Illinois Soil Classifiers Association Newsletter

Winter-February 2010

Upcoming Events:

ISCA Annual Meeting	March, 2010
ISCA Fall Tour	Oct., 2010

Inside this issue:

Message from the President

It has been a quick year as President of ISCA. There will be a passing of the gavel to Jennifer Wollenweber, who will be taking over the reigns as ISCA President for 2010. Plan to attend the Annual Meeting this year in Bloomington. Jim Hornickel and the Public Relations Committee have done an excellent job of putting this together. The details for the meeting are in this issue.

As pedologists, we are at the end of one era, and the beginning of another. We have a soil inventory at an adequate scale, for much of the conterminous United States. I liken the current soil survey product to the DNA model "discovered" in 1953 by Watson and Crick. The current body of knowledge related to DNA is huge. The tools and techniques that developed over the years since 1953 have allowed scientists to discover things about DNA that were only 'dreamed' of in 1953. The pending discoveries in the field of pedology will not be quite as dramatic or life changing as the geneticists have experienced, but we will have new tools like high resolution elevation and imagery data, that will pave the way for learning more about where and why soils occur on the landscape, and how and why they behave under the uses required by humans. The future years should be interesting and help build on the foundation of knowledge embedded in the current soil map.

Tom D'Avello
304-290-3219
tom.davello@wv.usda.gov

ISCA Membership News

Welcome New Members

Ten new members have joined the ISCA in the last year.

- 2 student members: Bobby Calhoun and Mary Beth Falsey
- 5 affiliate members: Wendell Oliver, Suzanne D'Souza, Coilin McConnell, Daniel Withers, and Jennifer Burnham
- 2 associate members: Chad LaMontagne and Jay Hayek
- 1 out-of-state member: Gary Struben

The ISCA membership welcomes you! We look forward to meeting you at the annual meeting, fall meeting, field exams, and other events.

Below are brief introductions to a couple of the new members. We look forward to hearing from the rest of you for future newsletters. Please send your info to zach.weber@il.usda.gov.

Mary Beth Falsey (student)

I am a Wetland Specialist with the DuPage County Department of Economic Development and Planning, Division of Environmental Concerns. I have been working at DuPage County since 2003. I have a B.S. and am currently completing an M.S. in Geography with an emphasis in soil science both from Northern Illinois University.

Mary Beth Falsey

Suzanne D'Souza (affiliate)

Hello everyone! I am a new member to ISCA, but not to soils associations. I have been the executive secretary for the Minnesota Association of Professional Soil Scientists for over five years and am also a member of the Wisconsin Society of Professional Soil Scientists.

I worked as an environmental consultant for 17 years (environmental site assessments, asbestos and lead-based paint inspections), after graduating from the University of Minnesota. Currently, I am a sales rep for Historical Information Gatherers, Inc., a company that provides historical property information (aerial photograph, city directories, historical maps) to environmental consultants and engineers.

I am the chair of the Forum of Women in the Environmental Field, a networking group that hosts six networking events annually in the Minneapolis/St. Paul area.

I am a passionate networker who loves to garden, eat, dance, visit museums, explore local culture, cook, eat, listen to music, connect people and eat! I am often in Illinois for work and would like to meet up with other ISCA members!

I hope to meet you at upcoming events!

Suz.

952-457-0788 mobile

ISCA Fall Tour - October 13-14 - Save the Date!

ISCA, along with the Iowa and Missouri Soil Science groups (PSCI and MAPSS), have scheduled a Tri-State Field Tour in the Quincy, Illinois area this fall. The dates are Wednesday and Thursday, October 13 & 14, 2010. Plans are to have a meeting, speaker, and perhaps social Wednesday evening, with speakers and field tour and pit stops on Thursday. More details will be announced at the Annual Meeting and as they are developed. Put this on your calendar now to attend!

Submitted by Steve Elmer

Illinois Conservation Congress Resurrected: A Role for ISCA?

The Illinois Conservation Congress was reconvened on 23-24 October 2009 after a six-year hibernation. In May of 2009, the Illinois House of Representatives adopted a resolution to reconvene the Congress "to assist in the protection, conservation, education, and appropriate use of the natural, recreational, and cultural resources of the State". Under the direction of Illinois Department of Resources (IDNR) Director Marc Miller, a diverse group of approximately 140 conservationists and outdoors supporters met in Springfield. Mr. Miller challenged this group to work together on three key issues: (1) natural resources funding, (2) public access, and (3) building the next generation of outdoor and conservation enthusiasts.

The Conservation Congress was founded by former Governor Jim Edgar in 1994. Its mission was to "propose and advocate actions that can be taken by elected and appointed officials to protect and conserve the natural resources of the State of Illinois, and ensure through professional management that sustainable use, recreational opportunities and enjoyment of these resources is available for this and future generations." The Congress met regularly until 2003 when it was suspended by then-Governor Rod Blagojevich.

The Executive Summary of the New Conservation Congress is published on the next page of this newsletter. The full report may be viewed at: http://dnr.state.il.us/NRAB/pdf/CC_Exec_summary_Full_report.pdf

The Illinois Soil Classifiers Association had a seat at previous Congresses, and was represented by Pat Kelsey. I was not aware the Congress would be meeting this past fall, and I'm guessing most of our membership also was in the dark. Many of us are, however, aware that the IDNR has gone through some tough times relative to funding and leadership. I've spoken with Director Miller and he seems capable of getting the IDNR back on track. I am particularly encouraged by his work in educating the young people of Illinois relative to resource conservation. I think his efforts in reconvening the Congress shortly after his appointment demonstrate his sincerity in promoting conservation in Illinois.

One of the stated objectives of ISCA is to "promote the wise use and conservation of the soils of Illinois through the use of soils information in land use planning". We do this by promoting standards of excellence in our own education and training, and educating students and the public about soil classification and conservation. This objective is consistent with that of the Congress. Membership of ISCA in the Congress would serve to make other like-minded groups aware of ISCA and the wealth of knowledge our members have. This could lead to re-connecting with old partners and establishing new partnerships with individuals and groups interested in conservation and the soil resources of Illinois. Therefore, I ask ISCA members to join me in recommending our Executive Council consider regaining ISCA membership in future Congresses.

Submitted by Bill Kreznor, CPSC

Conservation

CONGRESS

Illinois Department of Natural Resources

Final Report of the New Conservation Congress: October 24 – 25, 2009

Executive Summary

On October 24 and 25, 2009, the Illinois Department of Natural Resources (IDNR) hosted the New Conservation Congress in Springfield. A diverse group of about 140 conservationists and outdoor supporters participated.

IDNR Director Marc Miller stated the objective: to work together and find solutions to three key issues facing conservation today; natural resources funding, public access, and building the next generation of outdoor and conservation enthusiasts. **RECOMMENDATIONS OVER.**

Public Access: With limited public land for outdoor recreation, and a large population, outdoor recreationists must compete for public open space or depend heavily on private landowners. At the same time demand for access to private land is increasing, obtaining access becomes more challenging due to changing population patterns, cultural changes, controversial issues around public waters, and heavy impacts of agriculture and urban sprawl.

Youth Recruitment and Retention: Youth participation in outdoor activities is declining, with negative effects on children's physical and mental health. Past generations were more connected with the natural world. The U.S. population has shifted more to metropolitan areas, and entertainment is found in screen media or other structured, sedentary activities. Not only does this affect the funding base for conservation, through a declining base of recreators paying license fees, it also means breaking the chain of transmission of knowledge about the natural world and outdoor activities to future generations.

Conservation Funding: A high quality environment is key to economic development: outdoor recreation generates many jobs. Conservation assures basic ecosystem services (water supply, air, soil quality, resilience to climate change) that underlie our quality of life. Conservation and outdoor activity enhance the health and well being of adults as well as children. Illinois is woefully behind with only about 1% of its land protected, at a time that pressures on open space and habitat are increasing. IDNR's special fund balances are declining alarmingly. Other states have taken bold approaches to conservation funding, which have overwhelmingly been supported by voters. **Illinois needs a stable, adequate, long-term funding source for conservation.**

Director Miller challenged the participants to play a role in the future of conservation in Illinois. "The job isn't done when you walk out those doors. Our constituents must be engaged in finding solutions and together we will unearth a way to succeed."

Participants reviewed information gathered through public input leading up to the Congress. These included recommendations from the Public Access, Youth Recruitment and Retention and Conservation Funding Committees of the IDNR's Natural Resources Advisory Board, that held meetings and discussions across the state over the previous four months, and the results of a voluntary online survey in which over 6000 state residents voiced their opinions. Together with the Congress itself, these input mechanisms are part of an ongoing dialogue between IDNR and its constituents, which will continue after the Congress event.

"The messages we heard from those participating in the new Conservation Congress are clear," said Director Miller. "Illinois citizens and constituent organizations interested in conservation and natural resources protection want action and are ready to provide the leadership needed to get things done. The Conservation Congress process is just the beginning. I am delighted the participants in Conservation Congress have pledged their support to the job of pursuing and implementing these recommendations."

Continued.

RECOMMENDATIONS INCLUDE STABLE FUNDING

These recommendations were deemed by participants most critical for immediate action in each issue area

Access to Public and Private Lands

- Restore liability protection for all recreational land uses allowed by private owners.
- Develop a new program with dedicated funding source to advocate and research new methods of expanding access on private land, including incentives for landowners.
- Develop and implement a plan to acquire more land for pubic outdoor recreation.
- Develop model State Heritage Water Trail.

Youth Recruitment and Retention

- Update and adopt the Environmental Literacy Plan for Illinois to encompass non-formal educators and include more outdoor components.
- Work with partner organizations to develop mentoring programs to pass on the safe and ethical outdoor traditions in Illinois.
- Provide conservation education for youth in schools; improve and enhance marketing, advertising and promotion of existing youth programs and activities.
- Educate youth on conservation, natural resources in schools and informal programs with nonprofits.

Conservation Funding

- Immediately develop a master action plan outlining conservation and natural resources funding needs and how to pay for them.
- Approve SB 1846 to increase existing hunting, fishing and other fees, and administrative implementation of new and existing fees to shore up and enhance conservation programs, with guarantees that fee revenues are used only for the purposes intended.
- Implement a stable, dedicated long-term funding source for conservation and outdoor, focused on the benefits of conservation and outdoor recreation programs for economic development, tourism, public health, education, agriculture and private land stewardship, and the state's cultural heritage.
- Proactively communicate IDNR plans and programs, as part of restoring trust.

SURVEY HIGHLIGHTS CONSERVATION SUPPORT

Over 6,000 Illinois residents participated in an on-line survey about conservation and outdoor recreation during September and October 2009.

89% strongly agree that "All residents of the State of Illinois benefit from conservation or open space, whether or not they personally utilize or recreate on these spaces."

Most (68%) place equal value on State parks and lands' conservation and recreation. The rest are split between more value for recreation (15%) and more value for conservation (17%).

Half thought that reducing liability to landowners is the most important thing the IDNR can do to facilitate access to private lands and water for recreation; purchasing more land and improving landowner/ recreationist relations were also viewed as important.

95% of respondents think children spend too little time outdoors and in nature-related activities. Half had been involved in youth mentoring and 80% support it as a way to increase youth involvement in the outdoors, though many need more information on how to do so.

58% thought there should be increased funding for conservation from general state taxes; 74% agreed with increased fees or licenses for consumptive recreation like hunting and fishing; 44% with fees or licenses for other types of recreation; 83% with fees charged to extract natural resources, and 86% with tax credits for conservation such as private donations of easements.

91% would be willing to pay higher fees or new fees—if they were sure that the state would use those funds to support the activity for which they are charged.

82% wanted funding increased to maintain and repair state parks; 76% more funding for environmental protection programs; and 73% to purchase more land. Over 70% of respondents felt that funding for education and outreach should be increased.

The full report of Conservation Congress 2009 can be found at http://dnr.state.il.us/nrab/cc.htm .

Participant List—Illinois Conservation Congress

First Name	Last Name	City	Affiliation/Organization
Kent	Adams	Effingham	NWTF
Jerry	Adelmann	Chicago	Openlands
James	Anderson	Grayslake	Lake County Forest Preserve District
Karl	Arnold	Greenview	Greenview, IL
Mark	Badasch	Collinsville	Collinsville Area Recreation District
Judith	Baron	Gardner	Des Plaines Fish and Wildlife Area
Jim	Barr	Blue Mound	Decatur Audubon Society/ Audubon Council of Illinois
Judy	Beck	Glenview	Glenview Park District
Calvin	Beckmann	O'Fallon	City of O'Fallon
Ted	Beier		President, Kaskaskia Watershed Association
Jerry	Beverlin	Dawson	United Bowhunters of Illinois
Lenore	Beyer-Clow	Woodstock	Openlands
J.R.	Black	Kankakee	Northern Illinois Anglers Association
Kirsten	Blackford	Paxton	IL Pheasants Forever Youth Council
Jeff	Blackford	Paxton	IL Pheasants Forever Youth Council
Tim	Brenner	Urbana	Champaign County Pheasants Forever
Patricia	Brown	Cottage Hills	The Nature Institute/EEAI
Bill	Brown	Marseilles	IL Association of Snowmobile Clubs
Debbie	Bruce		Illinois Department of Natural Resources
Bill	Bruhn		National Wild Turkey Federation
Robert	Bryant	Eldred	Migratory Waterfowl Hunters
John	Buhnerkempe	Chatham	Illinois Dept. of Natural Resources
Fran	Caffee		Sierra Club
Brian	Caskey	Wheaton	Wheaton, IL
Dave	Cassens	Springfield	IDNR
Douglas	Chien	Chicago	Sierra Club
Gary	Clark	Springfield	Department of Natural Resources
Tom	Clay	Springfield	Illinois Audubon Society
Mike	Clifford		Illinois Smallmouth Alliance
Linda	Cole	Aurora	Sierra Club
Glynnis	Collins	Champaign	Prairie Rivers Network
Andrew	Coresta	Chatham	Chatham, IL
Russ	Crawford	East Peoria	Elected CC Delegate-1st 3 Congresses
Joel	Cross	Springfield	IDNR
Tim	Cummings		
Domenico	D'Alessandro	Algonquin	D'Alessandro & Associates
Rosemarie	DeWitt	South Holland	Thornton Twp. Hwy.
Olivia	Dorothy		IDNR
Janette	Dove	Cobden	Shawnee Trail Conservancy
Mark	Duntemann	Oak Park	Natural Path Urban Forestry Consultants
Melissa	Eaton	Peoria	Tri-County Regional Planning Commission
Tom	Eckels	Lake Villa	Lake Villa, IL
Jesse	Elam	Chicago	Chicago Metropolitan Agency for Planning
Claudia	Emken		Yates City, IL
Nancy	Erickson	Bloomington	Illinois Farm Bureau
Ted	Erikson	Chicago	Chicago, IL

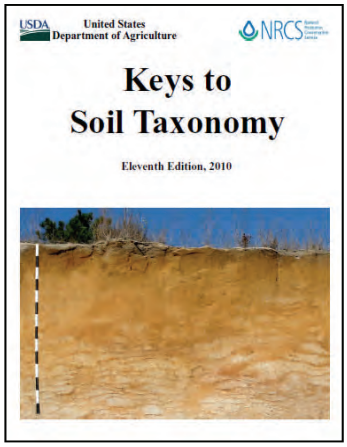
Tami	Evans	Springfield	IDNR
Christine	Favilla	Elsah	Sierra Club
Jesse	Felix	West Chicago	West Chicago Park District
Carol	Fialkowski	Burr Ridge	Chicago Wilderness
Audrey	Fischer		International Dark Sky
Dennis	Flanagin	Lansing	Lan-Oak Park District
Ted	Flickinger	Springfield	Illinois Association of Park Districts
Jo Ann	Fritz	Dundee	Prairie Coast Paddlers
Mel	Gajewski	Scheller	Quail Unlimited
Kathleen	Garness	Forrest Park	Chicago Botanic Gardens Plants of Concern
Warren	Gayle	Orien	Quad City Conservation Alliance
David	Gillespie	Chatham	Illinois Forestry Association
Richard	Glazebrook		Kaskaskia Watershed Association
Rafael	Gutierrez	Springfield	IDNR-Law Enforcement
Walter	Haas	Rockford	Muskies Inc.
Elizabeth	Hagen-Moeller	DeKalb	Environmental Education Association of Illinois
Amy	Hardwick	Virginia	Cass County SWCD Chair
Fran	Harty	Monticello	The Nature Conservancy
Tom	Hayes	Ipava	Ipava, IL
Harry	Hendrickson	Rochester	IL Science Teachers Association
Tim	Hickmann	Springfield	Illinois Department of Natural Resources
Reinee	Hildebrandt	Springfield	IAA, INPS, LOESS
William	Hill		
Adele	Hodde	Springfield	IDNR
Edward	Hooser	Mahomet	Friends of the NRA of Champaign County
Jeff	Hopkins		IDNR
Michael	Howard	Chicago	Fuller Park Community Dev.
Amelia	Howard	Chicago	Fuller Park Community Dev.
Charles	Jackson	Springfield	Illinois Environmental Council
Marie	Johns	Crete	Midwest Soaring
Jim	Johnston	Springfield	Soaring
Valerie	Keener	Springfield	Illinois Department of Natural Resources
Paul	Kelley	Hudson	Illinois Trappers Association
John	Kidd	Chicago	Fishin Buddies Inc.
Denny	Kirkham	Greenville	Quail Forever
Jolie	Krasinski	Chicago	Illinois Clean Energy Community Foundation
Aaron	Kuehl	Oakford	Pheasants Forever
Vicki	Lea	Springfield	IDNR
Matthew	Lechner		Shawnee National Forest
Kerry	Leigh	Oakwood Hills	Oakwood Hills, IL
Thomas	Lindblade	Rockford	Illinois Paddling Council
Marcia	Lochmann	Godfrey	Lewis and Clark Community College/NGRREC
Larry	Lucas	Chicago	DNR Natural Resources Advisory Board
Conor	Lucas	Chicago	Chicago, IL
Walter	Lynn	Springfield	Lynn & Associates
Ben	Magers	Paxton	Pheasants Forever
Richard	Mark	St. Louis	IDNR Advisory Board
Susanne	Masi	Glencoe	Chicago Botanic Garden
Michael	Mason	Riverton	IDNR
Denise	Maxwell		Illinois Trail Riders
Joseph	Mayer	Chicago	Chicago Astronomical Society
Chris	McCloud		IDNR

