$89/night plus tax and 7 single queen bed rooms at \$79/night plus tax. Call Margaret at 541-386-6322 to reserve.

Other options are:

Hood River Hotel, www.hoodriverhotel.com, 541-386-1900

Best Western Hood River Inn, www.bestwesternoregon.com, 541-386-2200

Comfort Suites, www.comfortsuites.com, 541-308-1000

Riverview Lodge, www.riverviewforyou.com, 541-386-8719

Several options for other motels exist within 20 miles of Hood River: The Dalles (~18 miles east of Hood River); Cascade Locks (~18 miles west of Hood River); Stevenson, WA (17 miles west of Hood River—crossing at Hood River or Cascade Locks).

CAMPING:

Polson's Cherry Orchard

OSSS member Dick Polson has been gracious enough to host free camping on his newly established cherry orchard. Camping would be available Thursday and Friday nights. Amenities include: an outhouse, potable water, either forest or orchard camp sites, limited access to indoor restrooms, and gas camp stove cooking allowed in safe locations. This option will be available for 15-20 tents. There is also space for a limited number of RVs. If you are interested in this option you must register with OSSS President Cory Owens by July 16, 2010 via email: president@oregonsoils.org. Registration will be first come first serve. Pack it In-Pack it Out. Thanks so much to Mr. Polson for this option.

Oregon State Parks—Viento Campground

Cost: Tent-\$17, Electrical/Water Hookup-\$20, Extra Vehicle-\$5. First-Come, First-Served; 56 Electrical & 18 Tent Only Sites.

Directions: Approximately 6 miles west of Hood River on I-84.

More Information: [VIENTO STATE PARK](#)

Oregon State Parks—Memaloose Campground

Cost: Tent-\$19, Full Hookup-\$24, Extra Vehicle-\$5. Reservations call 1-800-452-5687; 44 Electrical & 66 Tent Only Sites.

Directions: Approximately 9 miles east of Hood River and 11 miles west of The Dalles, on I-84.

More Information: [MEMALOOSE STATE PARK](#)

USFS—Wyeth Campground

Cost: \$10 per night. First-Come, First-Served, 13 total sites.

Directions: In Hood River, OR, take I-84 west 12.7 miles to Exit 51 (Wyeth). Take exit ramp to stop sign. Turn left and go less than 0.1 miles to a "T" intersection. Turn right and go 0.1 miles to campground on left.

More Information: [Columbia River Gorge National Scenic Area Forest Camping](#)

Hood River County Parks—Tucker Park

Cost: Overnight full hookup \$20, Overnight self-contained RV site (river side) \$22, Overnight self-contained RV site \$19, Overnight group Tent Site \$72, Overnight Tent Site \$18, Overnight Tent Site (river side) \$20, Extra Tent \$8, Extra Vehicle \$5; First-Come, First-Served.

Directions: About 6 miles north of Hood River, map of Hood River County Parks: [map of Hood River County Parks](#)

More Information: [Hood River County Parks Information](#)

Hood River County Parks—Tollbridge Park

Cost: Overnight full hookup \$20, Overnight self-contained RV site (river side) \$22, Overnight self-contained RV site \$19, Overnight group Tent Site \$72, Overnight Tent Site \$18, Overnight Tent Site (river side) \$20, Extra Tent \$8, Extra Vehicle \$5; Reservations (at least 3 weeks advanced warning) 541-352-5522, otherwise First-Come, First-Served.

Directions: About 16 miles north of Hood River, map of Hood River County Parks: [map of Hood River County Parks](#)

More Information: [Hood River County Parks Information](#)

RECREATIONAL OPPORTUNITIES:

The WSPSS/OSSS summer tour is an excellent opportunity to bring your family and take in the amazing range of things to do while you are in session Thursday and Friday, and on the weekend as well.

Hood River is an outdoor enthusiasts' dream, and there is a wide array of attractions and activities for the whole family within a short distance from downtown Hood River—including: windsurfing (Hood River is the self proclaimed windsurfing capitol of the world), camping, birding, scenic byways touring, hiking, skiing, biking, kayaking, wine tours, fruit picking, and many, many other recreational opportunities to explore.

