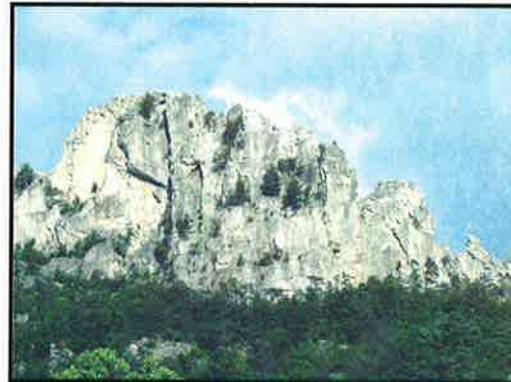


**2004 Northeast Cooperative Soil Survey Conference
Proceedings**

June 21 – 25, 2004

**Canaan Valley Resort
Tucker County, West Virginia**

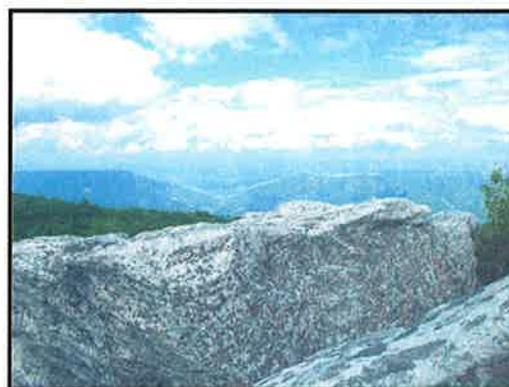


Northeast Regional Cooperative Soil Survey Conference Proceedings

Canaan Valley, West Virginia

June 21 – 25, 2004

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AGENDA

SUNDAY, JUNE 20, 2004

4:00 – 6:00 pm **Early Registration** at Canaan Valley Resort Main Lodge

MONDAY, June 21, 2004

9:00 am – Noon **Registration** at Canaan Valley Resort Lodge

1:00 – 1:45 pm **Opening Session**
Moderator – Dr. John Sencindiver, West Virginia University

Welcome and Opening Remarks:

Lillian V. Woods, State Conservationist, NRCS - WV
Cameron Hackney, Dean, WVU Davis College of Agriculture,
Forestry and Consumer Sciences, and Director, WV
Agricultural and Forestry Experiment Station
Truman Wolfe, Exec. Director, WV Conservation Agency
Dr. Maury Mausbach, Deputy Chief, NRCS Washington, D.C.

1:45 – 3:00 pm **National Committee Reports** - Dr. Joyce Scheyer, NRCS NSSC,
Lincoln, NE
ICOMANTH Report - Dr. John Galbraith, Virginia Polytechnic
Institute & State University, Blacksburg, VA
Northeast Agricultural Experiment Station Reports

3:15 – 3:30 pm Coffee break

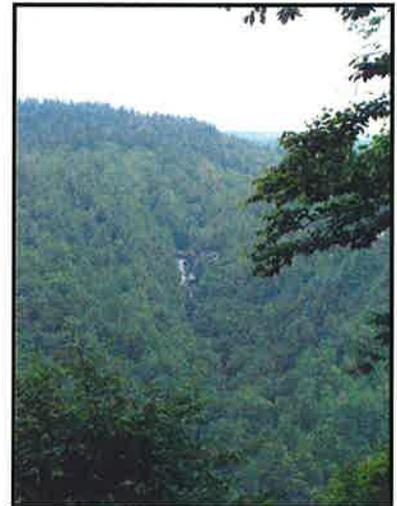
3:30 – 5:00 pm **Committee Meetings** (Breakout Sessions)
Research Needs
Soil Taxonomy
Hydric Soils
Technical Soil Services
Subaqueous Soils
Standards (new for 2004)

6:00 pm Social Gathering

TUESDAY JUNE 22, 2004

8:00 – 10:00 am **Committee meetings continue**

10:00 – 10:15 am Coffee Break



Tuesday (continued...)