Don	McFall	Springfield	IDNR
Jim	McFarlane	Rockford	Illinois Federation for Outdoor Resources (IFOR)
Marc	Miller	Springfield	IDNR
Mike	Moomey	Springfield	Illinois Department of Natural Resources
Kelly	Neal	Springfield	IDNR/Illinois Nature Preserves Commission
Erik	Neidy	Wheaton	Forest Preserve District of DuPage County
Richard	Nichols	Springfield	Assn. of IL Soil and Water Conservation Districts
Mark	Nitzsche		
Jack	Norman	Columbia	Sierra Club
Jacques	Nuzzo	Decatur	Illinois Raptor Center
Judy	Ogalla	Monee	STAND (Shut This Airport Nightmare Down)
Daniel	Olson	Mahomet	Champaign County Forest Preserve District
Tom	Palmisano	Chicago	Mayor Daley's Fishing Advisory Chicago
Bob	Park		
Susan	Parks	Oak Park	Parks Consulting Group
Jack	Philbrick	Rockford	Retired Forest Preserve Director
Ken	Polhamus	Galena	Galena, IL
Mike	Polhamus		
Gwen	Pollock		Illinois Science Teachers Association
Greg	Prosen		Illinois Council of Trout Unlimited
Mike	Redmer	Barrington	US Fish & Wildlife Service
Jill	Riddell	Chicago	Illinois Nature Preserves Commission
William	Rigsby	Arrowsmith	ABATE of Illinois
Alley	Ringhausen	Alton	Great Rivers Land Trust
Nick	Ripley	Washington	Pheasants Forever
Eleanor	Roemer	Chicago	Friends of the Parks
John	Rogner	Springfield	IDNR
Jeff	Rosecrans	Brimfield	Wildlife Prairie
Richard	Rupp		Trout Unlimited and Chicago Fly Fishers
Terry	Rush	Pittsfield	Pike Co. Farm Bureau
Marc	Sanson	Springfield	Springfield, IL
Eric	Schenck	Canton, IL	Ducks Unlimited
Joseph	Schranz	Lyons	Midwest SOARRING Foundation
Susie	Schreiber	Winnetka	Waukegan Harbor Citizen's Advisory Group
Tim	Schweizer	Springfield	Illinois Dept of Natural Resources
Diana	Seitz	Decatur	Illinois Raptor Center
Joe	Seten	Champaign	IFOR
Tracy	Shafer	Springfield	IDNR
Sheryl	Siebert	Chenoa	Chenoa, IL
Jenny	Skufca	Springfield	Illinois Department of Natural Resources
Maggie	Soliz	Leland	Pizzo & Associates, Ltd.
Jennifer	Sousa	Quincy	Trees for Tomorrow/ University of Illinois Ext.
Richard	Spangler	Smithfield	Spoon River Partnership
Anne	St. John	Quincy	Trees for Tomorrow/ City of Quincy
Gretchen	Steele	Coulterville	Coulterville, IL
Mike	Stevens		IDNR
Deborah	Stone	Springfield	Illinois Department of Natural Resources
Terri	Treacy		Sierra Club
Mary Jo	Trimble	Carterville	IFOR, Field Trial Clubs of IL
Colin	Tysoe		Sierra Club
Peter	Veit	Naperville	Horsemen's Council, IL Trail Riders
Sonia	Vogl	Oregon	Prairie Preservation Society
Robert	Vogl	Oregon	Friends of the Rock River
Tom	Wall	Peru	Better Fishing Association of Illinois

Madonna	Wallace	Skokie	LEDchic
Barry	Welbers	Spring Valley	Better Fishing Association of Northern Illinois
T. Tim	Werner	Bumcombe	Bumcombe, IL
Karen	Werner	Bumcombe	Bumcombe, IL
Dick	Westfall	Springfield	IDNR
Beth	White	Chicago	The Trust for Public Land
Chuck	White	Effingham	Carlyle Lake Assoc./ Carlyle Waterfowlers
Gloria	Williams	Springfield	Illinois Department of Natural Resources
Christine	Williamson	Chicago	Sierra Club
Sandy	Wilson	Springfield	Illinois Trail Riders @ Prairie Trail Riders
Karen	Witter	Springfield	IL Department of Natural Resources

11th Edition Keys to Soil Taxonomy

The 11th edition Keys to Soil Taxonomy, as well as a summary of all changes for this new version of the Keys is available at: http://soils.usda.gov/technical/classification/tax_keys/. The Keys are in PDF format and suitable for download and printing locally.



In the near future, a supply of bound copies of Soil Taxonomy, 11th edition, 2010 will be distributed to each State. Changes to the National Soil Information System (NASIS 6.0) as well as the Soil Classification File (new web application to be released after NASIS 6.0) are being made to accommodate these changes in our databases. So while you can use the new keys now to classify soils, you will have to wait for these changes to be incorporated before you can enter any of the new taxa into our databases.

We will also have a Spanish version available later this year.

Craig Ditzler
National Leader
Soil Survey Standards
USDA-NRCS

TRADING POST

This spot is reserved for members who would like to buy, sell, trade, or announce an item, event, or activity in our newsletter. Please limit your classified ad to 25 words or less. Email your ad to the newsletter at zach.weber@il.usda.gov

For Sale: Truck, and Matching Trailer-Mounted Hydraulic Soil Coring Rig (sold together or separately). Diamond in the rough 1950 Chevy 1/2 ton, 5-window pickup, road-worthy -- new motor, new tires, new alternator (12 v), new mirrors, new brakes--including new emer. cables, new shocks. Four extra complete grills and other extras (orig. shop manual, dash stuff, etc.) go with this diamond-in-the-rough fixer-upper. Body almost dingless, but definitely needs sand-blasting, paint, and usual attention-to-restoration detail. Giddings rig has new high horsepower engine, mounted on ¾ ton 50 Chevy bed modified into trailer. Includes Kelly bars and various sized slotted Shelby tubes, plus other extras. Pictures of both available upon request. Price: $8,000 truck; $5,000 Giddings rig (price negotiable if purchased together). 217-356-7437 (home); 217-290-4839 (cell); dljohns@uiuc.edu.

Set of soil calendars from 1999 (the first year of issue) through 2010, except for 2006 and 2007. They are free to anyone who wants them as a collection. contact Mark at: mark.bramstedt @ il.usda.gov

35th Annual Meeting Illinois Soil Classifiers Association

Saturday, March 20th, 2010
Bloomington, IL

Where: Ewing Manor
48 Sunset Road., Bloomington, Illinois
Registration: 11:00 am
Opening Remarks: 11:40
Lunch: 12:00
Guest Speaker: 1:00
Business Meeting: 2:00

The 35th annual meeting of the Illinois Soil Classifiers Association will be held Saturday, March 20th, 2010 at Ewing Manor. Ewing Manor is located at 48 Sunset Road with registration beginning at 11 am and lunch to be served at noon.

Note about parking: There is no parking area at Ewing Manor. Ewing Manor has an agreement with St. Johns Lutheran Church to use their parking lot. St. Johns Lutheran Church is located directly south of Ewing Manor. Park on the north side of the church and walk across the street to Ewing Manor.

Please use the registration form on page 14 to make a reservation before March 12th, 2010. The cost of the meal and registration is $15. Make checks payable to ISCA.

This year's speaker will be Maria Marshall, PhD Associate Professor, Department of Agricultural Economics, Purdue University.

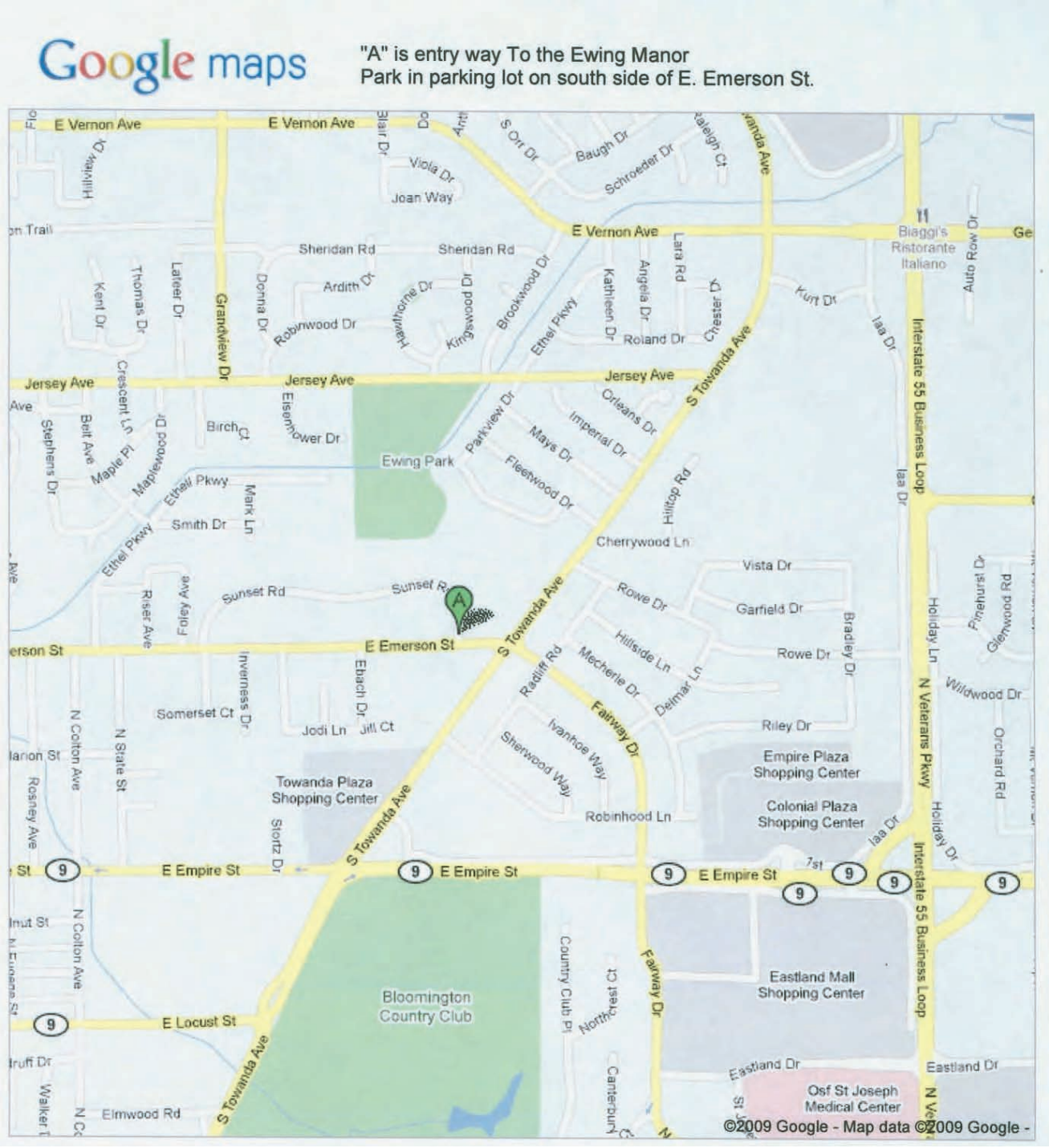
Driving Directions: See map on next page for directions.

2010 Bent Auger Award

It is again time to select a new winner of the prestigious Bent Auger Award. As its name suggests, this award is given each year to an individual or group of individuals who displays "excellence" in the field. Qualifying events/situations are numerous and unrestricted. Stories do not have to be true, but are preferably based on partial truth. If you know anyone who is deserving of this award for 2010, **please bring his/her nomination to the annual meeting** in Bloomington on March 20.

Competition can be fierce, so make sure your story is well prepared and fully exaggerated. This award has been held by many of the leaders and founders of the ISCA. It is a great honor and looks good on any resume. Good luck!

Map and Directions to ISCA Annual Meeting



Driving Directions: Ewing Manor is located on the northwest corner of the Towanda Avenue and Emerson Street insection. To get to there take Veterans Parkway to Empire (Rt. 9). Then take Empire Street west to Towanda Avenue. Then take Towanda Avenue north (turn right) to Emerson Street. Then take Emerson Street west (turn left).

Dirt: The Movie…not coming to a theater near you.

I guess I was a very good little soil geek this year as I got *Dirt: The Movie* for Christmas. *Dirt* is a documentary about the importance of dirt: what it has and continues to mean to us as humans, some of the ways in which we mistreat/undervalue soil, and some prospects for the future.

This documentary was inspired by a book, *Dirt: the Ecstatic Skin of the Earth*, by William Bryant Logan. The cinematography was lovely, sites and scenes were vivid and/or gloomily stark when needed. The content was broad, just as the study and use of soils are, ranging from mycology and viticulture to planting trees to soak up water and using dirt as a building material. It's even got a section of the importance of poop! Dirt also talks about some of the effects of industrial sized farms, clear cutting, mining, and impervious surfaces. The serious message of the movie is given some levity with animations that are quite comical at times – well, at least my boyfriend and I thought so.

Dirt is carried along by diverse commentators from arborist/author William Logan, philosopher/agroecologist/farmer Pierre Rabhi, and environmental studies professor David Orr to Nobel Peace Prize winner Wangari Maathai, Edible School Yard founder Alice Waters, and prisoners at Rikers Island, New York. The broadness of the commentators, to me, really drove home how important soils are to everyone regardless of race, class, or geography. I think the broadness is where the appeal will really be for non-soil geek types like us to get inspired by this movie and, hopefully, start asking more questions.

Dirt's website is http://www.dirtthemovie.org/ .

Submitted by Jesse Kurylo

2010 Membership Dues

Our Secretary Steve Elmer wants to thank everyone who submitted their 2010 dues in a timely manner. ISCA is a leading proponent of the use of soil survey information in Illinois. Its many activities throughout the year are designed to advance soil science in many ways. Your participation and support helps make this happen. Thanks to all of you! For those very few of you who may have procrastinated over the holidays, there is still time to renew your membership, using the form below.

2010 ISCA membership dues are to be mailed to Steve Elmer, 27892 Ebenezer Road, Geneseo, IL. 61254. Fill in your name, check the appropriate membership category, and return with a signed check for the appropriate amount. Thank you!

NAME _____

Membership Category (circle correct category and insert dues amount in the space to the right):

Full and Associate ($25.00) ____
Student, Affiliate, Retired, & Out-of-State ($5.00) ____
Honorary Full ($0) ____

Indicate whether Membership Status has changed in past year: YES _____ NO _____

If YES, Reason for change: _____

2010 Candidate Biographies

The Nomination Committee presents the following slate of officers for nomination: President Elect - Bruce Houghtby; Vice-President - Dale Calsyn, Brad Cate.

Please see their biographies below and use the ballot on next page to cast your vote.

President Elect

Bruce Houghtby

I am a graduate of the University of Illinois, 1978. I have worked on SCS soil surveys in Indiana and Illinois.

I have been doing on-site soils evaluations and detailed soil surveys in northeastern Illinois since 1988. I'm a partner in an environmental consulting firm, John A. Raber & Associates, which also does septic and well evaluations, mold inspections and radon inspections. We also operate an analytical water laboratory.

I have been actively involved in 4-H the past 15 years both at the local leader and county committee level. So, if you have any questions about rabbits or pony driving let me know.

My family is a Big Ten family; my wife of 26 years, Purdue 1979; oldest daughter, University of Minnesota 2009; and youngest daughter is currently attending the University of Wisconsin-Madison. So we are all looking forward to March Madness, some more than others.

Vice President

Dale Calsyn

Dale received his B.S. degree in Agronomy from the University of Illinois in 1975. He began his career as a county soil scientist working on the Henry County Soil Survey in 1975. In 1977 he changed employers and became a soil scientist with the Soil Conservation Service. During the period from 1980 through 1990, he served as the project leader for the Cass County Soil Survey, the Mason County Soil Survey, and the Fulton County FSA HEL mapping project. In 1990, he moved to NE Illinois to serve as the project leader for the McHenry County Soil Survey Update project. His position there evolved into serving as the leader of the Aurora MLRA soil survey office with the responsibility of conducting soil survey updates. Currently Dale and the Aurora staff are mapping the remaining 300,000 acres of Cook County which were not completed as part of the 1979 soil survey report. He has been a member of the ISCA since 1977.

Brad Cate

Brad received his BS & MS degrees in Plant and Soil Science from Southern Illinois University in '78 and '81. In addition to a short stint as a soil conservationist, he has worked on the Brown, Putnam, and Whiteside County soil surveys in Illinois as well as a soil survey of the Quatif area of Saudi Arabia for Harza Engineering. In 1987 he briefly worked as a soil scientist with the Delaware Dept. of Natural resources overseeing the soil investigation program for septic systems in Sussex County, Delaware before starting his own environmental consulting business. Since then, he has worked primarily in Delaware until 2006 when he and his wife Kay moved back to Savanna, Illinois. Brad continues to practice in Delaware while developing a practice in Carroll and the surrounding counties.

ISCA 2010 Annual Meeting Reservation

NAME _____
NUMBER ATTENDING _____ **($15/person)**
TOTAL PAYMENT _____

Fill out the above information and mail with check to the following address:

Charles J. Frazee
65 Gaffney Rd
Divernon, IL 62530

.....Cut.....Cut.....

2010 ISCA Ballot For Officers

Voting privileges are for Full Members, Associate Members, and Honorary Members (Vote for one in each office by placing a check or an X next to the candidate's name.)

President-Elect

Bruce Houghtby _____

Write -in _____ _____

Vice President

Dale Calsyn _____

Brad Cate _____

Write -in _____ _____

Return the ballot in a sealed envelop marked "ballot" to Steve Elmer, ISCA Secretary before the start of the 2010 ISCA Annual Meeting. You may also mail the ballot to Steve Elmer, 27560 Ebenezer Road, Geneseo, IL 61254. Please mark "ballot" on the outside of the envelope to ensure that the ballot remains sealed before it is counted at the Annual Meeting. In order to be counted, mailed ballots must be received before March 20, 2010.

www.illinoissoils.org

The Illinois Soil Classifiers Association is an organization promoting the wise use of the soil resource. ISCA is made up of professional soil classifiers in public service, private industry, and education and includes students and others interested in preserving soil. A soil classifier maps, describes and interprets soils according to a national system of soil classification. ISCA was established in 1975 and is affiliated with the American Registry of Certified Professionals in Agronomy, Crops, and Soils.

ISCA Newsletter Staff
1502 South West Street
Olney, IL 62450

Phone: 618-392-7141 x116
Fax: 618-392-4325
Email: zach.weber@il.usda.gov

Days Gone By...

OK– so this one may be easy for many of you, as it is not really an old picture. We felt it appropriate to include as this was truly a "meeting of the (soils) minds".

How many of these ISCA members do you know?