To go on a self-guided tour of wineries and vineyards in the Columbia Gorge/Hood River area, visit:

<http://www.columbiagorgewine.com/> and download their winery touring map.

Hood River Chamber of Commerce, <http://www.hoodriver.org/>. The Hood River Chamber of Commerce website has an amazing set of pages with links and phone numbers: [VISITING HOOD RIVER COUNTY](#) to connect you with over thirty categories of fun things to do, from historic aircraft museums to Maryhill Art Museum to Mount Hood Scenic railroad, Hood River Saturday market, and Bonneville Dam tours.

REGISTRATION FORM – WSPSS-OSSS SUMMER TOUR

Name:

Affiliation:

Address:

City:

State:

Zip:

Phone:

Fax:

E-mail:

Registration Costs:

☐ WSPSS member: \$85.00

☐ Non-Member: \$100.00

☐ OSSS member: \$85.00

☐ Full time student: \$50.00

Submit registration form and payment by July 9, 2010.

WSPSS Members can pay by check, payable to WSPSS, by sending payment to:

Toby Rodgers, WSPSS Secretary
PO Box 247
Mount Vernon, WA 98273

OSSS members can pay by check, payable to OSSS, by sending payment to:

Summer Tour 2010
Oregon Society of Soil Scientists
P.O. Box 2383
Corvallis, OR 97339

Payment must be received with your registration to enroll you in the tour. Registration has been extended through July 9 but don't wait to register as space is limited.

Refunds: Full refunds are available up until 2 weeks prior to the Tour (July 8th, 2010). A refund of ½ the tour cost will be available if cancellation occurs between July 8th and July 22nd. If you are a WSPSS or OSSS member and you would like to donate the refund money to one of our designated scholarship funds, please let us know. If you can't make the Tour and would like to apply for a refund, WSPSS members should contact Dan Ufnar (dufnar@tss.net, or 360-236-1899) and OSSS members should contact Cory Owens (president@oregonsoils.org or 541.967.5925 ext 119).

Online Registration and Payment Available Through OSSS

Are you a WSPSS or OSSS member or a Guest interested in registering for *From Volcanoes to Vineyards* online?

Are you a WSPSS or OSSS member or a Guest interested in paying for the event through PayPal?

If you answered yes to either of those questions then you need a myOSSS account. Getting a myOSSS account is easy!

1. Select Join from www.oregonsoils.org
2. Create a username and password
3. Fill in your personal information
4. Fill in your professional information
5. If you are a WSPSS member or a Guest select to create a guest account. If you are an OSSS member select your membership status.
6. Click on submit

Congratulations! You have just created your myOSSS account.

To login to your account either go to the [myOSSS](#) page or sign in on the upper right corner of the page.

Once you login to your [myOSSS](#) account you will see:

- Your account information
- The registration form for “From Volcanoes to Vineyards”
- You will be prompted to select your membership affiliation or if you are a guest, which society you are a guest of.
- You will have the option of paying online or paying through the mail.

If you have any questions about how to create a [myOSSS](#) account or about your account please don't hesitate to contact the OSSS webmaster: osswebmaster@gmail.com or President Cory Owens (she's the webmaster!)

WESTSIDE NOTES

by Cameron Bergen

It's All About "Soil" Man – An Interview with James Cassidy

Greetings soil enthusiasts – this issue's installment of Westside Notes will have an inclusion of eastside material. Over on the eastside, in the lovely high desert hamlet of Bend, collaboration between the OSU-Cascades campus and the OSU Alumni Association is bringing OSU research scientists together with a public thirsty for knowledge. The events, known as "Science Pubs," are held monthly at the McMenumins in Bend, as well as locations in Redmond and Sisters. Open to the public, the Science Pubs offer a full menu, delicious microbrew beer, and presentations on cutting edge research ranging from catastrophic bridge failure to Oregon's growing artesian cheese industry.