- 10:15 – Noon **General Session**
Moderator: Stephanie Connolly, USFS, Elkins, WV
- 10:15 – 10:50 am **Welcome from the U.S. Forest Service** – Clyde Thompson, Forest Supervisor, Monongahela National Forest, Elkins, WV
- 10:50 – 11:20 am **Forest Research on the Fernow Experimental Forest** – Dr. Mary Beth Adams, Research Soil Scientist, Northeast Research Station, Parsons, WV
- 11:20 – Noon **Update on Forest Soil Characterization in Appalachia** – Anthony B. Jenkins, MLRA-127 Project Leader, NRCS, Oak Hill, WV
- Noon – 12:50 pm Lunch
- 12:50 – 1:20 pm **Sugar Maple Decline in NE Forests** – Dr. Steve Horsley, USFS, Northeast Research Station, Warren, PA
- 1:20 – 1:45 pm **Monitoring Water Table Depth Using Locally Available Materials** – Dr. Mark Stolt, University of Rhode Island
- 1:45 – 2:05 pm **Using IRIS Tubes to Measure Iron Reduction in Red Parent Material Hydric Soils** – Dr. Marty Rabenhorst, University of Maryland
- 2:05 – 2:25 pm **Update From the NRCS National Cartography and Geospatial Center** – Nathan McCaleb, NRCS Soil Survey Support Branch, Ft. Worth
- 2:25 – 2:50pm **Hydropedology and Modern Soil Surveys** – Dr. Henry Lin, Penn State University
- 2:50 – 3:20 pm Break
- 3:20 – 3:40 pm **Surface Mine Reclamation in West Virginia** - Dr. Jeff Skousen, Professor, West Virginia University
- 3:40 - 4:15 pm **Hillslope Hydrology Study** - Dr. Pam Edwards, USFS, Northeast Research Station, Parsons, WV
- 4:15 – 5:15 pm **Geology and Geomorphology of the Canaan Valley Area and Field Trip Overview** – Dr. Robert Behling, West Virginia University and Tony Jenkins, NRCS, Oak Hill, WV

WEDNESDAY, JUNE 23, 2004

8:00 am – 5:00 pm **Field Trip**

Our goal here is to show (as much as we can) relevant sites that correspond to our research and technical soil services agenda i.e. hydric soils with red parent materials and inexpensive water table monitoring devices.

THURSDAY, June 24, 2004

8:00– 9:00 am **Committee Breakouts** to prepare reports
NEC-50 Breakout - Maple Room
NRCS Breakout - Lounge

9:00 – 11:30 am **General Session**
Moderator: David Kingsbury, NRCS, Morgantown, WV

9:00 – 10:00 am **Committee Reports**
Research Needs
Soil Taxonomy
Technical Soil Services

10:00 – 10:30 am Coffee Break

10:30 – 11:30 am **Committee Reports**
Hydric Soils
Subaqueous Soils
Standards



11:30 am – 1:00 pm Lunch

1:00 – 1:20 pm **The Changing World of Providing Soil Information** – Sharon Waltman, Soil Scientist, NRCS NSSC, Lincoln, NE

1:20 – 2:10 pm **Status of the Soil Survey in the Northeast Region**
Steve Fischer, MO-12 SDQS, NRCS, Amherst, MA
Steve Carpenter, MO-13 Leader, NRCS, Morgantown, WV
Roy Vick, MO-14 Leader, NRCS, Raleigh, NC
Bill Craddock, MO-18 Leader, NRCS, Lexington, KY

2:10 – 2:30 pm **Soil Phosphorus Retention in Some Appalachian Soils** – Dr. D.K. Bhumbla, West Virginia University

2:30 - 4:30 pm **Breakout session - MO-13 Board of Directors Meeting**

Thursday General Session (continued...)

- 2:30 – 3:00 pm Break
- 3:00 – 3:30 pm **Activities at the Canaan Valley Institute** – Paul Kinder, Canaan Valley Institute, Davis, WV
- 3:30 – 4:00 pm **The I-95 Corridor, “A Region Apart”**-Steve Carlisle, NRCS-NY
- 4:00 – 4:30 pm **NENCSS Business Meeting** - Dr. John Sencindiver; Stephen G. Carpenter; Stephanie Connolly; and NENCSS Steering Team
- 6:00 pm **Pig Roast at Canaan Valley Ski Area**