Answer to last newsletter's "Days Gone By…":

Left to right- Mike Kiefer, Ken Gotsch, Jerry Berning

Submissions

This is **YOUR** newsletter. If you wish to submit material, here are some preferences.

- Send information by the last week of the month before the newsletter is scheduled to be published.
- Digital copy in Microsoft Word
- Use as little formatting (indents, bullets, charts) as possible. This increases the work to get it into Publisher.

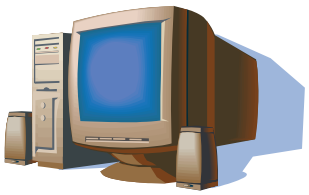
Publication Schedule

- Winter (February)
- Spring (May)
- Summer (August)
- Fall (November)

ISCA Newsletter Committee is looking for pictures of it's members, past or present, to include in future newsletters. Submissions can be sent electronically or hard copy to the staff address, see above and left. Please include a narrative for the caption! If hard copies are sent please indicate if they are to be returned otherwise photographs will be retained in an archive photos file.

www.illinoissoils.org

New, exciting links have been added to the "announcements" page on our website. Be sure to bookmark this page. Its an excellent resource to keep you informed on the latest soils issues. Better yet… make it your home page!



ISCA

ISCA Newsletter
1502 South West St.
Olney, IL 62450

Visit the ISCA website to see the color version of this newsletter

www.illinoissoils.org/news

.....Cut.....Cut.....

Change of Address Form

Name:_____

Address:_____

City, State, Zip:_____

Phone:_____

E-Mail:_____

***Mail to: Steve Elmer, ISCA Secretary, 27892 Ebenezer Road, Geneseo, IL 61254**

Illinois Soil Classifiers Association Newsletter

Spring-May 2010

Upcoming Events:

ISCA Fall Tour Oct., 2010

Inside this issue:

Message from the President

Greetings from your new 2010 ISCA president! I would like to congratulate the new (and returning) Executive Council Members:

Mark Bramstedt, Past-President
Bruce Houghtby, President-Elect;
Brad Cate, Vice President;
Steve Elmer, Secretary;
Chuck Frazee, Treasurer

I would also like to thank Steve Zwicker for agreeing to take over the responsibilities of Historian, and the Committee Chairs for either agreeing to another term or for tackling a new challenge:

Dale Calsyn, Constitution, By-Laws, and Legislative;
Ron Collman, Ethics, Certification, and Membership;
Mark Bramstedt, Nominations;
Frank Heisner, Public Relations and Education;
Brad Cate, Finance;
Zach Weber, Newsletter

I am really excited for this upcoming year. During our first Council meeting several new ideas were discussed. We look forward to and encourage any suggestions and/or ideas from our members. If you are interested in helping out with any of the committees or activities, please do not hesitate to contact one of us.

I would also like to encourage our members to submit articles, pictures, stories, etc. to Zach Weber for our Newsletter. It's really great to see pictures and read about what other professionals are up to. As you are experiencing your field work, vacations, leisure time, etc, it may not seem thrilling at the time, but I imagine many other professionals would enjoy reading about your experiences, findings, mishaps (who doesn't like seeing a work truck stuck in the mud or those photos from the 70s for that matter)…..

Planning for the 2010 Fall Tour in Quincy, IL is well underway. This is a joint meeting between Association of Women Soil Scientists, the Missouri Association of Professional Soil Scientists, the Professional Soil Classifiers of Iowa, and ISCA. This meeting will provide an excellent opportunity to meet and collaborate with a variety of professionals. Hope to see you there. More details regarding the Fall Tour can be found in the newsletter.

Our membership last year experienced a phenomenal increase! Hopefully this year the interest and support will continue to grow (let's see if we can beat last year's numbers). A continued effort to establish an outreach and mentorship program will remain a priority this year. The times of soils are changing – many traditional ideas regarding careers in soils are also changing. Many will not have the same experience as their predecessors, and those new to the field of soils will look to their predecessors for expertise and guidance. As a sign of the times, ISCA is now on Facebook! If you don't have a Facebook account, please consider signing up for one, as this will be a great networking tool.
I look forward to collaborating with you this year.

Regards,

Jennifer Wollenweber

ISCA Membership News

Welcome New Member

Greetings! My name is Jay Hayek and I am the extension forestry specialist at the University of Illinois. I help provide technical outreach and education to our state's 170,000 private forest landowners, who are in fact the stewards of over 4.3 million acres of forest land. I am also a part-time PhD student in silviculture and forest soils under the advisorship of Drs. Jeff Dawson, George Gertner, Bob Darmody, and Ken Olson—all of whom are faculty members in the Department of Natural Resources and Environmental Sciences at U of I.

Brief Background: I am a 1997 forestry graduate of the University of Illinois. Like many undergraduates with a passion in their chosen field of study, I decided to continue my academic pursuits by enrolling in graduate school. This time, however, I chose a geographic location with more trees—the University of Idaho. In the summer of 1997, I accepted a graduate assistantship with the Intermountain Forest Tree Nutrition Cooperative in Moscow, ID. My research focused on the effects and influence of forest fertilization and parent material on the growth response and nutrient status of ponderosa and lodgepole pine. Interesting tidbit: my former advisor, Dr. James A. Moore, coined the phrase "Good Rocks, Bad Rocks" as it relates to soil parent material and tree nutrition.
Previous employment prior to my January 2006 appointment with U of I: forest products marketing specialist with Caterpillar Inc., and district forester with the IL Dept. of Natural Resources.

Hobbies: anything outdoors—hunting, fishing, camping, hiking, mountain biking, and I also enjoy hitting that little white ball around manicured fairways and greens.

Hickory Ridge Golf Course Seeks Certification as an Audubon Cooperative Sanctuary

Contact Person – Trey Anderson 618-713-2342; hickoryridge@LL.net

Sam Indorante (right) (USDA-NRCS, Soil Scientist) provides soil survey and natural resource information to Golf Course Superintendant, Trey Anderson (middle) and Angela Kazakevicius, Carbondale Park District Board Member. All support Carbondale Park District's Hickory Ridge Golf Course application for certification with Audubon International's Cooperative Sanctuary Program for Golf Courses.

Do golf and the environment mix? "Yes they do and they mix quite well," says Angela Kazakevicius, Regional Representative for the Illinois Department of Agriculture, and recent appointee to the Carbondale Park District Board. Angela's office is located with the USDA-Natural Resources Conservation Service Major Land Resource Area Office in Carbondale. Shortly after she was appointed to the park board, she approached MLRA Soil Survey Leader Sam Indorante about helping the park district certify Hickory Ridge Golf Course as an Audubon Cooperative Sanctuary (ACS)*. The ACS certification is awarded to recognize golf courses that actively and successfully protect the environment, conserve natural resources, and provide wildlife habitat. Achieving certification demonstrates a course's leadership, commitment, and high standards of environmental management.

Angela was familiar with Sam's interest in both golf and conservation, and got Sam together with Hickory Ridge's Golf Course Superintendant, Trey Anderson. From the beginning Sam was excited about the chance to combine his love of the

game with his love of resource conservation. Indorante said, "I knew Trey was already an excellent steward of Hickory Ridge's resources from the many times I played the course. It was just a matter of helping Trey gather the required natural resource information and involve conservation experts in order to help him organize and present the achievements of his golf course in the ACS application", said Indorante.

"For years, Sam and I discussed ACS certification, but never got past the starting point. When Angela was appointed to the park district board and she approached Sam and I with the idea, we all knew the timing was right to move forward with the application and make it happen," said Anderson.

The whole process will take about 12 to 18 months. Certification of the course involves six key areas of environmental management practices: Environmental Planning, Wildlife and Habitat Management, Chemical Use Reduction and Safety, Water Conservation, Water Quality Management, and Outreach and Education. More than 700 courses worldwide are ACS certified, with most of the courses located here in the United States. There are currently 47 public and private courses certified in Illinois, with a majority in the Chicago and collar counties area.

Anderson commented, "I was amazed at the amount of natural resource information that was available at Sam's fingertips. It took him about two minutes to pull up the soil map for Hickory Ridge on Web Soil Survey. In no time, we had a printed copy of the soil the soil map and associated information to include in the application."
Kazakevicius added, "My experience working with local Soil and Water Conservation Districts has taught me that a key part of getting a job done is to get the right people together. With Trey's stewardship, Sam's natural resource background, NRCS's natural resource data, and with the help of the community, it won't be long before Hickory Ridge is added to the prestigious list of Audubon Cooperative Sanctuary golf courses."

For more information on the ACS certification process go to: http://audubonintemational.org/ge.html

To track Hickory Ridge certification process contact Trey Anderson.

*The Audubon Cooperative Sanctuary Program for Golf Courses (ACSP-Golf) is an award winning education and certification program that helps golf courses protect our environment and preserve the natural heritage of the game of golf. The program helps golf officials enhance the valuable natural areas and wildlife habitats that golf courses provide, improve efficiency, and minimize potentially harmful impacts of golf operations.

Submitted by Erik Gerhard

ISCA Publishes "Understanding Soils" Brochure

A new brochure titled "Illinois - Understanding Soils" was published by ISCA in cooperation with the Natural Resources Conservation Service in March 2010. This brochure provides an excellent synopsis of the soil forming factors, processes involved in soil formation, and the major properties and features of soil. These brochures are great for teachers, farmers, homeowners, and others who want a more in-depth understanding of soils. The brochure is available on the web to download or to view. Contact Roger Windhorn in Champaign, Jennifer Wollenweber in Aurora, or Mark Bramstedt in Watseka if you desire a quantity of these brochures to hand to your clients.

Submitted by Mark Bramstedt

URGENT!

It appears that there are some ISCA members whose contact information is not up to date. We are asking all members with known issues to send an email to Steve Elmer at torflagr@geneseo.net with the updated information. All other members are being asked to visit the ISCA website and validate their information. If any of the listed information is incorrect and needs updating please send an email to Steve Elmer with the updated information as well

Loess in Northeastern Illinois (Cook County and Chicago land)

It has long been recognized that loess in northeastern Illinois is very thin. Back in 1942, in a bulletin written by Guy Smith (Bul 490, Illinois Loess—Variations in Its Properties and Distribution: a Pedologic Interpretation) a map shows that in Cook County, the loess is "not identifiable or less than 25 inches thick". Later it was described as; "Within the Minooka-Iroquois and later till plains the loess of Cary (late Woodfordian) and/or later age is nowhere thicker than about 2 feet except for minor areas, and averages mostly less than 1 foot. In this till region some silty wind-deposited material of local origin may be present. (H.L. Wascher, J.D. Alexander, B.W. Ray, A.H. Beavers, and R.T. Odell, 1960). Recent mapping in Cook County and the greater Chicago area confirm that loess is difficult to distinguish. Some of the official series descriptions of the common soil series mapped in the region don't even identify the origin of the silty material capping the soils of the area. It is often described as "loess or other silty material" denoting that the origin of the silty material is unclear. In late April of this year, Jennifer Wollenweber and Mark Bramstedt discovered the mystery behind the lackluster loess in the Chicago region while they were mapping in the Bethania Cemetery near the town of Willow Springs. It seems that Loess passed away in the mid 1930s and is nowhere to be found (see below).

Modern Anthropogenic affects on the Mollisol Order

The problem of eroded Mollisols has been a bothersome taxonomic issue in Illinois and possibly a few surrounding states (like Indiana and Iowa) for many years now. Soils that were once lush prairie with thick dark surfaces have eroded due to modern agronomic practices over the past 50 years, often to the point where they no longer qualify for the Mollisol order under our current system of classification. Former Mollisols affected by this anthropogenic interaction are now classified as Alfisols. The erosion necessary to cause this change may amount to only several inches of topsoil. The Mollisol Order is the only Soil Order so affected by this rather benign human interaction with the upper 6 to 12 inches of the earth.

Something is seriously wrong with a classification system when something as benign as plowing the surface soil to plant crops causes such a drastic change in soil classification.

An analogy could be drawn as follows: A botanist identifies and classifies an oak tree in the field. Several weeks later he returns and sees that someone gave it a serious pruning, lopping off several branches. He recognizes that the former oak is still in the Kingdom: plantae but this branch removal necessitates that he change the Division from Quercus to Acer. His system of taxonomy now requires that he classify it as a red maple. Sounds ridiculous doesn't it?

Kingdom: Plantae	Soil
Division: Magnoliophyta	Order
Class: Liliopsida	Suborder
Order: Liliales	Great Group
Family: Liliaceae	Subgroup
Genera :	Family
Species:	Series

History

Several attempts have been made to address this issue, the latest being by Dr. Ken Olson from the UI. From what I can tell, these past attempts failed largely because either: a)the proposal was not strictly morphologically based (i.e. a soil scientist could not describe and classify the soil from a soil core or pit using the criteria), b)was based on technology not readily available to a field soil scientist (i.e. Cs137 data), c)involved altering long held criteria for an established diagnostic layer which might potentially cause serious ramifications to classification of other soils not effected by erosion, d)involved using reference pedons various distances from the point in question, or e)was not readily distinguishable from "mollic" intergrades in other orders.

Affected Soils

As Dr. Olsen pointed out in his proposal, several million acres of farmland are affected by erosion in the Midwest and Great Plains. Mollisols in the Ustic soil moisture regime do not appear to be as drastically effected as those in the Udic soil moisture regime and do not appear to be affected taxonomically. This is possibly due to lower rainfall, shallower tillage, the carbonate rule that allows for thinner mollic layers, or a combination of these. The largest effect seems to be with "former" Argiudolls. Of these only soils that are moderately well drained or better drained are subject to enough surface loss that changes in taxonomy are required. Although Udolls, other than Argiudolls erode, the changes in classification that have been noted in Argiudolls have not been nearly as widespread or documented in other Great Groups.

Proposal

The proposal is to add a subgroup to Argiudolls called *Anthropic*. (NOTE:A decision would have to be made at a later date as to whether or not *Anthropic Aquic* and *Anthropic Oxyaquic* would be beneficial.) *Anthropic Argiudolls* would key out first in the Argiudoll paradigm. The proposal involves altering the definition of the Mollisol order to allow Anthropic epipedons in the Udic Moisture Regime. Once that is done, the Anthropic epipedon could easily be eliminated from all Great Groups by simply requiring unaffected Great Groups have a mollic epipedon.

The definition of the Anthropic Epipedon would have to be expanded to allow soils in the Udic Soil Moisture Regime to have a)structural units with a diameter of more than 30 cm; or b)a hard or harder dry rupture-resistance class; or c)both. In addition, epipedons meeting the definition of Anthropic would have to be specifically mentioned in the Ochric epipedon as being excluded.

Logic
Currently, anthropic epipedons must meet ALL of the requirements of a mollic epipedon except for ONE OR BOTH of the following: phosphorus content, or soil moisture. My proposal would add structure and hardness in the Udic Soil Moisture Regime (only) as an alternative exception.

Eroded Mollisols in the Midwest are typically tilled from 6 to 12 inches in depth. As the soil erodes, clay rich subsoil is incorporated into the plow layer. The theory is tillage such as this either destroys structure forming large clods; or it reduces tilth to the point that the plow layer is hard or harder when dry; or both.

Separation from Mollic Intergrades to Alfisols
Mollic intergrades to the Alfisol order are required to have an epipedon that meets **ALL** of the requirements of a Mollic Epipedon except for thickness. Eroded Argiudolls typically do not meet either the structure or hardness requirement.

The Downside
Adoption of this proposal would require that new soil series be established to address the taxadjuncts currently mapped in the state. In addition, it would not address severely eroded Mollisols with less than 18 cm (7 inches) of their surface left. Those former Mollisols would still either classify as Alfisols or Inceptisols.

Conclusion
This proposal is taxonomically doable. Soils fitting this condition can be identified, described and classified in the field using classical techniques without the need for reference pedons or difficultly obtained data. The drawbacks that effected previous efforts are not present. It is taxonomically distinguishable from other Suborders, Great Groups, and Subgroups and does not adversely affect other soil classifications in various parts of the country.

If you believe this is something worth pursuing, please forward this to others in the state for review. Let me know what you think. Please call or write if you have questions.

Thanks,

Chris Cochran

Please contact Chris Cochran or Bob McLeese for comments on this proposal.
chris.cochran@il.usda.gov
bob.mcleese@il.usda.gov

Soil Taxonomy - Aquic and Combination Aquic (ACA) Subgroups in Mollisols

As you are aware, a change in Soil Taxonomy that took place in 2003 regarding the separation of the Aquic and Oxyaquic subgroups in the Mollisol Order has created a profound affect upon the classification of soils in Illinois. Potentially 2.8 million acres encompassing at least 71 soil series are either directly or indirectly affected in Illinois. About 744,000 acres and at least 21 soil series are directly affected by this change. To deal with this potentially monumental change, Illinois has chosen to either a.)ignore the Ninth and subsequent editions of the Soil Keys and hope that eventually this problem will go away, or if challenged, b.)use non-morphological characteristics to explain away the incongruities, (i.e. stating in the Drainage and Permeability section of the OSD that the water table is below 60cm). Neither of these responses to this problem is a responsible way to deal with this issue. The first response is just wishful thinking and the second response cannot be supported by morphological evidence and is based on speculation or best guess.

BACKGROUND
In 1992, the 5th edition of Soil Keys introduced the concept of "Oxyaquic" to the Alfisol and Mollisol Orders. Prior to this, soils that were well or moderately well drained were classified as "Typic" Argiudolls, Hapludolls, or Hapludalfs. For instance, Proctor Series included both well and moderately well drained soils and were classified as Typic Argiudolls. Based on the 5th edition, Illinois soil scientists went about separating moderately well drained soils from well drained soils and established 21 new Mollisols that classified as Oxyaquic Argiudolls and about an equal number of Alfisols that classified as Oxyaquic Hapludalfs. Proctor Series is now the well drained Typic Argiudoll and the moderately well drained counterpart Clare Series is the Oxyaquic Argiudoll.

With the ninth edition of the Soil Keys issued in 2003, the Official Series Descriptions for 15 out of the these 21 new series now morphologically classify as Aquic Argiudolls. All 21 of these series have range of characteristics that includes both Aquic and Oxyaquic classifications. The Alfisols were not affected.

This presents a problem not only for the 21 series in question but also for their current taxonomic equivalents that are somewhat poorly drained.
Do we lump them in with their poorer drained cousins?
Do we separate them at the series level? AND If we separate them at the series level;
Do we now need 21 more new series that actually fit the narrowly defined range for "Oxyaquic"? or;
Do we just ignore "Oxyaquic altogether and call them "Typic"?

None of these solutions is a practical or desirable way to handle this. Lumping would destroy much of the interpretive properties of the soil series; separating them would necessitate setting up new series to fit Oxyaquic; ignoring Oxyaquic would create a Taxonomic and Series hole that many a soil would no doubt fall into.