Last April's Science Pubs hosted OSSS's own, once and future president, James Cassidy for a discussion on Organic Produce, Clean Soil and Local Food. James was president of OSSS from 2008 to 2009 and for the past 5 years has been an Instructor and Faculty Research Assistant in the Department of Crop and Soil Science at OSU. Additionally, James serves as the Marketing Director and Faculty Advisor for the OSU Organic Growers Club, an organization that can boast an active membership of over 600.

Interviewer: James, you became a scientist after many successful years in the music industry. Some would consider it a strange career shift. What brought you to soil?

Cassidy: As with most people in soil, I didn't come to soil as much as soil came to me or rather, became inescapable to me. Once you see truth, there is NO GOING BACK! I had been living deep within the inner workings of the media-induced-trance-machine and somehow was able to escape with my life and was lucky enough to reevaluate what I wanted to do. I instinctually thought of nature and wanted to do something that might get me outside in the sun. I chose fisheries because I remember liking to fish (or at least be floating around in boats) when I was a kid in northern Minnesota. Eventually that led me to studying freshwater quality. One day, while standing in the rain at the bank of Oak Creek (near OSU's main campus) I had the discovery that most of the rain drops were not falling in the creek and that's when it truly dawned on me, it's ALL about soil!

Interviewer: So you shifted from Fish Science to Soil Science; how did that work?

Cassidy: I started doing work as an undergraduate on contamination problems associated with Oak Creek and agriculture. Accelerated transport of surface applied nutrients, truth be told. Or rather, how liquid manure being sprayed on a field was getting into the creek. I noticed lots of vole holes that the poop water (technical term) was flowing into endlessly and thought, hmmm, that seems logical. So I ended up meeting Dr. Maria Dragila (soil physicist at OSU) and eventually she asked if I wanted to be her student – wow, lucky break #543 for me – it ended up being great fun.

Interviewer: When did you begin to dig soil as a career path?

Cassidy: After graduating, I just kept working with Dr. Dragila in the soil physics lab, making all sorts of bench-top experimental apparatus – best job I ever had; I got to do all the fun stuff and Maria did all the hard stuff (grant writing, writing papers, etc.). Really, research assistant = GREAT job. I thought I had shaken free of my rock-n-roll life until Elizabeth Sulzman asked if I would teach her Intro to Soils class as a one-off deal. I remember



James Cassidy talking DIRT at the OSU Organic Growers Club Farm near the OSU Campus in Corvallis

thinking, "I never even took an intro to soils class and now I'm supposed to teach it?" – I was terrified and thought about it for about an hour and remembered all the good things in life I had done started out scaring me – I ran back and said, "Sure, I'll do it" and remembered a flush of adrenaline running at that moment – a real rush.

Interviewer: Did your career as a rock star prepare you being a soil scientist?

Cassidy: Well, I don't know about scientist, but teaching is similar in the good ways (and not so much in the bad ways!). Face it, good teaching is a performance. Think of your favorite teachers throughout your life, I bet they had a bit of the thespian in their delivery. I mean, for me, standing up in front of 80-100 students is cake! I love to connect with an audience and teaching soils is perfect! Most people know nothing about it so every day you are blowing minds! There is so much to tell. Teaching is storytelling really, and I was doing that long before being in the music business. Actually, I was a pretty poor student as a kid and made my way socially by being funny, hanging out after art class, playing music, and becoming a good story teller and conversationalist.

Interviewer: If you could say only one word or phrase about soil, what would it be?

Cassidy: SOIL IS TRUTH!!! You can't escape the reality, the fact that everything that we know and love comes from AND WILL eventually go back to it. It is so fundamental that we can't even see it; it's like the fish in a tank that doesn't know about water. It is a FACT. We are COMPLETELY DEPENDANT on soil for our DAILY SURVIVAL, not just as a people but individually – every beat of our heart, RIGHT NOW!, is an awe-inspiring cosmic expression of energy that was captured from the sun by a natural system in which soil is at the core. We are MADE of soil, every blood cell in your body, RIGHT NOW (!), has a bit of iron in it that came from rocks mediated by soil. Every atom in your being has been through the soil system BILLIONS of times over! The soil is inside of you RIGHT NOW! And it is an indisputable FACT: you will return to the soil – sooner, or later!!! Now that's TRUTH!!!