FRIDAY, JUNE 25, 2004

- 8:00 am – Noon **MO-13 Board of Directors Meeting**
- 12:00 Noon **Adjourn**



Conference Participants

Mary Beth Adams, USFS, Parsons, WV
Debbie Anderson, NRCS, Raleigh, NC
Neil R. Babik, USFS, Milwaukee, WI
Steven Baker, NRCS, Philippi, WV
Robert Behling, WVU, Morgantown, WV
Jared Beard, NRCS, Moorefield, WV
Skip Bell, NRCS, Morgantown, WV
D. K. Bhumbra, WVU, Morgantown, WV
Melissa Blankenship, WVCA, Summersville, WV
Adam Boner, NRCS, Philippi, WV
Leander Brown, NRCS, Laurel, MD
Steven C. Carlisle, NRCS, Aurora, NY
Stephen G. Carpenter, NRCS, Morgantown, WV
Debra Chase, NRCS, Morgantown, WV
Ed Ciolkosz, Penn State, University Park, PA
Carlos Cole, NRCS, Ripley, WV
Stephanie J. Connolly, USFS, Elkins, WV
Dean Cowherd, NRCS, Annapolis, MD
Marc Crouch, NRCS, Midlothian, VA
Kevin Cunningham, NRCS, Wheeling, WV
Charles Delp, NRCS, Summersville, WV
Tim Dilliplane, NRCS, Wheeling, WV
Robert Dobos, NRCS, Morgantown, WV
Bruce Dubee, NRCS, Richmond, VA
Pamela Edwards, USFS, Parsons, WV
Chris Fabian, NRCS, Bloomsburg, PA
Henry Ferguson, NRCS, Indianapolis, IN
Steven W. Fisher, NRCS, Amherst, MA
Don Flegel, NRCS, Buckeye, WV

Conference Participants

Debbie Frigon, NRCS, Tolland, CT
John Galbraith, VPI, Blacksburg, VA
Richard Gehring, NRCS, Columbus, OH
John Gerken, NRCS, Columbus, OH
Cameron Hackney, WVU, Morgantown, WV
Wayne Hoar, NRCS, Dover-Foxcroft, ME
Steve Horsley, USFS, Warren, PA
Theresa Huffman, NRCS, Summersville, WV
Steven Hundley, NRCS, Durham, NH
Steven Indrick, NRCS, Syracuse, NY
Anthony Jenkins, NRCS, Oak Hill, WV
Kimberly Johnson, USFS, Elkins, WV
Rick Jones, NRCS, Hamlin, WV
Kip Kalesinskas, NRCS, Tolland, CT
Paul Kinder, Canaan Valley Institute, Davis, WV
David Kingsbury, NRCS, Morgantown, WV
Lisa Krall, NRCS, Tolland, CT
David Kriz, NRCS, Richmond, VA
Maxine Levin, NRCS, Washington, DC
Henry Lin, Penn State, University Park, PA
Melissa Marinaro, NRCS, Morgantown, WV
Maury Mausbach, NRCS, Washington, DC
Katy McBride, NRCS, Huntington, WV
Nathan McCaleb, NRCS, Ft. Worth, TX
Marlene Menear, NRCS, Morgantown, WV
Shawn McVey, NRCS, Tolland, CT
Michelle Mohrmann, NRCS, Oak Hill, WV
Debra Murphy, NRCS, Summersville, WV
John Nicholson, NRCS, Farmville, WV
Wendy J. Noll, NRCS, Morgantown, WV