WHAT NECESSITATED THIS CHANGE IN THE FIRST PLACE?
Three separate soil conditions necessitated the change:
With the Ninth Edition, Borolls were deleted from Taxonomy. Many of the former Argiborolls became Argiudolls. The Aquic criteria differed between Borolls and Udolls. Aquic Argiborolls allowed depletions with chroma of 2 or less to be as deep as 100cm.
C. J. Heidt identified two conditions that might cause a mischaracterization of Mollisols with overly thick mollic epipedons and Mollisols with regular mollic epipedons but having dark or mollic colors extending more than 60cm in depth, masking 2 chroma depletions.

The solution developed by the ACA Committee was to eliminate reliance on the mollic epipedon and go strictly with a depth criteria. Although they no doubt put a lot of thought and effort into this, they neglected to include a representative from the one state which is almost exclusively tied to Mollisols in the US, the Prairie State of Illinois.

SOLUTION
Now that we know what the problem is and how it came to be, we need to come to an agreed upon solution. Attached is a rather simple fix that does not change or alter the solutions for the above problems that the ACA committee corrected with their changes in 2003. The attached fix allows Illinois to maintain the distinctions it has developed and used for over 100 years of classifying, mapping an interpreting soil properties on the Illinois Prairie. The fix will need to be applied to all Aquic subgroups of Udolls for it to work. No other Suborder should be affected.

Send me your comments.

Thanks,

Chris Cochran

Please contact Chris Cochran or Bob McLeese for comments on this proposal.
chris.cochran@il.usda.gov
bob.mcleese@il.usda.gov

ATTACHMENT

IHDB. Other Argiudolls that have *both*:
1. Aquic conditions for some time in normal years (or artificial drainage) *either*:
a. Within 40 cm of the mineral soil surface, in horizons that also have redoximorphic features; *or*
b.Directly below the mollic epipedon or within 75 cm, whichever is closer to the mineral soil surface, in one or more horizons with a total thickness of 15 cm or more that have *one or more* of the following:
(1) A color value, moist, of 4 or more and redox depletions with chroma of 2 or less; *or*
(2) Hue of 10YR or redder and chroma of 2 or less; *or*
(3) Hue of 2.5Y or yellower and chroma of 3 or less; *and*
2. *One or both* of the following:
a. Cracks within 125 cm of the mineral soil surface that are 5 mm or more wide through a thickness of 30 cm or more for some time in normal years and slickensides or wedge-shaped peds in a layer 15 cm or more thick that has its upper boundary within 125 cm of the mineral soil surface; *or*
b. A linear extensibility of 6.0 cm or more between the mineral soil surface and either a depth of 100 cm or a densic, lithic, or paralithic contact, whichever is shallower.

GETTING ACQUAINTED WITH YOUR SOIL

Referring to soil as "dirt" and assuming that all "dirt" is more or less alike is a common mistake. Great differences in soil properties can occur even within short distances. Soils may be naturally wet or prone to flooding. They may be unstable and not suitable for construction. They may not drain well or have a high water table.

These properties of soil and many others that affect land use can be found in soil surveys. Each soil survey describes the properties of soils in the county or area surveyed and shows the location of each kind of soil on detailed maps. For each kind of soil there is a description of the characteristics you can expect to find for that particular soil.

The soil survey maps are now available on the Web. "Web Soil Survey (WSS) provides soil data and information produced by the National Cooperative Soil Survey. It is operated by the USDA Natural Resources Conservation Service (NRCS) and provides access to the largest natural resource information system in the world. NRCS has soil maps and data available online for more than 95 percent of the nation's counties and anticipates having 100 percent in the near future. The site is updated and maintained online as the single authoritative source of soil survey information." (http://websoilsurvey.nrcs.usda.gov) This website is worth a visit!

Are you interested in buying land, building a home, or developing property in some way? Soil surveys describe soil properties such as: natural soil drainage, flood hazard, depth to water table and bedrock, seasonal wetness, susceptibility to erosion, load bearing capacity, potential for swelling and shrinking, and location of sand and gravel. Do you make a living from a farm, ranch, or woodland? Soil surveys provide evaluations of soils for specific trees and crops. They also help producers, whether they are managing large or small operations, to plan disposal of waste resulting from feedlots, poultry processing, and the like.

Do you have a yard that you are planning to garden or landscape? Soil properties are a major consideration in successful gardening and in selecting plantings. In small plots, the soil survey may need to be supplemented by a soil test.

Are you fond of outdoor recreation and wildlife? Private or public land suitable for developing wildlife habitat, hunting areas, fish ponds, and other recreational facilities can be selected and planned through the use of soil surveys.

Do you support conservation of land and water resources in all land use? Soil information is basic to planning cost efficient measures to reduce erosion, sedimentation, subsidence (sinking or settling), slippage, wetness, and other hazards.

You can discuss soils and land use with the staff in your Soil and Water Conservation District office who will assist you in accessing and interpreting soil survey information.

Della Moen, Earth Team Volunteer, NRCS/Stephenson Soil and Water Conservation District, an equal opportunity provider and employer, 03/24/10 (for publication on 03/27/10 in the Journal-Standard, Freeport, Illinois) Della can be reached at info@stephensonswcd.org

ISCA is now on Facebook

For those of you who want to keep in touch with ISCA members and others interested in soils in Illinois, join our group on Facebook. Search Facebook for "Illinois Soil Classifiers Association" and become a friend of ISCA. Anyone may post messages, announcements, pictures or events that may be of interest to our membership. This is a great venue for posting meetings of other associations or organizations who use soil information. This is also a great place to post pictures of recent projects, interesting soils, or maybe something unrelated to soils, but of general interest to the membership. If you don't have a Facebook account, it is easy to set up. Just go to www.facebook.com and follow the instructions. Unfortunately, the Facebook site is restricted on some government computers, so many of you will need to do this at home. Contact webmaster@illinoissoils.org if you have any difficulty in accessing the ISCA Group or if you have any questions or comments.

ISCA Annual Meeting News

The 35th Annual Meeting of the ISCA was held on March 20, on the beautiful grounds at Ewing Manor at Illinois State University in Bloomington, Illinois. 28 members attended the event.

Registration was from 11-noon. Committee and Officer Reports were available to attendees as handouts prior to lunch and the meeting.

An invocation was given by Bill Teater, followed by a well-catered and delicious lunch!

President Tom D'Avello convened the Annual Meeting after lunch, and introduced the guest speaker. Dr. Maria Marshall is an Associate Professor in the Department of Agricultural Economics at Purdue University. Her topic was "Pricing: An Essential Small Business Strategy". It covered a number of marketing ideas relevant particularly to small businesses, and customer/client relationships.

President D'Avello called for the Secretary and Treasurer Reports from Steve Elmer and Chuck Frazee, respectively. These were read to the members present and approved as read.

Jim Hornickel announced the Burt Ray Scholarship Award recipient for 2009. The high Illinois scorer at the Region 3 Soil Judging Contest held at Purdue was Aaron Browning of Northern Illinois University. The winner of the prestigious Bent Auger Award was USDA-NRCS State Soil Scientist Bob McLeese, nominated (with accompanying photographs) for "Falling Asleep on the Job"!?! Drawings were also held for a variety of door prizes.

President D'Avello thanked all the officers and Committee members for their efforts in what has been an active and successful past year. In light of his promotion to West Virginia this past year, he announced his resignation prior to the end of the meeting. He passed the gavel to Mark Bramstedt, the current Vice-President, to insure that the organization would have a Past-President in the coming year.

This years Past President, Scott Wegman, announced the election results. President-Elect is Bruce Houghtby, and Vice-President is Brad Cate. Since incoming President Jennifer Wollenweber was ill and unable to attend the meeting, Vice-President Brad Cate accepted the gavel on her behalf, and adjourned the 35th Annual Meeting.

Many thanks to all who helped to plan and facilitate the meeting, as well as to those who attended! Keep tabs on the latest news and upcoming events posted in future newsletters and on the official ISCA website!

"Breaking News! Government Employee Dozes During Critical Teleconference!

Apparently, Bob McLeese Illinois State Soil Scientist, was not totally involved in a "crucial" soils teleconference recently and decided to catch a few winks! When photographed (apparently by a roving CNN reporter!) he denied the charge and claimed to be "thinking about a weighty issue"! When questioned about this later, he continually denied the charges, then "saluted" those involved! For these reasons, Bob was determined to be this year's recipient of the prestigious BENT AUGER AWARD!!

Congratulations, Bob!!

NOTE: Those involved in documenting this event have declared "protection" under the Whistleblowers Act of 1744!!

Submitted by Roger D. Windhorn

TRADING POST

This spot is reserved for members who would like to buy, sell, trade, or announce an item, event, or activity in our newsletter. Please limit your classified ad to 25 words or less. Email your ad to the newsletter at zach.weber@il.usda.gov

ISCA/AWSS/MAPPS/PSCI Joint Fall Meeting and Field Tour

The dates for the fall meeting and field tour have been established for October 13th and 14th. This will be a joint meeting with the Association of Women Soil Scientists, the Missouri Association of Professional Soil Scientists, and the Professional Soil Classifiers of Iowa. What a wonderful opportunity to mix and network with soil science professionals from other states. Plans are still under development, but a tentative agenda is indicated below.

Dates: October 13th and 14th, 2010
Location: Stoney Creek Inn, 3809 Broadway St., Quincy, IL

Tentative Agenda:

Wednesday, October 13th – Stoney Creek Inn
6:00 pm – 7:00 pm: Registration (cost yet to be determined, if necessary)
7:00 pm – 8:30 pm: Guest speakers
8:30 pm – ? : Social time

Thursday, October 14th – 8:00 am to 1:00 pm
8:00 am to 1:00 pm – field tour to examine/discuss floodplain soils and loess covered terraces. (Stops to be determined)

– Mid morning break which will include a texturing contest.

A block of 20 rooms has been reserved by ISCA at the Stoney Creek Inn at the rate of $70.00 + tax. http://www.stoneycreekinn.com/locations/index.cfm/Quincy You may call the hotel at (217) 223-2255. Please make your reservation by September 13th to guarantee a room. If you would so choose, Quincy offers many other hotels for accommodation (http://www.quincy-cvb.org/).

PR & E Committee: Frank Heisner, Steve Elmer, Rick Francen, and Bruce Putman

Reuse of Illinois Lake and River Sediments

The Fox Waterway Agency is drafting a series of informative brochures to promote the beneficial reuse of lake and river sediments. According to the Agency, over 100,000 cubic yards of sediment enters their waterway system annually due to eroding shorelines and islands. The Agency removes these sediments through their maintenance dredging program.

Reuse of lake and river sediments are currently used to restore natural habitat, enrich municipal ball fields and parks, landscapers have been selling and distributing it, and local organic farmers have been applying it to their fields.

The handout (shown here) includes one type of sediment classification that provides information to potential users of reclaimed sediments. The Agency is asking for help in identifying other standards or ways of classifying IL sediments that would provide additional information to the end users.

Please contact me if you have resources to share or would be willing to help with this volunteer project. Thank you.

Christy Sabdo, ISCA Member, c.sabdo@yahoo.com

ISCA ANNUAL FALL SOILS TOUR MENARD AND CASS COUNTIES FRIDAY, OCTOBER 23, 2009

Optically Stimulated Luminescence Date Sampling

By Xiaodong Miao, Ph.D
Illinois State Geological Survey
Institute Of Natural Resource Sustainability
University of Illinois

Stop #1(Road Cut) in Soils Tour Guide

Upper Sample (Roxanna Silt) is about 47,000 years old*
Lower Sample (Upper Sangamon Soil) is older than 50,000 years old*

*They are not the final ages because the dose rate is not determined; they are based on the rough estimation of dose rate at 3Gy/ka.

Above are the results from the OSL dating of geologic materials that we looked at on the Fall Soils Tour. At the time of the tour we were still waiting for the results of the dating procedure. The attached sheet was passed out at the annual meeting but many that attended the tour were not at the annual meeting.

Submitted by Jim Hornickel

www.illinoissoils.org

The Illinois Soil Classifiers Association is an organization promoting the wise use of the soil resource. ISCA is made up of professional soil classifiers in public service, private industry, and education and includes students and others interested in preserving soil. A soil classifier maps, describes and interprets soils according to a national system of soil classification. ISCA was established in 1975 and is affiliated with the American Registry of Certified Professionals in Agronomy, Crops, and Soils.

ISCA Newsletter Staff
1502 South West Street
Olney, IL 62450

Phone: 618-392-7141 x116
Fax: 618-392-4325
Email: zach.weber@il.usda.gov

Stories of a Bagpiper

As a bagpiper, I play many gigs. Recently I was asked by a funeral director to play at a graveside service for a homeless man. He had no family or friends, so the service was to be at a pauper's cemetery in the Kentucky back-country.

As I was not familiar with the backwoods, I got lost and being a typical man I didn't stop for directions. I finally arrived an hour late and saw the funeral guy had evidently gone and the hearse was nowhere in sight.

There were only the diggers and crew left and they were eating lunch. I felt badly and apologized to the men for being late. I went to the side of the grave and looked down and the vault lid was already in place. I didn't know what else to do, so I started to play.

The workers put down their lunches and began to gather around. I played out my heart and soul for this man with no family and friends. I played like I've never played before for this homeless man.

And as I played 'Amazing Grace,' the workers began to weep. They wept, I wept, we all wept together. When I finished I packed up my bagpipes and started for my car. Though my head hung low, my heart was full.

As I opened the door to my car, I heard one of the workers say, "I never seen nothin' like that before and I've been putting in septic tanks for twenty years."

Submissions

This is **YOUR** newsletter. If you wish to submit material, here are some preferences.

- Send information by the last week of the month before the newsletter is scheduled to be published.
- Digital copy in Microsoft Word
- Use as little formatting (indents, bullets, charts) as possible. This increases the work to get it into Publisher.

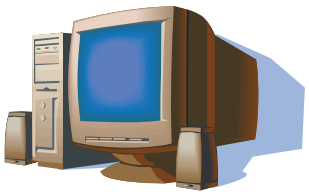
Publication Schedule

- Winter (February)
- Spring (May)
- Summer (August)
- Fall (November)

ISCA Newsletter Committee is looking for pictures of it's members, past or present, to include in future newsletters. Submissions can be sent electronically or hard copy to the staff address, see above and left. Please include a narrative for the caption! If hard copies are sent please indicate if they are to be returned otherwise photographs will be retained in an archive photos file.

www.illinoissoils.org

New, exciting links have been added to the "announcements" page on our website. Be sure to bookmark this page. Its an excellent resource to keep you informed on the latest soils issues. Better yet… make it your home page!



ISCA

ISCA Newsletter
1502 South West St.
Olney, IL 62450

Visit the ISCA website to see the color version of this newsletter

www.illinoissoils.org/news

.....Cut.....Cut.....

Change of Address Form

Name:_____

Address:_____

City, State, Zip:_____

Phone:_____

E-Mail:_____

***Mail to: Steve Elmer, ISCA Secretary, 27892 Ebenezer Road, Geneseo, IL 61254**

Illinois Soil Classifiers Association Newsletter

Summer-August 2010

Upcoming Events:

30th CSFSW	Oct. 2010
ISCA Fall Tour	Oct. 2010

Inside this issue:

Message from the President

Summer is definitely upon us, but before we know it the leaves will be changing. Just like the seasons, our association changes and evolves. The ISCA's Executive Council and Committees are always working diligently to ensure our association is keeping up with the current issues we face within our profession. We rely heavily on the membership providing thoughts and ideas as to how our association can continue to improve. In order to maintain our credibility and viability, each one of us should be actively participating and attending meetings, training sessions, professional seminars, field activities, mentoring, etc. Several great opportunities will be available this year; we all must be passionate and proactive!

Recently, many concerns have been addressed regarding non-soil classifiers conducting on-site investigations. The proposed Illinois State Septic Code (which is currently under review) allows certified (ISCA or ARCPACS) soil classifiers, licensed professional engineers, employees of the local health department (meeting specific experience criteria), and certified (ARCPACS) soil scientists to conduct soil investigations for subsurface sewage disposal systems. The newly proposed addition of certified soil scientists has many eyebrows raised within our community. However, the Illinois Department of Public Health found it necessary to include certified soil scientists because it appears that there is a lack of certified (ISCA or ARCPACS) soil classifiers available to conduct soil investigations for septic systems.

The ISCA website has a list of ISCA certified professional soil classifiers and an interactive map to find ISCA CPSCs who are available for private consulting. You can check this map out under the "Hire a Soil Classifier" tab. Currently, there are only 45 members who are certified through ISCA; however, not all of these classifiers are available for private consulting. The number of available ISCA certified professional soil classifiers ranges from 1-9 classifiers throughout the entire state of Illinois! Even if you do not plan on currently conducting on-site investigations, becoming an ISCA certified professional classifier is a great way to support, maintain creditability, and protect our organization and careers.

A continued effort to establish an outreach and mentorship program will remain a priority this year. One of the requirements for certification is to have soil classification experience with supervision under or collaboration with a certified professional soil classifier. If you are certified, please consider mentoring/collaborating with someone who may be eligible for certification.

If you are not certified, but are qualified, support our organization by becoming an ISCA certified professional soil classifier! The first step in the ISCA certification process is becoming a full member. Currently, there are several associate members who are qualified to upgrade to full member status. If you think you qualify, please contact Ron Collman or consult the ISCA Handbook for the requirements and application form. In addition, there are several full members who are not ISCA certified. If you are interested in becoming certified please contact Doug Gaines or consult the ISCA Handbook. Please keep in mind that membership and certification are two different processes and require different applications. The last thing we want to happen to ISCA is for the number of ISCA certified soil classifiers to decrease and for our organization and the need for certification to become extinct.