Interviewer: There are many ways humans are connected to soil; in your experience what are the connections that seem to surprise people the most?

Cassidy: I think most students or audiences are surprised to find that they never knew any of this stuff. No one ever told them this intensely, fundamental, and deeply personal and meaningful knowledge. Once you understand how the system works, suddenly – you belong! I mean, what other science can put the whole of you being into perspective like soil? Nothing else that I have found helps explain so much of our day-to-day existence. Let alone the big questions! How about the origins of life on earth mayhap? The [Sweet Crystal Hypothesis](#) (look it up!) is a fun conversation starter in the classroom or at a cocktail party! It states that the earliest proto-biological molecules may have been formed on the edges of clay crystals! A whole new take on Mother Earth, babe!

Interviewer: Is there a connection between soils and global super powers? Is there a crisis? What is it?



The answer according to James is – Add Organic Matter!

Cassidy: I love to show my students a soil map of the world after they learn about important agricultural soils like Mollisols and make the connection between political power and soil distribution. I posit the reason that there was a cold war – two super-powers at the brink – is because that is where the Mollisols are! Soil is a battery that stores energy from the sun that can be converted to power through agriculture. That is WHY we are a super power – the power is the soil and soil is the power of civilization. Look at the most troubled places on the planet, look at the soils. Here is the scary part—the whole planet is losing productive soil at a rate of about 1 hectare every 6 seconds and the population is rising at about 2-3 people per second – you don't have to be a mathematician to figure that one out, or like my father once said to me, "You don't need a degree in fisheries to know that fish can't climb ladders..." We are IN THE MIDDLE of a global soil crisis! Everybody needs to get hip and start growing some food and be a part of it. The answer is ADD ORGANIC MATTER!!! Organic matter is carbon and energy, the two things the soil needs. All those billions of creatures in a pinch need carbon from the atmosphere and energy from the sun – just like we do. Hmmm, just like we do, hmmm; wait, WE ARE SOIL ORGANISMS!

Interviewer: What else would you say about soil, in sound bite form?

Cassidy: Soil IS habitat - by far the most diverse habitat on the planet. As all soil scientists know (but not many other people) a single pinch of soil contains over 1 billion living organisms – and man, there are a lot of pinches out there! Soil is a 4-dimensional complex habitat, a self-organized natural body – a living thing. Once you realize that, you can't un-know it.

Interviewer: Humans are also diverse habitat; is that just an example of a fractal universe, evidence of our soil parent material?

Cassidy: By dry weight, 80% of our bodies aren't even us! We are a collection, a commune, a community of organisms ourselves. Now that's a trip!

Interviewer: You raise the point that soil organisms clearly outnumber humans. In the end, what's our role?

Cassidy: I think, even though we are having a big impact on the planet's systems, we are just bugs on the windscreen of the history of the earth. But I mean that in a good way... Does that sound too existential? It actually gives me hope – we need to realize our place. We cannot repeal the laws of nature when they become irksome, and understanding that might help us get our “thing” together. I mean, the earth has been around long before we got here and it will continue with or without us. In my class, I put up an amazing image of some bacteria with the heading, “It's their world...we just die in it!” We can hang around as long as we want; it's partly up to us.

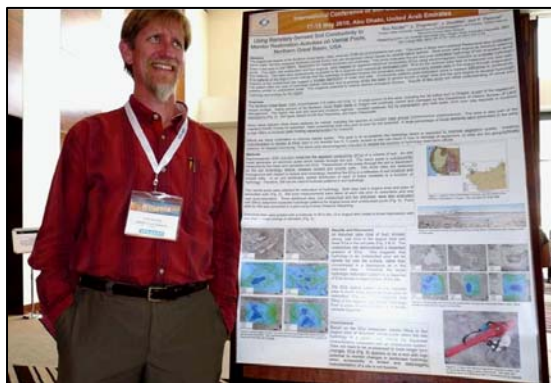
Thanks for reading folks, if you would like to learn more about soil and how your life depends on it, but don't have time for university course work, check out the OSU Organic Growers Club at http://cropandsoil.oregonstate.edu/organic_grower/. For more information on upcoming Science Pubs visit the Science Pubs website at <http://www.osucascades.edu/sciencepubs> or call 541-737-2351 or 877-678-2837 (toll free) or e-mail info@osucascades.edu. Additionally, at the Science Pub website you can view a video of [James's recent presentation - “It's All About SOIL Man!”](#) Check it out—it is very well done.