Conference Participants

Eileen O'Neill, NRCS, Oak Hill, WV
Rob Pate, NRCS, Beckley, WV
Tim Prescott, NRCS, Morgantown, WV
Martin C. Rabenhorst, UMD, College Park, MD
Carl Robinette, NRCS, Cumberland, MD
Jonathan Russell-Anelli, Cornell U., Ithaca, NY
Joyce Scheyer, NRCS NSSC, Lincoln, NE
John C. Sencindiver, WVU, Morgantown, WV
Jeff Skousen, WVU, Morgantown, WV
Chris Smith, NRCS, Cherry Hill, NJ
Cara Sponaugle, USFS, Elkins, WV
Mark Stolt, URI, Kingston, RI
Jennifer Sweet, NRCS, Fort Worth, TX
Ronnie L. Taylor, NRCS, Somerset, NJ
William H. Taylor, NRCS, Holden, MA
Jason Teets, NRCS, Philippi, WV
Jeff Thomas, NRCS, Gate City, VA
Pam Thomas, NRCS, Richmond, VA
Bruce Thompson, NRCS, Amherst, MA
Clyde Thompson, USFS, Elkins, WV
Alex Topalanchik, NRCS, Morgantown, WV
Willem Van Eck, Private Consultant, Cary, NC
Mark Van Lear, NRCS, Morgantown, WV
Bruce Vasilas, UD, Newark, DE
Lenore Vasilas, NRCS, Philadelphia, PA
Sharon Waltman, NRCS NSSC, Lincoln, NE
Jim Ware, NRCS, Washington, DC
Truman Wolfe, WVCA, Charleston, WV
Lillian V. Woods, NRCS, Morgantown, WV
Doug Zehner, NRCS, Columbus, OH

Northeast Cooperative Soil Survey Conference Business Meeting
Thursday, June 24, 2004

Agenda

1. Conference Proceedings reports getting in
2. Follow-up experiment station report
3. Hydric-subaqueous committee
4. Standard committee rename
5. Adding NCSS to all publications
6. Next location
7. Point of committee
 - a. By-laws
 - b. Reorganization of NRCS
 - c. Steering committee

Meeting called to order at 4:00 pm with Dr. John Sencindiver, NECSSC Co-Chair, presiding

1. Submission of committee reports

- Submit reports to Dr. John Sencindiver or Steve Carpenter on Friday
- Or send electronically to Dr. Sencindiver by Aug. 15th, 2004.
- Use old formats of past reports. Format should be Word document or Word Perfect
- All talks can go into proceedings

2. Experiment Station reports

- Changing protocol from Experiment Station report to Research report of ongoing work.
- More interesting and more appropriate. Length to be determined by host.
- Vote passed unanimously.

3. Merging hydric and subaqueous committees or a subcommittee.

- Which way to go? Hydric soils as standing committee with subaqueous soils as a subcommittee.
- What do we call it?
- Overlapping scheduling of committees is an issue with scheduling.
- Possible Solutions: 1.) Series of night meetings and thoughtful sequence of progression of meetings with one or two at a time. 2.) Several breakout sessions with unlike committees scheduled at the same time
- Options:
 1. Combine the two committees
 2. Set two committees at different times
- **Call for Motion:** Steve Fischer (NY) – Planning at next conference don't schedule hydric/ subaqueous/ standards/ taxonomy: These committees do not meet at the same time.
 - Maxine Levin – 2nd motion

- Chris Smith (NJ) – amendment to motion Research committee meet after to above committees meet.
- Maxine Levine – 2nd motion
- **Discussion:**
 - Timing and lengths of days
 - Kip Kalesinskas– work needs to be done for committees ahead of time.
 - This year no regional Soil Scientist to organize.
 - The wrap up should occur at the conference with last minute discussion.
 - Other Comments: Enough work and talent in the Northeast that we should have to rely on certain people attending meetings.
Not fair? Costing time etc.
Lenore - Two hours is enough time to get the work done for hydric and subaqueous committees
- **Vote:**
 - 19 For
 - 5 Against
 - 1 Abstention
- **Motion Passed**

4. **Recommendation to change the name of the Standards Committee.**

- **Call for a Motion:** Mark Van Lear(WV) –To change the name of the Standards Committee to include procedures: Standards and Procedures Committee
- Steve Baker – 2nd motion
- Discussion:
 - National committee is called . . . separation
 - Taxonomy VS. Standards NSSH Procedures. ... Manual
- **Motion passes unanimously.**

5. **Adding NCSS on USDA publications. To pass a recommendation on to the National Conference**

- **Call for a Motion:** Maxine Levin (Washington, DC) –This conference make a recommendation to the National Conference that citations for Soil Survey related publications include NCSS in them.
 - **Amendment** – Including digital products for a recommendation.
 - Pam Thomas – 2nd motion
 - **Point of discussion:** Decision needs to be made at the National level.
 - **Motion passed unanimously – vocal**

6. **Meeting Location for 2006 NECSSC**

- **Call for a proposal:** Ronnie Taylor (NJ) - Could schedule the 2006 NE NCSS Conference with the 2006 World Congress Soils Conference in Philadelphia