Best regards,
Jennifer L. Wollenweber
ISCA Certified Professional Soil Classifier
ISCA President

30th ANNUAL CENTRAL STATES FOREST SOILS CONFERENCE

OCTOBER 12 - 14, 2010

LONDON, KENTUCKY

Location

London, Kentucky is located on I-75 about 75 miles south of Lexington, KY and 96 miles north of Knoxville, TN. Or at UTM 759036.1E, 411299.9N

Lodging

Near I-75 Exit 38 - Hwy 192

- Hampton Inn
  800-426-7866
- Country Inn & Suites
  606-878-9900
- Comfort Suites
  800-228-5150

Tentative Program Includes

- White Oak Stocking Studies
- Healthy Forests Restoration Act of 2003
- Prescribed Burning
- Thinning Studies
- Southern Pine Beetle damage and Recovery
- Oak Decline and Regeneration
- Soils Formed from Middle and Lower Pennsylvanian Strata
- Tour of Begley Lumber Company

Sponsors

- USDA- Daniel Boone Nat. Forest
- USDA-NRCS
- Laurel County Conservation District
- Kentucky Assn. Professional Soil Scientists
- University of Kentucky-Dept of Agronomy

For Additional Information

- Doug McIntosh, NRCS
  606-864-2180 x131
  doug.mcintosh@ky.usda.gov
- George Chalfant, F.S (ret)
  georgechalfant@aol.com
- Steve Blanford, NRCS
  859-224-7607steve.blanford@ky.usda.gov

DRAFT

Central States Forest Soils Conference
October 12-14, 2010
London, KY
(Agenda/field itinerary)

Tuesday, October 12th

Registration 3 – 5 p.m., at *The London Community Center*
(www.londoncommunitycenter.com)

Social 5 – 6:30 p.m.

Evening program

Moderator – Yet to be selected

6:30 – 6:45 Welcome, Derek Ibarguen, London District Ranger, Daniel Boone National Forest

6:45 – 7:00 Opening remarks, synopsis of the evening program and introduction of the presenters

7:00 – 7:30 "The Appalachian Regional Reforestation Initiative" and the "Forest Reclamation Approach", a review of the current reforestation renaissance on coal surface mines in Appalachia by Dr. Patrick Angel, Senior Forester/Soil Scientist, USDI, OSM, Appalachian Regional Office, London, Kentucky. (http://arri.osmre.gov)

7:30 – 8:00 Soils and Geology (Soils – Doug McIntosh, NRCS/Geology – Harry Evans, NRCS)

8:00 – 9:00 Forest Service research on the Daniel Boone National Forest

- Authorized by the "Healthy Forests Restoration Act of 2003". (Dr. Robert Rummer, Project Leader, Forest Operations Research, and/or Dr. Callie Schweitzer, SRS, Auburn, University)
- Long-Term Research for Oak - Daniel Yaussy, Supervisory Research Forester, Northern Research Station, Delaware, OH

Closing - Preview of the field trips and Wednesday nights banquet, etc.

Field Stops:

Wednesday, October 13th

Healthy Forests Restoration Act of 2003 Research; Cold Hill Area off State Route 192 West of London: (see attached map of study units)

1. Unit 11 – Thinning (to B-level)
   Unit 17 – Thinning (to B-level)

2. Unit 10 – Oak – Shelterwood (60-75 BA)
   Unit 12 – Shelterwood with reserves (10-15 BA)

3. Unit 23 – Woodland – Thinning (30-50 BA); Xeric
   Unit 24 – Oak – Shelterwood (60-75 BA); Xeric
   Unit 25 – Thinning (to B-level); Xeric

4. Short-leaf pine management (within HFRA Research Area); Southern Pine Beetle damage and recovery. (FS London District Silviculturist, Robert Sitzlar, host)

5. Recent Prescribed burn (Middle Fork Burn) in Unit 25. Over view of burn (i.e. objectives, fire behavior, etc.)

Lunch – Craig's Creek Group Campground/picnic shelter on Laurel River Lake.

6. White Oak Stocking Study, USFS Research, 1959 to present; effects of establishment and stand density on growth, quality, and production in even-age hardwood stands. Laurel River Lake Holly Bay Recreation Area (State Route 1193).

   - "White Oak Stocking Study" and Oak decline and regeneration at Amphitheater; and
   - Review of plots 5 and 6 (BA of 40 and 20 respectively); and plots 1 and 2 (BA of 60 and 80 respectively) – Daniel Yaussy, Research Forester

Return to London. Travel SR 1193, crossing the Laurel River Lake dam to parking area serving as access to the beach, return to London.

Evening Banquet:

7 – 10 p.m. The London Community Center. (Meal, entertainment, and business meeting, respectively)

Thursday, October 14th

8:00 – Noon: Tour of Begley Lumber Company facilities west of London. Begley has a very modern computerized mill operation. (www.begleylumber.com). (The Laurel County Soil Conservation District Board has approved purchase of masks, safety glasses and ear plugs; and the Daniel Boone N.F. will loan 40 + hardhats in support of this tour).

Handouts -

- Copy of H.R. 1904, "Healthy Forests Restoration Act of 2003"
- Paper entitled "Harvesting Productivity and Disturbance Estimates of Three Silvicultural Prescriptions in and Eastern Kentucky Hardwood Forest" by Jason Thompson, Dr. Bob Rummer, and Dr. Callie Schweitzer at the SAF 2009 National Convention, Orlando, Fl.
- "Controlled burning for Healthy Forest Management in the Appalachians'"
- Prescribed Fire " An Ancient Practice for today's Forests"
- "The Boone Trace", Daniel Boone National Forest
- Soil Survey status map
- General geology map
- ?

Motels offering Group rates:
(All near the I-75 Exit, 192 Interchange)

Hampton Inn
(800) 426-7866/ (606) 877-1000

Country Inn & Suites
(606) 878-9900

Comfort Suites
(800) 228-5150/ (606) 877-7848

Transportation

Wombles Transportation
144 Eisenhower Court
Nicholasville, KY 40356
859-887-4611
www.womblescharters.com

(Two motor coaches are under contract)

Conference Registration Form

Central States Forest Soils Conference

October 12 – 14, 2010
London, Kentucky

Name _____

Organization _____

Address _____

City _____ State _____ Zip _____

Phone# _____ Fax# _____

E-mail _____

Registration Fee is $80.00

Late Registration – after September 15 – is $95

Make check payable to: KASC (Kentucky Association of Soil Classifiers)

Please return form with payment to: Harry Evans
100 Nami Plaza, Suite 2
London, KY 40741

For more information, please contact:

- Doug McIntosh, NRCS
  606-864-2180 x131
  doug.mcintosh@ky.usda.gov
- George Chalfant, F.S (ret)
  georgechalfant@aol.com
- Steve Blanford, NRCS
  859-224-7607
  steve.blanford@ky.usda.gov

Received

AMT: _____

CHK#: _____

DATE: _____

ISCA/MAPSS/PSCI/AWSS Joint Fall Field Tour
October 27th & 28th, 2010

Location: Stony Creek Inn, Quincy, Illinois

Agenda:

Wednesday, Oct. 27th – Stony Creek Inn, Conference Room
6:00 – 7:00 pm - Registration
7:00 – 8:30 pm – Topics of Presentations:
Fluvial Geomorphology of the Mississippi River Valley
USFW Service – Vegetation Changes on the Mississippi River Floodplain
President (or representative) from each professional organization
8:30 - ? pm – Social time for interaction with fellow soil classifiers

Thursday, Oct. 28th – Field Tour
8:00 am – 1:00 pm - Meet in conference room at Stony Creek Inn to depart for selected sites in Adams County, IL and Lewis and Marion Counties, MO. Sites will include: Sand terrace, loess covered foot slope/terrace, poorly drained flood-plain sites, and a fluvial-lacustrine site.

1:00 pm – Farewell

Registration: Please register by October 1st. The registration fee is $25.00 if you are a member of ISCA, MAPSS, PSCI, or AWSS. Please indicate which affiliation you belong to on the registration form. The registration for all other nonmembers will be $50.00. Checks should be payable to: Illinois Soil Classifiers Association.

Lodging Information: You are responsible for your own lodging arrangements. A block of 20 rooms have been reserved at the Stoney Creek Inn, 3809 E. Broadway, Quincy, IL, (http://www.stoneycreekinn.com/locations/index.cfm?LocationID=4) at a rate of $70.00 + tax. Call the hotel at (217) 223-2255 before Sept. 15th to guarantee a room. There are numerous hotels/motels in the Quincy area if you wish find other accommodations. Go to: http://seequincy.com/

For more information contact: Frank Heisner (frank.heisner@il.usda.gov)
(815) 625-3417 ext. 3
(815) 499-4681 (evenings)

Registration Form for October 27 & 28, 2010 ISCA/MAPSS/PSCI/AWSS Fall Tour

Registration: ISCA/MAPSS/PSCI/AWSS Members: $25.00; Non-members/Guests: $50.00

Name: _____ Affiliation: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: (___) _____. Email address: _____

Members ($25): _____ Non-members/Guests ($50): _____

Optional T-shirt: Commemorative, long sleeve T-shirts are available for $12.50* ($14.50* for 2XL and larger). They are made with 100% pre-shrunk cotton, are chocolate in color (approx. 7.5YR3/2), and recognize all 4 associations. If you are interested in purchasing one or more of these shirts, please indicate the size and quantity below and add the purchase price to your registration fee. Note that both men's and women's sizes are available. Orders are needed by October 1.
*Prices based on a minimum shirt order. If minimum is not met, shirt purchases will be refunded.

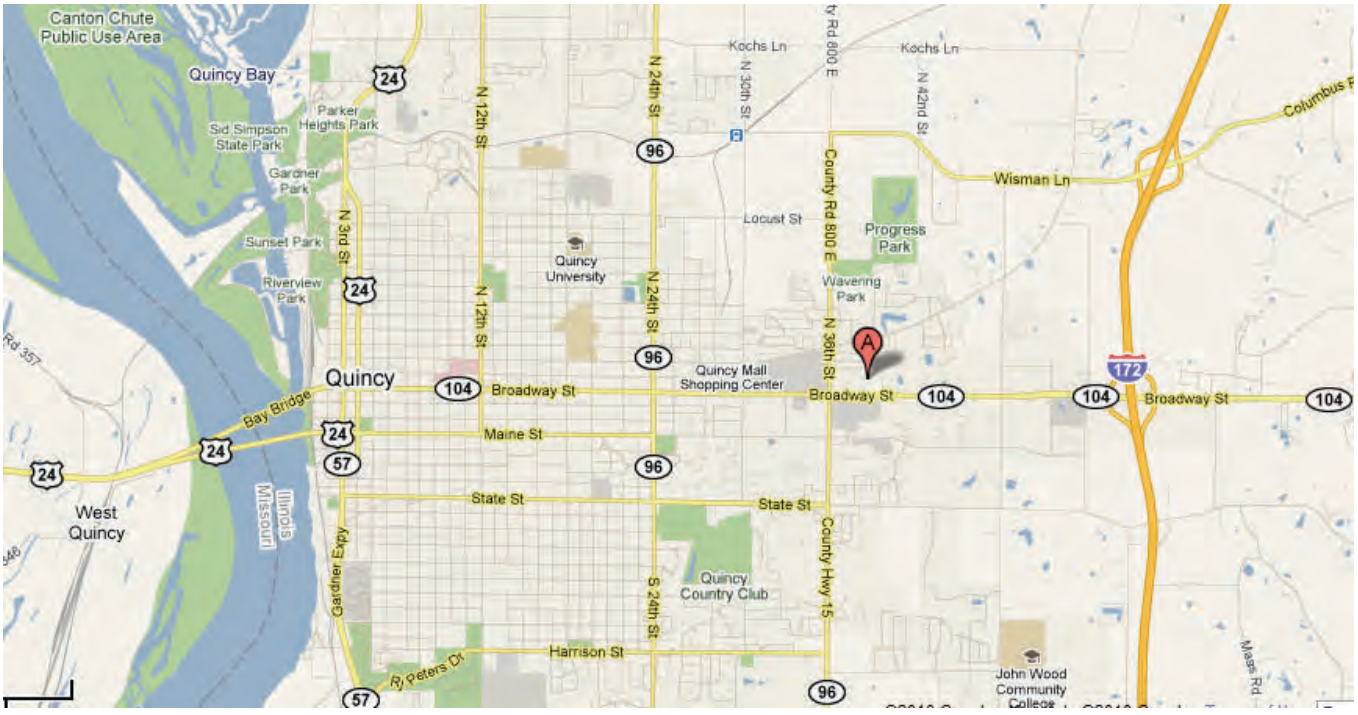
Men's sizes: S ___ M ___ L ___ XL ___ ($12.50)
2XL ___ 3XL ___ 4XL ___ ($14.50)

Women's sizes: S ___ M ___ L ___ XL ___ ($12.50)
2XL ___ ($14.50)

Please make your check out for the appropriate amount ($25.00 for members, $50.00 for non-members/guests, plus shirts if applicable). Make your check payable to the Illinois Soil Classifiers Association. Detach and send the registration form and check to:

Steve Elmer, 27892 Ebenezer Road, Geneseo, IL 61254

Map to Stoney Creek Inn, Quincy, IL



United States Department of Agriculture

NRCS
Natural Resources Conservation Service
National Soil Survey Center
Federal Building, Room 152
100 Centennial Mall North
Lincoln, NE 68508-3866

Phone: (402) 437-5499
FAX: (402) 437-5821

SUBJECT: MGT – Trip Report – Geophysical Assistance May 14, 2010

TO: William J. Gradle
State Conservationist, NRCS
Champaign, Illinois

File Code: 330-20-7

Purpose:
The main purpose of this investigation was to use electromagnetic induction (EMI) to characterize the depths to coarser-textured outwash materials on a paleoterrace composed principally of Plano soils in Tazewell County, and to assess spatial patterns of sodium-affect soils (SAS) in Montgomery and Clark Counties. Heavy rains and wet soil conditions made several sites unsuitable for EMI surveys. Alterative sites and projects had to be selected. Ground-penetrating radar (GPR) and EMI surveys were completed on dunes associated with aeolian deposits in Tazewell County. In addition, an EMI survey was completed at a research site of Dr. Leon Fulmer in Clark County.

Participants:
Jim Doolittle, Research Soil Scientist, USDA-NRCS-NSSC, Newtown Square, PA
Jim Hornickel, Soil Scientist, USDA-NRCS, Springfield MLRA, Springfield, IL
Troy Fehrenbacher, Soil Scientist, USDA-NRCS, Charleston, IL
Leon Fulmer, Retired Geologist, ISGS, Champaign, IL
Rich Francen, Soil Scientist, USDA-NRCS, Springfield MLRA, Springfield, IL
Tim Malone, District Conservationists, USDA-NRCS, Pekin, IL
Bob Tegeler, MLRA Project Leader, USDA-NRCS, Springfield MLRA, Springfield, IL
Zach Weber, Soil Scientist, USDA-NRCS, Olney, IL
Roger Windhorn, Resource Soil Scientist, USDA-NRCS, Champaign, IL
Dan Withers, Cartographic Technician, USDA-NRCS, Champaign, IL

Activities:
All activities were completed during the period of April 26-29, 2010.

Summary:
1. This field study was preceded by an unusually wet weekend in Illinois. As a consequence, extremely wet field conditions plagued our field investigations. Roger Windhorn and the Illinois Staff are commended for finding alternative sites and projects.

2. Vertical profiling with both the EM38MK2-2 and EM31 meters on a paleoterrace in Tazewell County suggest the presence of coarser textured outwash materials beneath medium-textured loessial deposits. Ten ground-truth cores confirmed the general uniformity of soil materials within this site, which accounts for EMI inability to better quantify the depths to coarser textured outwash deposits. Vertical profiling with the shallower-sensing EM38MK2-2 meter can be used to map the spatial distribution of over-thickened surface layers and shallower argillic horizons developed in loessial soils.

3. Tonal patterns on aerial photographs of the visited paleoterrace in Tazewell County suggest the presence of periglacial features (ice-wedge pseudomorphs, relict polygonal pattern ground). If present, these features appear to have sufficient sizes or dimensions to be distinguished with EMI.

4. At a dune site in Tazewell County, the EM31 meter was ineffective because of the high electrical resistivity of Plainfield soils, which produced exceedingly low and invariable EC_a across the site. However, GPR effectively imaged the depth to the water table and imaged three unique facies composed of different soil materials and structures. Using a 200 MHz antenna, the water table was identified at depths ranging from about 5.2 to 2.0 m.

5. It was my and the groups good fortune to spend time in the field with Dr. Leon Fulmer. Much was learned through casual conversations with this very caring and knowledgeable gentleman.

/s/ Craig Ditzler, Acting

JONATHAN W. HEMPEL
Director
National Soil Survey Center

cc:
James A. Doolittle, Research Soil Scientist, Soil Survey Research & Laboratory, NSSC, MS 41, NRCS, Lincoln, NE
Micheal L. Golden, Director, Soil Survey Division, NRCS, Washington, DC
Samuel J. Indorante, MLRA Project Leader, NRCS, Carbondale, IL
Robert L. McLeese, State Soil Scientist, NRCS, Champaign, IL
Travis Neely, State Soil Scientist/MO Leader, NRCS, Indianapolis, Indiana
Philip J. Schoeneberger, Research Soil Scientist, Soil Survey Research & Laboratory, NSSC, MS 41, NRCS, Lincoln, NE
Robert Tegeler, MLRA Project Leader, NRCS, Springfield, IL
John W. Tuttle, Soil Scientist, Soil Survey Research & Laboratory, NSSC, MS 41, NRCS, Lincoln, NE
Larry W. West, National Leader, Soil Survey Research & Laboratory, NSSC, MS 41, NRCS, Lincoln, NE
Roger Windhorn, Geologist, NRCS, Champaign, IL

Technical Report on Geophysical Investigations conducted in Illinois on 26 to 29 April 2010.

James A. Doolittle

Equipment:
The EM38-MK2 meter (Geonics Limited, Mississauga, Ontario) was used in this investigation.[1] The EM38-MK2 meter weighs about 2.8 kg (6.2 lbs) and requires only one person to operate. The EM38-MK2 meter consists of one transmitter coil and two receiver coils, and operates at a frequency of 14,500 Hz. The receiver coils are separated from the transmitter coil at distances of 100 and 50-cm. This configuration provides nominal penetration depths for the 100 and 50-cm intercoil spacings of 150 and 75 cm in the vertical dipole orientation (VDO) and 75 and 38 cm in the horizontal dipole orientation (HDO), respectively. Operating procedures for the EM38-MK2 meter are described by Geonics Limited (2008). The EM38-MK2 meter provides simultaneous measurements of both quadrature-phase (apparent conductivity; EC_a) and in-phase (susceptibility) components within the two depth ranges.

The EM31 meter (Geonics Limited, Mississauga, Ontario) was also used in this investigation.[1] This meter is portable and requires only one person to operate. McNeill (1980) has described the principles of operation for the EM31 meter. The EM31 meter weighs about 12.4 kg (27.3 lbs), has a 3.66 m intercoil spacing, and operates at a frequency of 9,810 Hz. When placed on the soil surface, the EM31 meter has effective penetration depths of about 3.0 and 6.0 meters in the HDO and VDO, respectively (McNeill, 1980).