EASTSIDE NOTES

by Ron Reuter

An Abu Dhabi Diary

International Conference on Soil Classification. May 16-19, 2010. Abu Dhabi, United Arab Emirates.



Ron Reuter with his round-trip paying poster

What started out as a sort of lark landed me a trip to the Middle East for a conference that introduced the release of the Abu Dhabi Soil Survey. In the late fall of 2009, Gene Kelley (Colorado State University) sent out an email to the Soil Pedology (S5) group of the Soil Science Society of America announcing an upcoming conference in Abu Dhabi; the topic was soil classification and restoration of arid lands. The teaser was that authors of accepted papers “might” receive funding for travel.

From one of the recent Sharpshooters, you may recall the piece by Laura Dlugolecki, a recent Oregon State Univ. MS graduate, and my advisee, that had been working on using electro-magnetic induction (EM) to monitor restoration of vernal pools in central Oregon. Based on the work we had done, I submitted

an abstract. The organizers liked the abstract and let me know that they wanted a full paper, again with the teaser that accepted papers would receive travel compensation. I needed more data, since we only worked on two pools. I managed to get my hands on an older EM meter from a colleague in Corvallis that didn't use it anymore. With a fresh battery and some studying of the manual, I went out and collected a few more sets of data

at additional pools – thank goodness for a dry February, which allowed me to get out into the desert without getting stuck. With more data I made a stab at a paper and got it in by the deadline.

A few weeks later came the email letting me know the paper was accepted and that presenting authors would be reimbursed airfare, lodging, and meals. We had to book our own flights and would be reimbursed at the conference. Cost of roundtrip to Abu Dhabi International from Redmond - \$1,700. Gulp. That goes on my credit card – what if they don't come through on the refund? Or what if the Iceland volcano cancels my flight? I bit the bullet and bought the ticket. And after all that, I was only getting to present a poster, not a talk.

Left Redmond for San Francisco at 6 am on May 15. Connection to Frankfurt, Germany, left at 12:50 leaving me five hours in the airport. Worked on another student's thesis, answered long overdue emails. Eleven hours to Frankfurt on a Lufthansa 747 was interesting. The great circle route takes you right over Redmond, up over Lethbridge, Canada (spend a few days there last summer), off the coast of Greenland, in through Holland. In May on that route the sun doesn't set. Hadn't expected that. Ten o'clock the next morning (Sunday), a bumpy landing in Germany, three hours till the next flight. The passengers are all very western looking. Six hour flight to Abu Dhabi, which we circled for 30 minutes while a dust storm raged through the city; this led to some stomach tightening bumps in the air as well. Taxi to the 5-star Fairmont. Ten-thirty at night, try to sleep after getting some emails out on the hotel internet.



Abu Dhabi International Conference on Soil Classification, Day 1

Three days of conferencing. An elaborate opening ceremony with some Arabic incantations and welcomes, a nice video showing the hard work of the soil survey. Ate breakfast with some Aussies. Met a fellow from Eritrea, China, Morocco. Presentations on salinity, soil taxonomy, soil survey, proposed anhydrite criteria in Soil Taxonomy, land use in different developing and developed countries, acid sulfate soils in Southern Australia. Dinner at the Intercontinental Hotel (7-star posing as a 5-star), local entertainment, Moroccan dinner company, as well as India. More presentations, same topics. More countries, Germany

(wearing a Penn State sweatshirt), Italy, Nigeria, Senegal, Kuwait, Pakistan. Visits to the Sheik Zayed Mosque, a Abu Dhabi version of Walmart with the same Chinese imports, a couple of carpet shops, a city trip that exposed the rampant growth and impossibility of sustaining 5 million people in a desert.