- **Discussion:** Interject our meeting with the World Conference
 - Will help university people in getting approval for attendance – 1 tour
 - Advantage NRCS National meeting is at tail end
 - Invite international folks to view how a NCSS works
 - Abbreviated meeting
 - Northeast meeting meet at 4-6pm range on Tuesday and Thursday. Connecticut and Rhode Island is a fall.
- **Call for a Motion:** New Jersey host the next NENCSS Region in conjunction with the 2006 World Soil Congress, PA. If this is determined to cumbersome, go to Connecticut, Rhode Island but must be held at a later date – NENCSS would need to take place later like August.
 - Maxine Levin – 2nd motion
 - **Motion passed unanimously**

7. By-laws - slate

NRCS East Region Soil Scientist – this position does not exist anymore.

Conference Chair

Conference Vice Chair

And Past Chair

- **Recommendation:** Put together a committee over the next 6-9 months. Planning committee held one year prior to the conference. Look at the other things out of date and necessary changes. Come up with a checklist of things for every meeting every year.

- **Recommendation** – who should be on the committee
 Current Steering Committee
 Steve Carpenter – past chair
 Ron Taylor – vice chair
 Experiment station chair- no one from NJ
 PA representative

- **Recommendation** : By laws committee be a separate committee
 No more than 5 people
 Marty Rabenhorst will be on the committee
 Steve Fischer MO-12
 Call for Chair – Steve Fischer
 Steve Carpenter – on committee
 Another university representative: John Sencindiver will take care of it
 Neil Babik – USFS Regional Planning Soils Scientist

8. **Close of meeting - Adjourn**

**BY-LAWS OF THE
NORTHEAST COOPERATIVE SOIL SURVEY
CONFERENCE**

ARTICLE I - NAME

Section 1.0

The name of the Conference shall be the Northeast Cooperative Soil Survey Conference.

ARTICLE II - PURPOSE

Section 1.0

The purpose of the Northeast Cooperative Soil Survey Conference is to bring together representatives of the National Cooperative Soil Survey in the northeastern states for discussion of technical and scientific questions. Through the actions of committees and conference discussions, experience is summarized and clarified for the benefit of all; new areas are explored; procedures are synthesized; and ideas are exchanged and disseminated. The conference also functions as a clearing house for recommendations and proposals received from individual members and state conferences for transmittal to the National Cooperative Soil Survey Conference.

ARTICLE III - PARTICIPANTS

Section 1.0

Permanent participants of the conference are the following:

Section 1.1

The NRCS state soil scientist responsible for each of the 13 northeastern states: Connecticut, Delaware, Maine, Maryland (also representing the District of Columbia), Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Virginia, Vermont, and West Virginia.

Section 1.2

The experiment station or university soil survey leader(s) of each of the 13 northeastern states.

Section 1.3

[NRCS East Region Soil Scientist]^***new title***

Section 1.4

NRCS, MLRA Office (MO) 12 and 13 Team Leaders

Section 1.5

National Soil Survey Center Liaison to the Northeast **Is this the correct Title**

Section 1.6

Cartographic Staff Liaison to the Northeast **Will this continue under this Title**

Section 1.7

Three representatives from the soils staff of the USDA Forest Service as follows:

1. One from the Eastern Region, National Forest System
2. One from the Southern Region, National Forest System
3. One from the Northeastern Area, State and Private Forestry **Are these titles active**

Section 2.0

On the recommendation of the Steering Committee, the Chair of the Conference may extend invitations to a number of other individuals to a number of other individuals to participate in committee work and in the conference. Any soil scientist or other technical specialists whose participation is helpful for particular objectives or projects of the conference may be invited to attend.

ARTICLE IV - ORGANIZATION AND MANAGEMENT

Section 1.0 Steering Committee

A Steering Committee assists in the planning and management of biennial meetings, including the formulation of committee memberships and selection of the committee chair and vice-chair.

Section 1.1 Membership

The Steering Committee consists of the following four members:

1. [NRCS East Region Soil Scientist] (Steering Committee chair)**new title**
2. The conference chair
3. The conference vice-chair
4. The past conference chair

The Steering Committee may designate a conference chair and vice-chair if the persons are unable to fulfill their obligations.