A Pathfinder ProXT GPS receiver (Trimble, Sunnyvale, CA) was used to georeferenced EC_a data collected with the EMI meters.[1] During surveying, EC_a and GPS measurements were automatically recorded in the Allegro CX field computer (Juniper Systems, Logan, Utah).[1] The RTmap38MK2 and the RTmap31 software programs developed by Geomar Software Inc. (Mississauga, Ontario) were used to record, store, and process EC_a and GPS data.[2] All EC_a data are expressed in milliSiemens/meter (mS/m).

To help summarize the results of the EMI survey, SURFER for Windows (version 9.0), developed by Golden Software, Inc. (Golden, CO), was used to construct the simulations shown in this report.[1] Grids of EC_a data were created using kriging methods with an octant search.

The radar unit is the TerraSIRch Subsurface Interface Radar (SIR) System-3000 (hereafter referred to as the SIR-3000), manufactured by Geophysical Survey Systems, Inc. (GSSI; Salem, NH).[1] The SIR-3000 consists of a digital control unit (DC-3000) with keypad, SVGA video screen, and connector panel. A 10.8-volt lithium-ion rechargeable battery powers the system. The SIR-3000 weighs about 4.1 kg (9 lbs) and is backpack portable. With an antenna, the SIR-3000 requires two people to operate. Jol (2009) and Daniels (2004) discuss the use and operation of GPR. A 200 MHz antenna was used in this investigation.

The RADAN for Windows (version 6.6) software program (hereafter referred to as RADAN; developed by GSSI) was used to process the radar records shown in this report.[1] Processing included: header editing, setting the initial pulse to time zero, color table and transformation selection, range gain adjustments, signal stacking, migration, and high-pass filtration (refer to Jol (2009) and Daniels (2004) for discussions of these techniques).

Calibration of GPR:
Ground-penetrating radar is a time scaled system. The system measures the time that it takes electromagnetic energy to travel from an antenna to an interface (e.g., soil horizon, stratigraphic layer, water table) and back. To convert the travel time into a depth scale, either the velocity of pulse

[1] Trade names are used for specific references and do not constitute endorsement.

propagation or the depth to a reflector must be known. The relationships among depth (D), two-way pulse travel time (T), and velocity of propagation (v) are described in equation [1] (after Daniels, 2004):

$$v = 2D/T \qquad [1]$$

The velocity of propagation is principally affected by the relative dielectric permittivity (E_r) of the profiled material(s) according to equation [2] (after Daniels, 2004):

$$E_r = (C/v)^2 \qquad [2]$$

Where C is the velocity of propagation in a vacuum (0.298 m/ns). Typically, velocity is expressed in meters per nanosecond (ns). In soils, the amount and physical state (temperature dependent) of water have the greatest effect on the E_r and v.

Based on the measured depth and the two-way pulse travel time to a known, buried subsurface reflector (metal plate buried at 50 or 52 cm), the v and the E_r through the upper part of the Plainfield (mixed, mesic Typic Udipsamments) and Cisne (fine, smectitic, mesic Mollic Albaqualfs) soil profiles were estimated using equations [1] and [2]. At the time of this study, soils were wet. In an area of Plainfield soil, the estimated E_r was 6.56. This relative dielectric permittivity results in an estimated v of 0.1163 m/ns. In an area of Cisne soil, the estimated E_r was 15.87. This relative dielectric permittivity results in an estimated v of 0.0748 m/ns.

Study Sites:

Tazewell County – Site 1:

The first study site is an 80-acre field of corn stubble, which is located in the SW ¼ of Section 19, T. 23 N. R. 4 W. Soils delineation mapped within this field include Plano silt loam on 0 to 2 % slopes (199A) and Edgington silt loam (272). Figure 1 is the soil map for this study site. The very deep, well drained Plano soils formed in loess or other silty material on terraces. At this site, Plano soils are known to be underlain by coarse-textured outwash deposits at depths ranging from about 2.1 to greater than 2.7 m (7 to greater than 9 ft). The very deep, poorly drained Edgington soils form in loess and are in swales and depressions. The taxonomic classifications of these soils are listed in Table 1. An aerial photograph of the general area of this site reveals tonal patterns that suggest the presence of relict periglacial polygonal patterns (Fig. 2).

Table 1. Taxonomic classification of soils.

Soil Series	Taxonomic Classification
Cisne	fine, smectitic, mesic Mollic Albaqualfs
Coloma	mixed, mesic Lamellic Udipsamments
Ebbert	fine-silty, mixed, superactive, mesic Argiaquic Argialbolls
Edgington	fine-silty, mixed, superactive, mesic Argiaquic Argialbolls
Hoyleton	fine, smectitic, mesic Aquollic Hapludalfs
Newberry	fine-silty, mixed, superactive, mesic Mollic Endoaqualfs
Plainfield	mixed, mesic Typic Udipsamments
Plano	fine-silty, mixed, superactive, mesic Typic Argiudolls

Figure 1. Site 1 in Tazewell County is dominated by two delineations: a larger delineation of Plano silt loam, 0 to 2 % slopes (199A) and a smaller delineation of Edgington silt loam (272). The soil map is from the Web Soil Survey.

Figure 2. This soil map includes the Tazewell County site (enclosed in rectangle). Tonal patterns on this image suggest relict periglacial pattern ground. The soil map is from the Web Soil Survey.

Tazewell County - Site2:

This study site is in CRP and is located in the SE ¼ of Section 9, T. 22 N., R. 5 W. Soils map units delineated within this site include Plainfield sand on 3 to 7 % slopes (54B), Plainfield sand on 7 to 15 % slopes (54D), and Coloma sand on 3 to 7 % slopes (689B). Figure 3 is the soil map for this study site with the approximate locations of GPR traverse lines. Ground-penetrating radar traverses were conducted mostly in map unit 54D (see Fig. 3). The very deep, excessively drained Plainfield and somewhat excessively drained or excessively drained Coloma soils formed in sandy drift. The taxonomic classification of these soils is listed in Table 1.

Figure 3. Site 2 in Tazewell County is dominated by delineations of Plainfield (54B and 54D) and Coloma (698B) soils. This soil map is from the Web Soil Survey. Black lines show the approximate locations of GPR traverse lines.

Clark County Site

This 40-acre site is located in the NW ¼ of Section 6, T. 9 N., R. 14 W. At the time of this study, the field was in corn stubble. Soil map units identified within the study site include: Cisne silt loam on 0 to 2 % slopes (2A), Hoyleton silt loam on 0 to 2 % slopes (3A), Ebbert silt loam on 0 to 2 % slopes (48A), and Newberry silt loam on 0 to 2 % slopes (218A). The very deep, poorly drained Cisne soils formed in loess and underlying gritty loess on till plains. The very deep, somewhat poorly drained Hoyleton, poorly drained Newberry, and the deep, poorly drained and very poorly drained Ebbert soils formed in loess and underlying silty or loamy deposits, which overlie a strongly weathered Sangamon-age paleosols developed in Illinoisan-age till. The taxonomic classifications of these soils are listed in Table 1. Figure 4 is the soil map of the study area from the Web Soil Survey.

Figure 4. The Clark County Site includes delineations of Cisne (2A), Hoyleton (3A), Ebbert (48A), and Newberry (218A) soils. This soil map is from the Web Soil Survey.

Results:

Paleoterrace Site in Tazewell County:

Ten soil cores were extracted at this site. Soils identified in these ten cores included Plano (7), Muscatune (2), and Edgington (1) (names and locations shown on upper plot in Fig. 5). The descriptions of these cores revealed relatively uniform soil materials developed in about 2.1 to greater than 2.7 m (7 to greater than 9 ft) of Peorian loess. With the exception of the Edgington soil, depth to water table ranged from 1.5 to greater than 2.7 m (5 to greater than 9 ft). A perched water table was observed in Edgington soil at a depth of about 61 cm (2 ft).

Apparent conductivity was relatively low and uniform across the surveyed area. Based on 4326 measurements made with the deeper-sensing (0 to 150-cm depth interval) 100-cm intercoil spacing on the EM38MK2-2 meter, EC_a averaged 19.8 mS/m and ranged from about 14.9 to 26.5 mS/m. One-half of these EC_a measurements were between 18.8 and 20.8 mS/m. Based on 4326 measurements made with the shallower-sensing (0 to 75 cm depth interval) 50-cm intercoil spacing on the EM38MK2-2 meter, EC_a averaged 8.9 mS/m and ranged from about 2.1 to 15.7 mS/m. One-half of these EC_a measurements were between 7.7 and 10.3 mS/m.

Results indicate that EC_a increases with increasing soil depth (measurements obtained with the deeper-sensing 100-cm intercoil spacing were higher than measurements obtained with the shallower-sensing 50-cm intercoil spacing). This vertical trend was attributed to the higher clay content of the subsoil compare with the surface layers. Surprisingly, the noticeably high moisture contents of surface layers and the soils had little impact on EC_a measurements. In fact lower EC_a were recorded on a ponded depression of Edgington soils with over thickened surface layers than on surrounding, higher-lying, convex surfaces of Plano soils where the depth to argillic horizon was shallower (see Fig. 5).

Spatial EC_a patterns that are evident in Fig. 5 suggest a very crude polygonal pattern consisting of intersecting lineations of lower EC_a. In light of the tonal patterns evident on the aerial photograph shown

in Fig. 2, it is all too easy to envision similar spatial patterns in the EC_a data. However, a number of additional ground-truth soil cores are needed to confirm this interpretation. In the data collected with the 50-cm intercoil spacing (lower plot in Fig. 5) a linear artifact is evident near the southern (lower) boundary of the survey area. This linear strip of lower EC_a may represent the location of a former access road.

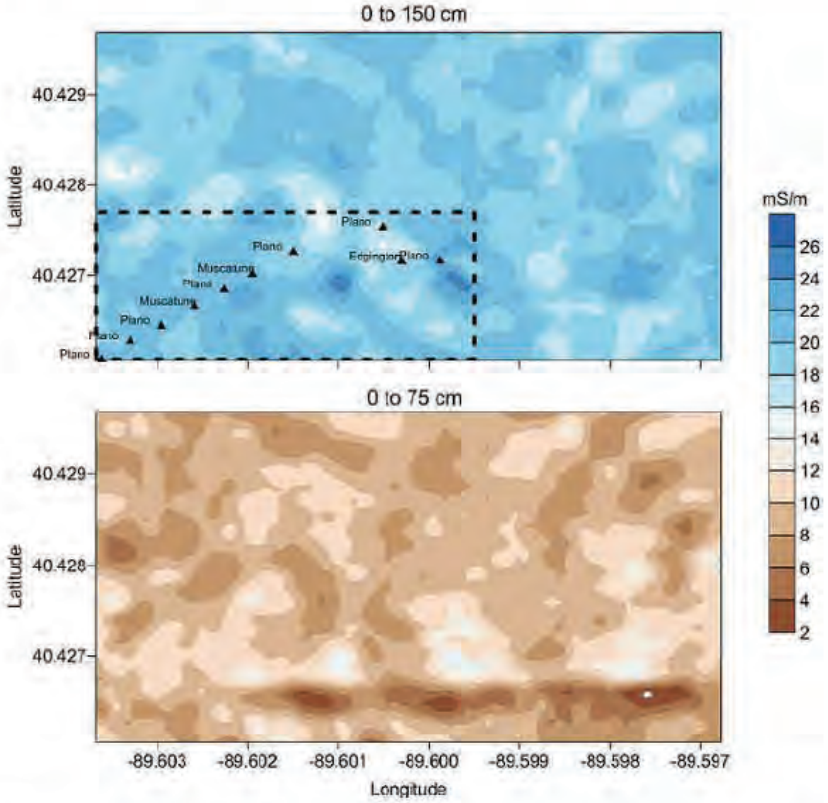


Figure 5. Plots of EC_a data collected on the paleoterrace in Tazewell County with the EM38MK2-2 meter in the deeper-sensing 100-cm (upper plot) and shallower-sensing 50-cm (lower plot) intercoil spacings. In the upper plot, the rectangular area enclosed with segmented lines was also surveyed with an EM31 meter (see Fig. 6)

A portion of the study site that was surveyed with the EM38MK2-2 meter was resurveyed using the deeper-sensing EM31 meter (see upper plot in Fig. 5). The EM31 meter was operated in the VDO, which provides a nominal penetration depth of about 5 m (pedestrian survey with meter held at hip-height). Based on 2751 measurements made the EM31 meter, EC_a averaged only 9.5 mS/m and ranged from about 5.9 to 12.5 mS/m. One-half of the measurements were between 9.1 and 9.9 mS/m. These lower measurements are attributed to the greater penetration depth of the EM31 meter. The greater penetration depth caused a larger proportion of the measured response to be influenced by the underlying coarser-

textured and more electrically resistive outwash materials. Spatial patterns of EC_a data collected with the EM31 meter are shown in Fig. 6.

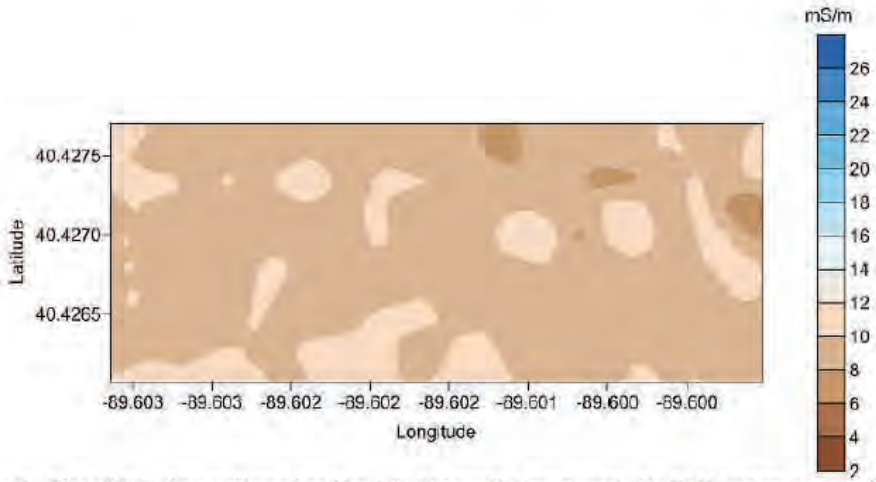


Figure 6. Plot of EC_a data collected at Site 1 in Tazewell County with the EM31meter operated in the deeper-sensing vertical dipole orientation. The nominal penetration depth is about 5 m.

The low variability of EC_a measurements testifies to the relative homogeneity and uniform layering of the soil materials within the study site. As measurements obtained with the deeper-sensing EM31 meter were lower than those obtained with the shallower-sensing EM38MK2-2 meter, it is assumed that the soil materials become more electrically resistive with increasing soil depths. The increased resistivity is attributed to coarser textured outwash materials at lower soil depths. This association was confirmed in core observations made at this site.

Measurements obtained with the EM38MK2-2 meter in the shallower-sensing 50-cm intercoil spacing were lower than those obtained in the deeper-sensing 100-cm intercoil spacing. This relationship is associated with the higher clay content of subsoil than surface soil layers. On higher-lying, convex surface, EC_a was noticeably higher than on lower-lying, plane and concave surfaces, which were wetter and some with ponded water. Surface layers were thinner on convex surfaces and thicker on concave surfaces.

Dune Site in Tazewell County:
Random traverses were completed across this site with the EM31 meter. These traverses include all slope components from concave toe slope to convex summit areas. Because of their low clay contents, Plainfield soils are electrically resistive. Variations in EC_a across the site are attributed to the number and thickness of finer-textured lamellae (Coloma soils) and differences in soil moisture contents and depth to water table.

The EMI survey revealed exceedingly low and invariable EC_a across this site. With the EM31 meter operated in the deeper-sensing VDO, EC_a averaged only 1.53 mS/m and ranged from 0 to 3.9 mS/m. Slightly higher EC_a measurements were recorded in a lower-lying depression that was located among the dunes. Here the water table was closer to the soil surface and slightly higher soil moisture contents were observed and presumed to be responsible for the slightly higher EC_a recorded in the depression.

Figure 7 is a processed radar record from the Dune Site in Tazewell County. In Fig. 7, the depth and distance scales are expressed in meters. In Figure 7 the water table may be traced across the entire radar record at depths ranging from 5.19 (extreme left) to 2.05 (extreme right) m. In coarse-textured materials, the electromagnetic gradient is abrupt and dielectric properties are strongly contrasting between saturated and unsaturated soil materials. Because of these properties, the upper boundary of the water table produces strong reflections and distinct images on most radar records.

In Figure 7, the continuous, near-horizontal reflections from the water table contrast in amplitude and form with the segmented, inclined reflections from strata within the dune. This aids identification. The detection of the water table may have been more difficult and ambiguous had reflections from the strata been continuous and more similar in amplitude and form. Abrupt and contrasting differences in density, grain size, and moisture contents produce high amplitude radar reflections (Schenk et al., 1993; Harari, 1996). In general, reflections from the interior of dunes are principally attributed to differences in moisture contents (Schnek et al., 1993; Bano et al., 1999; Bristow et al., 2000).

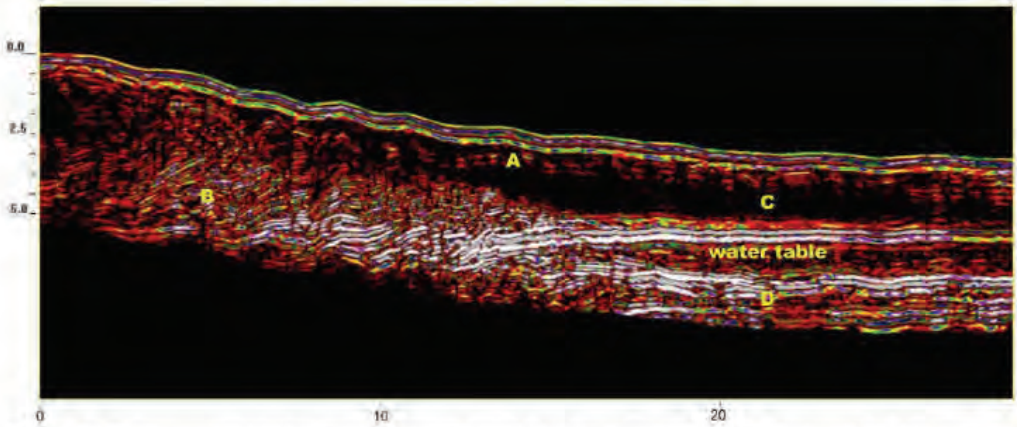


Figure 7. This processed radar record was collected at Dune Site in Tazewell County and shows various radar facies and a water table in an area of Plainfield soils.