Sheik Zayed Mosque – Abu Dhabi

I had planned an extra day to visit a market or two, but felt like I needed to see some soil profiles too. The survey in Abu Dhabi had been advised by Americans Mike Wilson of USDA-NRCS Lincoln and John Kelly, USDA-NRCS Raleigh (retired). They had a planned trip to the desert in search of illusive anhydrite. Anhydrite is a mineral that has CaSO_4 like gypsum, but without the H_2O . This was a necessary trip to get evidence to support the Abu Dhabi desire to get an anhydrite mineralogy family, or some sort of anhydrite subgroup into Soil Taxonomy. I weaseled my way into the trip. Participants were Drs. Shabbir Shahid and Mahmoud Adelfattah of the Abu Dhabi Environmental Agency (Shahid is from India and

Mahmoud from Egypt), the NRCS guys, Dr. Rob Fitzpatrick of CSIRO, Australia, and Peter King, Dept of State Development, Western Australia.

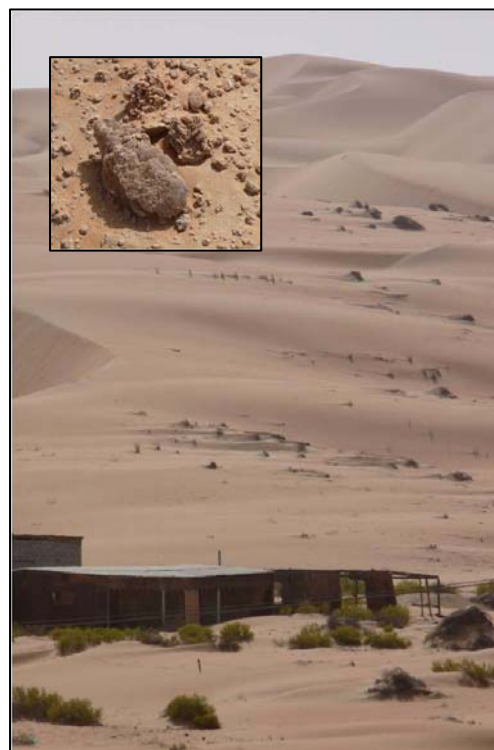
Temperature in town at 8 am was 35°C (95°F). We drove, and drove, in our agency leather-appointed Land Cruiser, until we reached a section of the coastal plain where the anhydrite was said to be hiding. Off-roading next to an oil pipeline, we trekked and hoped to not find a saline sink. At a likely spot, we dug a hole. Gypsum crystals covered the land surface. A white layer showed a glimpse of the mystery mineral. It appeared dry, yet working it in your hands the material becomes slimy and messy – thixotropic material. Temperature: 42°C (107°F). A little more driving across the plain to another pit. Thick white deposit of the anhydrite, mixed with crystalline gypsum at the lower range of the layer. Wilson took lots of samples, to be shipped back for analysis in Lincoln. Mission accomplished.



Mike Wilson (Research Soil Scientist, USDA, Lincoln, NE) and the white anhydrite layer



Coastal plain north of Abu Dhabi (inset: Gypsum crystals on the surface of the soil. There was no plant life on the coastal plain.)



Home at the base of a dune (inset: Gypsum evaporites in an interdunal area)

Soil stuff over, the visitors (Aussies and US) crammed into a compact sedan (yours truly, the junior, in the middle in the back) and drove west to the dune fields. An hour later, we stopped for snacks and a rest stop in Mezairaa, on the edge of the field of large dunes. Coca-Cola and Doritos, in the middle of the desert in a foreign land – go figure. Skirting the dunes, looking for a place to foray into the interior. A road looks promising and we make a go of it. Six inches of sand makes up the road. Our Aussie driver guns it and we crawl back to safety. Bad choice. Next road we attempt is paved. Nice macadam, excellent dunes, 45°C (113°F). A good field day temperature I'm told, beats the 51°C (124°F) days of the survey during the summer. Found an excavated area that exposed a layer of gypsum evaporates between big dunes. Where did this well paved road in the desert go? A dump. Getting back in the car we notice a large flap of rubber hanging from the tire. In 45°C (113°F) at 120 km/hr (75 mi/hr), not a good combination. After several miles we find a service station and pull in to change the tire out. Lug nuts too hot to touch. Five soil scientists required to change a tire in the desert.