On lower side and foot slopes a buried A horizon was observed in soil cores. This horizon has been labeled "A" in Fig. 7. Interpretations of radar records lead to the identification of three unique *radar facies*. A *radar facies* is a mappable three-dimensional unit composed of GPR reflections whose internal reflection patterns and characteristics differ from adjoining units. Each of the three radar facies defines different combinations of soil structures. Facies "B" consists of a high concentration of segmented reflectors from inclined strata within the dune. Facies "C" lacks reflectors and consists of colluvial materials on lower dune surfaces. Facies "D" consists of multiple linear reflectors that closely parallel the soil surface and the water table in this bowl-like inter-dune depression. Facies may help to define, characterize and differentiate soils and parent materials within these map units.

Clark County Site:

Apparent conductivity is moderate and variable across this site. Based on 2211 measurements made with the deeper-sensing (0 to 150-cm depth interval) 100-cm intercoil spacing on the EM38MK2-2 meter, EC_a averaged 38.9 mS/m and ranged from about 20.9 to 76.1 mS/m. One-half of these measurements were between 30.7 and 44.1 mS/m. Based on 2211 measurements made with the shallower-sensing (0 to 75

cm depth interval) 50-cm intercoil spacing on the EM38MK2-2 meter, EC_a averaged 25.9 mS/m and ranged from about 10.5 to 64.2 mS/m. One-half of these measurements were between 19.3 and 29.3 mS/m.

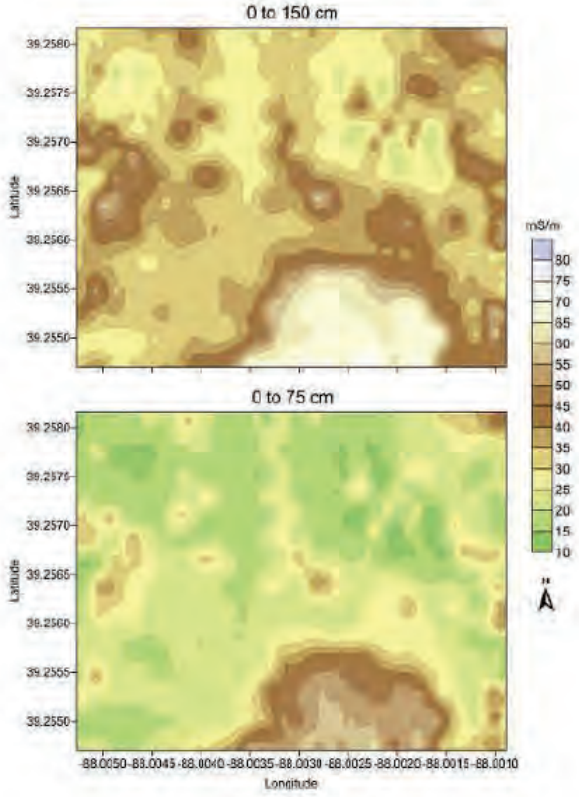


Figure 8. Plots of EC_a data collected at Clark County Site with the EM38MK2-2 meter in the deeper-sensing 100-cm (upper plot) and shallower-sensing, 50-cm (lower plot) intercoil spacings.

A comparison of the soil (Fig. 4) and EC_a (Fig. 8) maps for the Clark County Site reveals similar spatial pattern. Plots of spatial EC_a patterns clearly identify the wetter Ebbert map unit (48A). Plots of EC_a data reveal high values and a close conformity between isolines and the Ebbert map unit boundary. Areas mapped as Cisne (2A), Hoyleton (3A), and Newberry soils (218A) have lower EC_a than the area that is mapped as Ebbert soils. In general, EC_a data measured in the shallower-sensing (0 to 75 cm depth interval) 50-cm intercoil spacing renders areas of Hoyleton and Newberry soils as having slightly higher EC_a than areas of Cisne soils. However, pockmarked spatial patterns of higher and lower EC_a add inconsistency to this general rule. For all soils, EC_a increases with increasing observation depths (compare lower and upper plots in Fig. 8) and spatial similarities between EC_a and the Cisne, Hoyleton and Newberry map units becomes less.

Using the 200 MHz antenna a 50 m traverse was conducted in an area of Cisne soils. Figure 9 is the radar record from this traverse. The depth of penetration is restricted to the upper part of the argillic horizon by

the high clay and moisture content of Cisne soil. One prominent subsurface interface, while varying in signal amplitude, can be traced across the radar record. This interface represents the contact of silt loam layers with the finer-textured subsoil. In the left-hand portion of this radar record, this interface corresponds with the Eg/Btg horizon boundary. In the right-hand portion of this radar record, this interface corresponds with a transitional Bt1g/Bt2g horizon interface. Differences in the abruptness and contrast in clay and moisture contents are responsible for variations in signal amplitudes. For the first 27 meters, this interface is characterized by high amplitude reflections, which signify highly contrasting materials and abrupt interface. In the last 23 meters, this interface is characterized by low amplitude reflections suggesting less contrasting and transitional or intermixed horizons.

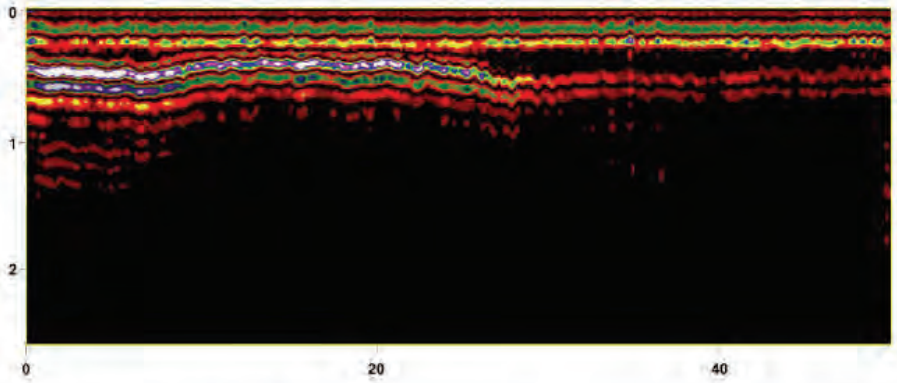


Figure 9. This radar record was collected in an area of Cisne and Newberry soils. The prominent subsurface interface is the boundary between horizons with contrasting clay and moisture contents. Where the interface is of higher amplitude (colored white, purple, blue and green) an E horizon overlies the Bt horizon.

Table 2. Cisne Soil Profile.

Horizon	Depth	Color	Texture
A	0-9"	10YR2/1	sil
E	9-14"	10YR6/2	sil
Bt1	14-21"	10YR5/2	sicl
Bt2	21-38"	10YR4/8	sicl
Bt3	38-46	10YR5/6	sicl
2Bt4	46-55	10YR5/1	sicl
2Bt5	55-78"	10YR5/4	sicl

Table 3. Newberry Soil Profile.

Horizon	Depth	Color	Texture
A	0-8"	10YR3/2	sil
Bt1	8-12"	10YR4/4	sil
Bt2	12-21"	10YR4/3	sicl
Bt3	21-33"	2.5Y5/1	sicl
Bt4	33-40"	10YR5/1	sicl
2Bt5	40-51"	10YR5/1	cl
2Bt6	51-64	2.5Y6/2	cl

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Left to Right: Jim Doolittle, Dan Withers, Tim Malone (DC Tazewell Co.) pull the EM 38 in a sled across corn stalks

Left to Right: Dan Withers is taking GPS points while Jim Doolittle is taking EM 38 readings while transecting across corn stalks.

Left to Right: Roger Windhorn, Dan Withers, and Jim Doolittle run a ground penetrating radar test on a terrace area.

Jim Doolittle runs a transect with the EM 31.

Left to Right: Dan Withers, Jim Doolittle, and Rick Francen run a transect with the ground penetrating radar on eolian sands.

Left to Right: Rick Francen, Dan Withers, Bob Tegeler, and Roger Windhorn ground truth by taking soil borings.

Left to Right: Tim Malone, Rick Francen, Jim Doolittle, Roger Windhorn, and Bob Tegeler checking results of ground penetrating radar.

Tennessee Enacts Public Chapter No. 1032

On June 11, 2010, Tennessee enacted Public Chapter No. 1032, which invokes professional licensing of soil scientists. No person may practice soil science on or after July 1, 2011 unless licensed by the Department of Commerce and Insurance. A copy of the law is available at http://state.tn.us/sos/acts/106/pub/pc1032.pdf.

State or federal employees, Tennessee Department Environment & Conservation approved consultants, or Soil Scientist Association of Tennessee certified professional soil scientists can be granted licensure without examination until July 1, 2011. Thereafter, examination will be required.

The smoothest route to licensure would be the latter grandfathering method of SSAT certification. The annual fee is currently $35. SSAT holds quarterly meetings and does an outstanding job of promoting the profession. The meetings are held at various locations to accommodate a diverse membership.

I encourage all to pursue the TN soils license or grandfathering. By supporting the soil science profession even in difficult economic times, its future can be strengthened. A membership application is available from Kevin Raley, SSAT Secretary/Treasurer, at (615) 218-7955 or soils@charter.net.

--Larry Gramm, CPSS/SC

ISCA Seeks Representative for 2011 IALEHA Conference

Call for Speaker: The Illinois Association of Local Environmental Health Administrators (IALEHA) sponsors an annual conference on wastewater treatment. The IALEHA conference-planning committee is looking for a speaker to talk about soil evaluations and explain the information provided in soil-evaluation reports at the 2011 conference. The 2011 conference will be held on January 13 and 14 at the Hotel Pere Marquette in Peoria. If you are willing to represent ISCA at the IALEHA conference, please contact President Wollenweber.

TRADING POST

This spot is reserved for members who would like to buy, sell, trade, or announce an item, event, or activity in our newsletter. Please limit your classified ad to 25 words or less. Email your ad to the newsletter at zach.weber@il.usda.gov

- 2000 4100 4WD JD hydrostatic drive, low hours, with Giddings rear-mounted 5-TS soil probe, storage boxes, and many accessories. Call A&E Soil Consultants@ 309-945-9090.

www.illinoissoils.org

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The Illinois Soil Classifiers Association is an organization promoting the wise use of the soil resource. ISCA is made up of professional soil classifiers in public service, private industry, and education and includes students and others interested in preserving soil. A soil classifier maps, describes and interprets soils according to a national system of soil classification. ISCA was established in 1975 and is affiliated with the American Registry of Certified Professionals in Agronomy, Crops, and Soils.

ISCA Executive Council Members and Committee Chairs at the April 9th, 2010 Council Meeting in Ottawa.

Right side of Table: Mark Bramstedt, Past-President; Jennifer Wollenweber, President; Steve Elmer, Secretary; Dale Calsyn, Constitution, By-Laws, and Legislative Left side of Table: Bruce Houghtby, President-Elect; Frank Heisner, Public Relations and Education; Brad Cate, Vice President

-submitted by Steve Zwicker, Historian

Submissions

This is **YOUR** newsletter. If you wish to submit material, here are some preferences.

- Send information by the last week of the month before the newsletter is scheduled to be published.
- Digital copy in Microsoft Word
- Use as little formatting (indents, bullets, charts) as possible. This increases the work to get it into Publisher.

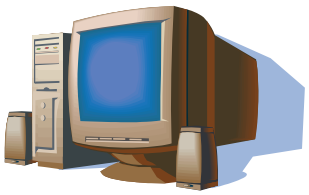
Publication Schedule

- Winter (February)
- Spring (May)
- Summer (August)
- Fall (November)

ISCA Newsletter Committee is looking for pictures of it's members, past or present, to include in future newsletters. Submissions can be sent electronically or hard copy to the staff address, see above and left. Please include a narrative for the caption! If hard copies are sent please indicate if they are to be returned otherwise photographs will be retained in an archive photos file.

www.illinoissoils.org

New, exciting links have been added to the "announcements" page on our website. Be sure to bookmark this page. Its an excellent resource to keep you informed on the latest soils issues. Better yet… make it your home page!



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Illinois Soil Classifiers Association Newsletter

Fall-November 2010

Upcoming Events:

Annual Meeting March

Inside this issue:

Message from the President

I cannot believe it is fall already. Soon we will be shoveling our driveways and cleaning the snow of our cars from the wonderful snowfall. This year is zooming by! The 2010 Fall Soils Tour took place in the Mississippi River Valley in Adams and Hancock Counties near Quincy and Warsaw, Illinois on October 27th and 28th. The tour was a joint effort with The Professional Soil Classifiers of Iowa (PSCI), Illinois Soil Classifiers Association (ISCA), Missouri Association of Professional Soil Scientists (MAPPSS), and Association of Women Soil Scientists (AWSS). A huge **THANK YOU** to Frank Heisner and Steve Elmer for your hard work organizing and planning such a great event! Make sure you check out ISCA's Facebook page to see photos from the tour.

As this year comes to an end, the Council and Committees are still hard at work planning for upcoming training sessions, tours, and ways to improve our association. Now that the Fall Tour is here and gone – The Public Relations and Education Committee is thinking about the March Annual Meeting. The Ethics, Certification, and Membership Committee is reviewing the current membership requirements to ensure they are still attainable. If you have any suggestions or would like to help out, please contact of the Council or Committee members.

Sincerely,
Jennifer Wollenweber

ISCA/AWSS/MAPSS/PSSI Joint Fall Field Tour

On the evening of October 27th, soil scientists from Illinois, Iowa, and Missouri gathered at the Stony Creek Inn in Quincy, in western Illinois. This year's tour was located along the Mississippi River Valley in Adams and Hancock Counties. The field trip was a joint field trip between the Illinois Soil Classifiers Association, the Association of Women Soil Scientists, the Missouri Association of Professional Soil Scientists, and the Professional Soil Classifiers of Iowa. The tour ran smoothly and was well attended.

The meeting Wednesday evening was moderated by Frank Heisner, ISCA Public Relations and Education Chair. US Army Corps of Engineers Large River Ecologist, Dr. Charles Theiling, began the evening with a presentation on large scale geomorphology, hydrology, and land cover relationships in the Upper Mississippi River Valley. Candy Chambers, Assistant Wildlife Refuge Manager, Clarence Cannon and Great River National Wildlife Refuges followed with a presentation on the Mississippi River Ecosystem: A Century of Changes. Dr. Xiaodong Miao, geologist with the Illinois Geological Survey, gave the final presentation regarding optically stimulated luminescence (OSL) dating on loess and dune sand in Illinois. Frank concluded the evening presentations with an overview of the field stops for the following day. Door prizes were awarded between speakers. The evening concluded afterward with socializing and camaraderie in the lounge.

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The first stop on Thursday, the 28th, was near the edge of the Lima Lake bottoms, located near the Adams/ Hancock County border. Slackwater sediments, their variability, limitations and challenges in soil mapping were discussed. Soils observed/discussed at this location included: Beaucoup, Darwin, Sawmill, Titus, Wabash, and Zook. The participants had an opportunity to examine cores from the immediate area and classify the soils for themselves.

The second stop of the morning was located at the Andy and Ruby Wetzell farm south of Warsaw, IL. A soil pit had been excavated displaying a soil formed from colluvial/hillslope sediments formed over a buried soil. Parent materials discussed at this location included loess, colluvium, and outwash. The soil was located in a polygon that had been mapped as Jasper (though many participants agreed it was "Worthen-like over Jasper").

The third and final stop was located at a road cut just south of Warsaw, Illinois. Parent materials observed were: Peoria loess, a paleosol developed in deoxidized loess, Illinoisian-aged till, and outwash. A lot of discussion was incurred at this location regarding the stratigraphic sequence. This cut dissected a unique soil map unit in Illinois, the Dickinson-Hamburg complex.

Thanks go out to all those who helped make this meeting a success. DC's Lori Bollin and Matt Lemaire deserve thanks for making the initial landowner contacts. Thanks to: The Hancock Land Company (Dave MacMurray, Joe and Sam Zumwalt) for use of their buildings and farm, Don Walker and his family for the use of their farm (the Wetzell property), Steve Elmer for all his time in coordination, scouting, and sampling, Ron Collman for excavating the soil pit, and to our speakers and those who provided comments, suggestions, and encouragement.

-submitted by Frank Heisner

The Newsletter Committee as well as all the membership of the ISCA would like to thank Frank Heisner and Steve Elmer for all of their effort in preparing and managing the Fall Tour this year.

Job well done!

Thank You!

Social Media and Professional Visibility

Social Media is a force to be reckoned with in the modern world. If we are not using it to tell our story, then we are missing out. People under 30 do not watch TV. Many do not even have a TV. They do not read newspapers and magazines. They use the internet to get all their news and information. We need to tap into the younger generation and social media is the way to do it.

I have been blogging for 4 years. Most of that time I have written with little or no attention. At our annual meeting in 2009 our speaker talked about using social media. I signed up for Facebook at that time. Last fall a friend of mine got me to read a book called "What Would Google Do" by Jeff Jarvis. I learned some things from reading it. One of his best tips is to Blog daily. Daily gets you found and gets you more attention. I started blogging daily in January. I picked up a few followers, but nothing big.

The same friend started to encourage Twitter. I had no idea, but signed up. I started following others with interest in agriculture and they started to follow me. I currently have 143 followers including some ag media types. I post a link to my blog every day on Twitter. I find Twitter to be sort of like the 10 second news teaser in some cases. I had my breakthrough in September when I wrote a blog on fall application of nitrogen. I got a link on agriculture.com which is a Successful Farming web site. From that link I got over 700 hits. I was amazed. A few weeks later I wrote a blog on a No-till Ripper which I call "Vertical Tillage Tool. That blog has had almost 2000 hits so far because of a link from agriculture.com. In addition, I have regular readership between 60 and 120 per day. I am certain that agriculture.com found me through Twitter.

I am told that "the Social Media Bible" by Lon Safko is an excellent reference on social media but I have not reviewed it myself. I encourage reading up on social media to improve your effectiveness.

I find it easier to write every day on my blog that to write weekly. My idle thoughts are now occupied with "what will I blog about today? " I am writing this to encourage my fellow soil classifiers to get involved in social media and get your message out. Yes it takes a little time, but I have found I can get by with less than a half hour a day on most days and still be effective. Check out my blog at daverahe.blogspot.com. I am daver819 on Twitter.

-submitted by David B. Rahe

ISCA Member Checks In At Joint Meeting Of Minnesota And Wisconsin Professional Soil Scientists

The Minnesota Association of Professional Soil Scientists (MAPSS) and the Wisconsin Society of Professional Soil Scientists (WSPSS) planned to hold a joint meeting and soils tour on 6 August 2010. My wife Nancy and I had planned a vacation for 31 July through 7 August in northwest Wisconsin. After an additional bit of research, I was delighted to learn that much of the meeting and tour would take place less than 50 miles from my lakeside cabin door.

The tour organizers had chartered a bus to transport participants to each of three planned stops. Would it be possible for me to join the group enroute so I could return to my cabin by early afternoon? Would I miss important information by not being present on the bus? Would there be any food or drinks left before Stop 1? Communications by telephone and email with tour organizers confirmed that the stops were easy to find and accessible. I would like to acknowledge and extend my thanks to ISCA newsletter Editor Zach Weber for the email heads up on the meeting, and to meeting organizers and administrators Suzanne D'Souza, Scott Eversoll, Larissa Schmitt, Michael Whited, and Keith Zygowicz for tour information and making me feel like one of the gang.

I decided to join the group near Stop 1, Big Rock Creek near St. Croix Falls, WI. The itinerary suggested the bus loaded with soil scientists would arrive at about 8:15. I arrived near the location just after 8:10. I wasn't sure just where the bus would be pulling off the highway, so parked in a location offering good sight lines up and down the highway. I waited. And waited. Took another look at the emails and itinerary and began to sweat. It's 8:40. Did I miss them? How difficult would it be to miss a tour bus chartered out of Minnesota along a state highway in Wisconsin just outside of a town with a population of about 2,200? Maybe they turned off on that short little side street leading to confluence of Big Rock Creek and the St. Croix River. Better check it out. I drove down that street all the way to the river – no bus. Turned around and return to the highway. Took about 4 minutes. As I waited at the stop sign pondering my next move, I saw a charter bus crawling up the highway. It passed me and I swung in behind, followed it for about ¼ mile to a right turn onto a narrow gravel lane. I continued to follow for several hundred feet until it stopped in a large parking area near some machine sheds. What looked like soil scientists began to file out.

Stop 1: Sedimentation, Stream Restoration, and Soil Observations, Big Rock Creek near St. Croix Falls, WI

Big Rock Creek is a short (4-5 miles) tributary of the St. Croix River. About 150 miles of this river is part of the St. Croix National Scenic Riverway, administered by the National Park Service. The river valley in this area consists of steep gorges cut 70 to 100 feet into igneous bedrock. The substantial cutting was a result of the valley serving as a glacial meltwater channel and outlet for glacial Lake Duluth, a large proglacial lake that formed at the front of the Superior Lobe about 10,000 YBP. It is estimated to have been about 400 feet above that of Lake Superior.

Figure 1. Much of the material eroded from this sediment-filled channel constructed during 1930s will enter Big Rock Creek on its way to the St. Croix River. (Photo by Keith Zygowicz, NRCS, Balsam Lake, WI)

Although the soils generally are coarse-grain and relatively porous, agricultural practices in the Big Rock Creek watershed generate an incredible amount of runoff and subsequent erosion and sedimentation. This adversely impacts Big Rock Creek, and ultimately the St. Croix itself. Beginning in the early 1900s, the creek and surrounding land at this stop were used as a trout hatchery and to raise cattle and polo ponies. Erosion and sediment control practices were initiated in the 1930s. In 1952, the farm changed ownership. Over the course of the next 30 to 50 years, the owners realized that the structures constructed during the 1930s were no longer functional; sediment-filled waterways were eroding (Figure 1) and the creek was filling with sediment. In 2002, the owners applied for funds under the Environmental Quality Incentive Program in order to begin removing trees and sediment, and install additional grade stabilization practices and structures. NRCS District Conservationist Keith Zygowicz and his staff took leadership on this project which included:

tree and stump removal to allow for survey work;
removal of sediment (>9300 cubic yards) (Figure 2); exhume and refurbish old structures;
seeding and mulching of sediment spoil piles;
construction and installation of flow spreaders, log barbs (for streambank stabilization),
and 2280 feet of waterway and diversion.

Figure 2. Sediment removal and channel re-grading. Approximately 3.5 feet of sediment was removed at this location. (Photo by Keith Zygowicz, NRCS, Balsam Lake, WI)

Figure 3. Runoff controlled at upper end of project site by reconstructed channel and structure. (Photo by Keith Zygowicz, NRCS, Balsam Lake, WI)

Keith led the tour and discussion of this site, where the group was conveyed seated on straw bales in the backs of pick-up trucks and flatbed trailers. The obvious result of this work has been the successful management of erosion and sedimentation just upstream of the confluence of Big Rock Creek and the scenic St. Croix River (Figure 3). An additional benefit includes creation and enhancement of wildlife habitat for a host of animals including deer, bear, and turkey. Work at this site will continue under the Conservation Stewardship Program.

At the onset of the tour at this stop, I was fortunate climb into the back of the same truck that included Minnesota NRCS and Duluth MLRA Soil Survey Leader Roger Risley. Roger and I last worked together (and saw each other) in the summer of 1985. We were members of the Jasper County soil survey crew that included Brian Fitch and Survey Leader Mark Bramstedt. Also at this stop, I also found myself standing on a hillside next to Wisconsin State Soil Scientist Carl Wacker, discussing the formation of lamella in the sandy soils of this area. I had seen Carl from time to time during the late 1970s during his work on the Champaign and Vermilion county surveys while I was working in nearby Iroquois County. During the course of our conversation I discovered that I live down the street from Carl's sister. I enjoyed chatting with my former colleagues in the brief time we spent together. I was somewhat shaken by the fact, however, that while both these gentlemen have aged gracefully over the years, I still look the same.

We returned to the parking area, and I was offered one of the few remaining snacks - an enormous blueberry turnover. I enjoyed this treat while following the tour bus toward our second stop. What's this? The hazard lights on the tour bus began flashing and it pulled over to the highway shoulder. I pulled over behind and waited. The driver and several passengers exited the bus and walked to the rear. The engine compartment was opened and the driver returned to the bus to try to restart the engine. This did not seem to be going well so I got out of my car and joined the group gathered behind the bus. I was told the "check engine" light went on and the bus shut itself down. The tour leaders began to brainstorm over how to get on with the meeting without a bus. There were 3 or 4 vehicles following the bus. We began to plan how we could transport the maximum number of drivers of larger vehicles back to the place where the bus picked up the participants (about 15 miles away) and return with enough vehicles to get everyone to Stop 2 and beyond. Meanwhile, the bus driver was able to contact his base. He found out that it would take 2-3 hours for a replacement bus to be dispatched and arrive at our location. A mechanic at the bus barn knowledgeable of the workings of this bus also suggested to the driver that he might sit tight for about 10-15 minutes, re-start the bus, and continue on his way as if nothing had happened. The driver and tour leaders decided to try the mechanic's suggestion, and that is exactly what happened. We arrived at Stop 2 about 25 minutes later.

Stop 2: Glaciofluvial Sediments of Glacial Lake Lind, Trade River Area near Cushing, WI

This stop highlighted some of the work toward establishing series for a topo-drainage sequence (catena) of soils developed in the sediments related to glacial Lake Lind. Information published in the tour guide sheets and by M.D. Johnson and others (GSA Bulletin, September 1999, v. 111, no. 9, p. 1371-1386) describes the setting. Lake Lind was a proglacial lake that formed at the front of the receding Superior Lobe and behind the St. Croix moraine about 18,500 YBP. Lake Lind sediments consist of reddish clays and silts that exhibit distinct varving. Studies of the sediments indicate Lake Lind ranged in depth from 60 to 180 feet and was present for about 1000 years. It appears that the Superior Lobe re-advanced and covered the lake at least one time, and that Lake Lind ultimately was filled in by glacial outwash, mud flows, and deltaic sand issued from the melting of the Superior Lobe.

The landscape characteristic of lacustrine areas familiar to me consist of the broad, nearly level to very gently sloping plains common in northeast Illinois (Milford, Martinton, and associated soils) and elongated slackwater terraces of the lower Kaskaskia River valley (Okaw, Hurst, Colp, and associated soils). Not soil in this location. Lake Lind sediments have been deeply dissected in areas as a result of meltwater streams repeatedly recharged by melting Superior Lobe ice and flow from glacial Lake Duluth. These streams have also left behind glacially-derived alluvium (containing up to 30 percent gravel) as much as 20 inches thick atop the lacustrine sediments. Slopes range from 0 to 80 percent. With more than 100 feet of elevation change.

NRCS Soil Scientist Scott Eversoll and his crew have proposed three soil series forming the catena in this setting: the somewhat poorly drained Centuria soils (fine, mixed, active, frigid Aquic Glossudalfs); the moderately well drained Trade River soils (fine, mixed, active, frigid Oxyaquic Glossudalfs); and the well drained Beede Lake soils (fine, mixed, active, frigid Haplic Glossudalfs).

MAPSS Business Meeting

I hung around for the sack lunch and to talk with some of the tour participants after discussions at Stop 2 ended. The history of soil survey work in Wisconsin was reported on by NRCS Soil Scientist Howard Gundlach in 2006. He writes that reconnaissance soil surveys at a scale of about 1:190,000 (1 inch = 3 miles) were completed for much of northwest Wisconsin during 1910-1940. The work was conducted USDA Bureau of Soils in conjunction with the University of Wisconsin and the Wisconsin Geological and Natural History surveys. Soil scientists currently working in this region recognize the importance of completing more detailed "once over" soil mapping here. I sensed some excitement from the soil scientists at the prospect of working out the complexity of the geology and soil forming processes with the ultimate goal of producing more detailed soil maps that document this complexity while being useful for resource management. As we finished eating, the MAPSS held a business meeting. A few of my observations:

The MAPSS employs on a part-time basis an Executive Secretary (ES) who handles the business of the Association. The duties include correspondence, web site management, and editing the Association newsletter. Minnesota licenses Professional Soil Scientist, so the ES has a number of duties relative to legislative matters. The ES represents MAPSS at regulatory board and joint professional committee meetings. The ES also reviews (on a weekly basis) the *Minnesota Register* and reports on rules and legislative issues that may be important to the MAPSS. The ES regularly attends Executive Committee (analogous to the ISCA Executive Council) meetings and reports activities as needed.

The MAPSS continues to pursue legislation officially designating the Lester series as Minnesota State Soil. Current legislative issues indicate a better climate for this in 2012.

State licensing has brought with it the need for ethics training for practicing professionals. The MAPSS intends to provide 2 Continuing Educational Units (about 20 Professional Development Hours) of formal professional ethics training to its members. Such training may become a requirement in order to maintain a license as a Professional Soil Scientist.

I truly enjoyed meeting with the Minnesota and Wisconsin soil scientists, and look forward to crossing paths with them and others down the road. We share a number of issues, and can benefit from the perspectives gained from communication and joint activities.

-submitted by Bill Kreznor

FOOD

Ground Control. Forget foam. A new crop of innovative chefs is serving up edible "dirt"

BY DAVID KAUFMAN

Copenhagen's Noma, the reigning best restaurant in the world, according to the prestigious *Restaurant* magazine, has been dazzling diners since it opened in 2003 with unorthodox ingredients such as just-picked flowers and wild game. But the most intriguing item on the menu by far? Chef René Redzepi's edible "dirt."

Edible dirt—perhaps one of the strangest fads to hit haute cuisine since *sous vide*—is not actual dirt but rather dried or charred ingredients used to give menu items an extra-earthy kick. Redzepi, 32, makes his dirt from dried malt and beer and presents it in terra cotta pots, "planted" with a whole raw radish to accompany a seven-course tasting menu.

Redzepi may be the most celebrated proponent of edible dirt, but he's not the only one. Although edible dirts vary in consistency (some resemble ash, others sand or soil), they typically serve the same culinary function: to anchor their dish's vegetables and proteins. At Tel Aviv's Shakuf, Eldad Shem-Tov serves dirt crafted from chickpeas and topped with smoked quail eggs. At San Francisco's Marlowe, Jennifer Puccio's dried-olive soil comes with pickled radishes and whipped chèvre. Both mushroom soil and charred-onion ash can be found at Gilt in Manhattan; the former is part of a summer salad, the latter dusted onto Niman Ranch strip loin. And a dish of 30 seasonal vegetables served with dirt made from potato, parsnip and roasted chicory is on the menu at Manresa in Los Gatos, Calif.

It was foams, gels and liquids that defined the last crop of superchefs, molecular gastronomists like Ferran Adrià, whose El Bulli in Spain is a five-time holder of the title of world's best restaurant. Redzepi and company are trading those elements for a more grounded geogastronomy—celebrating the land directly on the plate. "These chefs are reminding people where food actually comes from," says Nathan Garnett, the awards director at *Restaurant*.

Still, edible dirt's real test isn't professional admiration but diner appreciation. "People are really wowed to see dirt on their plates," says Gilt's Justin Bogle, who is experimenting with "pebbles" made from frozen foie gras. "They're unsure at first, but then they realize it really tastes good." ■

Fruit of the earth *Justin Bogle's spring salad at Gilt rests on a "soil" of crumbled mushrooms*

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Submitted by Chris Cochran-
Time Magazine, Sept. 27, 2010

AMERICAN SOCIETY OF AGRONOMY REGION 3 SOIL JUDGEING CONTEST

Northern Illinois University hosted the 54th annual American Society of Agronomy Region 3 Soil Judging Contest on October 8 and 9. The contest took place in DeKalb and Kane Counties. Sixty-five individuals from six teams (Northern Illinois University, Purdue University, University of Illinois, University of Wisconsin-Madison, University of Wisconsin-Platteville, and University of Wisconsin-Stevens Point) participated in the contest.

The contest was organized by Dr. Mike Konen (NIU). Soil pits were dug by Ron Collman (USDA-NRCS) and Zach Weber (USDA-NRCS). Mark Bramstadt (USDA-NRCS), Bill Kreznor (Kreznor and Associates), Bruce Putman (Putman Soil Testing), and Jennifer Wollenweber (USDA-NRCS) served as the official judges for the contest. John Begun, Dean Johnson, Eldon Gould, NIU, Dunteman Turf Farms, and Garfield Farm Museum were gracious hosts that allowed soil pits to be located on their property. Plaques were provided by the Illinois Soil Classifiers Association. Approximately 15 members and friends of the Department of Geography assisted with grading scorecards during the contest. Leonard Walther put the final touches on the design of the plaques and t-shirts. I am extremely grateful to everyone that donated their land, time, and efforts to make the contest a success.

NIU team members included: Clint Bailey, Trevor Edmonson, Jacob Kruse, Jennifer LeVine, Wesley Poggenpohl, Ellyn Raimondi, Ryan Strelcheck, Ashley Warren, Norman Yackle. Alicia Lisowski and Steve Hamilton (both NIU graduate students) coached the team.

The Wednesday evening before the contest, Dr. Konen gave a presentation on the soils and surficial geology of the contest area. The six teams observed 12 practice pits on Wednesday, Thursday, and Friday morning. The soils were Argiudolls, Endoaquolls, Argiaquolls, and Hapludalfs developed in alluvium, outwash, glaciolacustrine deposits, till, and/or loess. The weather was spectacular the entire week.

The contest consisted of two group judged pits on Friday afternoon at Dunteman Turf Farms and four individually judged pits Saturday morning at Garfield Farm Museum.

Overall team scores.

School	Score
Purdue	3541
Platteville	3383
NIU	3328
Illinois	3282
Stevens Point	3208
Madison	3188

Top 5 individual scores.

Student	School	Score
Jeff M. Fischer	Purdue	1015
Cody M. Fink	Purdue	979
Clint Bailey	NIU	975
Brian Fure	Platteville	974
Kevin Neal	Purdue	972

Group judging scores.

School	Score
Purdue	543
Illinois	521
NIU	507
Madison	500
Platteville	489
Stevens Point	485

The top three teams are eligible to participate in the national contest that will be hosted in the spring of 2011 by Oregon State University near Bend, Oregon. This is the third consecutive year the NIU team has qualified for the national contest.

The highest scoring individual from an Illinois university and winner of the Burton W. Ray Scholarship Award this year is Clint Bailey from Northern Illinois University.

I think I can speak for everyone involved in thanking the volunteers and landowners for all their hard work and hospitality and as usual everyone learned a great deal about soils, landscapes, hydrology, vegetation, and land-use and had fun while participating in the contest. I think back to my undergraduate days at Iowa State University and know that if it was not for the opportunity to participate in Soil Judging I would most likely not have ended up becoming a Pedologist and having the privilege in continuing to participate in this important educational field experience.

Thanks to all of you that have supported and continue to support Soil Judging,

Mike Konen

Argiaquoll practice pit.

Individual judging on contest day.

Northern Illinois University Soil Judging Team participating in group judging.

Volunteers and coaches grading scorecards during the contest..

Clint Bailey, Northern Illinois University. Winner of the Burton W. Ray Scholarship Award.

Northern Illinois University Soil Judging Team.

Official judges Jennifer Wollenweber, Mark Bramstadt, Bruce Putman, and Bill Kreznor.

www.illinoissoils.org

The Illinois Soil Classifiers Association is an organization promoting the wise use of the soil resource. ISCA is made up of professional soil classifiers in public service, private industry, and education and includes students and others interested in preserving soil. A soil classifier maps, describes and interprets soils according to a national system of soil classification. ISCA was established in 1975 and is affiliated with the American Registry of Certified Professionals in Agronomy, Crops, and Soils.

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TRADING POST

This spot is reserved for members who would like to buy, sell, trade, or announce an item, event, or activity in our newsletter. Please limit your classified ad to 25 words or less. Email your ad to the newsletter at zach.weber@il.usda.gov

- 2000 4100 4WD JD hydrostatic drive, low hours, with Giddings rear-mounted 5-TS soil probe, storage boxes, and many accessories. Call A&E Soil Consultants@ 309-945-9090.

Submissions

This is **YOUR** newsletter. If you wish to submit material, here are some preferences.

- Send information by the last week of the month before the newsletter is scheduled to be published.
- Digital copy in Microsoft Word
- Use as little formatting (indents, bullets, charts) as possible. This increases the work to get it into Publisher.

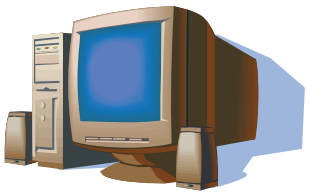
Publication Schedule

- Winter (February)
- Spring (May)
- Summer (August)
- Fall (November)

ISCA Newsletter Committee is looking for pictures of it's members, past or present, to include in future newsletters. Submissions can be sent electronically or hard copy to the staff address, see above and left. Please include a narrative for the caption! If hard copies are sent please indicate if they are to be returned otherwise photographs will be retained in an archive photos file.

www.illinoissoils.org

New, exciting links have been added to the "announcements" page on our website. Be sure to bookmark this page. Its an excellent resource to keep you informed on the latest soils issues. Better yet… make it your home page!



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