A long drive back to the city as the day gets late, improving the light in the desert and on the dunes. A camel strangled by fence wire, bleached bones and dried out hide. Sand over the edge of a dune flows like molasses when pushed. Sand snakes blowing across the highway, when I see those patterns in Oregon it is snowing and -6°C (43°F). In the city and can't see it for the haze. A shower, last 5-star dinner, taxi ride to the airport. Heineken and fries with the Albanian working in Italy. Five hours waiting for the flight, every nationality imaginable is probably represented in this airport.

Seven hours in Frankfort airport, five more in San Fran, and a thirty-minute drive home to arrive at 11:45 PM May 21. Two days to recover.

The trip gets better as I forget the travel time. I get emails from my Eritrea friend asking for leads on a PhD in the States. I email the Aussies and the Albanian in Italy about whether a sabbatical there would be possible. I make the camel skeleton my computer desktop image. And oil flows unabated into the Gulf of Mexico.

CALLING ALL SOIL JUDGING ENTHUSIASTS!

In spring 2011, the 51st National Collegiate Soils Judging Competition will be held in Bend, Oregon. Join us to help recruit volunteers and fundraise to support this exciting event. Organizations, such as the Oregon Society of Soil Scientists and the Oregon Chapter of the Soil and Water Conservation Society are collaborating with Oregon State University to host a memorable experience for college student competitors from around the USA.

In preparation for the contest, teams spend four days in practice pits to get to know the local soils and the rationale behind how professional judges have described, classified and interpreted the soils. The actual two-day contest includes both individual and group judging. Practice and contest soils are pre-judged by professional soil scientists from the USDA's National Resources Conservation Service and local experts.

How can you help? Volunteer! Many and various tasks are involved to plan and implement the competition. Prior to the event, we need to arrange food and lodging for soil judging teams. Do you know of a rental property near Bend that will house a student team and advisor? Is the owner willing to donate the use of their property? At the ground level, sharpen your soil characterization skills and help pre-judge the pits.

Fundraising – we need to raise \$10,000 to host the event. To help with fundraising you can:

- Solicit businesses to support teams or components of the event
- Request donations from colleagues
- Contribute your tax-deductible donation.

Cory Owens, President of the Oregon Society of Soil Scientists has set up a web page http://www.oregonsoils.org/?page_id=418 for getting the latest information on the event and for making donations through the OSSS Pay-Pal account.



For more information, please contact Teresa Matteson, tmatteson@bentonswcd.org 541-753-7208.

DATES TO REMEMBER



July 22-24, 2010: Oregon Society of Soil Scientists and Washington Society of Professional Soil Scientists Summer Tour, Hood River, OR. From Volcanoes to Vineyards. For more information: http://www.oregonsoils.org/?page_id=339

Aug 1-6, 2010: A [19th World Congress of Soil Science](#), Brisbane Convention and Exhibition Centre, Brisbane, Australia.

Oct 31-Nov 4, 2010: ASA-CSSA-SSSA International Annual Meetings, Long Beach, CA. Meeting theme: "Green Revolution 2.0: Food + Energy and Environmental Security." For more information: [ASA-CSSA-SSSA International Annual Meetings](#).

February 24-25, 2011: Oregon Society of Soil Scientists 2011 Winter Meeting, McMinnville, OR, "Soil Carbon and You: It's Complicated!" For the latest information visit our web site at: http://www.oregonsoils.org/?page_id=29

Spring 2011: The 2011 National Collegiate Soil Judging Competition, Bend, OR. Visit the OSSS website at: http://www.oregonsoils.org/?page_id=418 for the latest information.

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