Section 1.2 Meetings and Communications

A planning meeting is to be held about one year prior to the conference. Additional meetings may be scheduled by the chair if the need arises.

Most of the committee's communications will be in writing. Copies of all correspondence between members of the committee shall be sent to the chair.

Section 1.3 Authority and Responsibilities

Section 1.3.1 Conference Participants

The Steering Committee formulates policy on conference participants, but final approval or disapproval of changes in policy is by consensus of the participants.

The Steering Committee makes recommendations to the conference for extra and special participants in specific conferences.

Section 1.3.2 Conference Committees and Committee Chair

The Steering Committee formulates the conference committee membership and selects the committee chair and vice-chair.

The Steering Committee is responsible for the formulation of committee charges.

Section 1.3.3 Conference Policies

The Steering Committee is responsible for the formulation of statements of conference policy. Final approval of such statements is by consensus of the conference participants.

Section 1.3.4 Liaison

The Steering Committee is responsible for maintaining liaison between the regional conference and

1. The Northeastern Experiment Station Directors.
2. The East Region State Conservationists, NRCS.
3. Director, Soil Survey Division of the Natural Resources Conservation Service.
4. Regional and national offices of the U.S. Forest Service and other cooperating and participating agencies, and
5. The National Cooperative Soil Survey Conference.

Section 1.4

Responsibilities of the Steering Committee Chair are:

Section 1.41

Call a planning meeting of the Steering Committee about one year in advance of, and if possible at the place of the conference to plan the agenda.

Section 1.4.2

Develop with the Steering Committee the first and final drafts of the conference's committees and their charges.

Section 1.4.3

Send committee assignments to committee members. The committee assignments will be determined by the Steering Committee at the planning meeting. The proposed chair and vice-chair of each committee will be contacted personally by the conference chair or vice-chair and asked if they will serve prior to final assignments. NRCS people will be contacted by an NRCS person and experiment station people will be contacted by an experiment station person.

Section 1.4.4

Compile and maintain a conference mailing list that can be copied on mailing labels.

Section 1.4.5

Serve as a member of the editorial board of the Northeast Cooperative Soil Survey Journal.

Section 2.0 Conference Chair and Vice-Chair

An experiment station representative and an NRCS state soil scientist alternate as conference chair and vice-chair. This sequence may be altered by the steering committee for special situations. The conference chair and vice-chair will serve a

two-year term. The conference chair and vice-chair are chosen following the selection of a place for the next meeting and are from the state where the meeting is to be held.

Section 2.1

Responsibilities of the conference chair include the following:

Section 2.1.1

Function as chair of the biennial conference.

Section 2.1.2

Planning and management of the biennial conference.

Section 2.1.3

Function as a member of the Steering Committee.

Section 2.1.4

Send out a first announcement of the conference about 3/4 year prior to the conference.

Section 2.1.5

Send written invitations to all speakers or panel members and representatives from other regions. These people will be contacted before hand by phone or in person by various members of the Steering Committee.

Section 2.1.6

Send out written requests to experiment station representatives to find out if they will be presenting a report at the conference.

Section 2.1.7

Notify all speakers, panel members, and experiment station representatives in writing that a brief written summary of their presentation will be requested after the conference is over. This material will be included in the conference's proceedings.

Section 2.1.8

Preside over the conference.

Section 2.1.9

Provide for appropriate publicity for the conference.

Section 2.1.10

Preside at the business meeting at the conference.

Section 2.1.11

Serve as a member of the editorial board of the Northeast Cooperative Soil Survey Journal.

Section 2.2

Responsibilities of the conference vice-chair include the following:

Section 2.2.1

Function as Program Chair of the biennial conference.

Section 2.2.2

Serve as a member of the Steering Committee.

Section 2.2.3

Act for the chair in the chair's absence or disability.

Section 2.2.4

Develop the program agenda of the conference.

Section 2.2.5

Make necessary arrangements for lodging accommodations for conference members, for food functions, for meeting rooms, including committee loans, and for local transport on official functions. Notify all persons attending the meeting of the arrangement for the conference (rooms, etc.) included in the last mailing will be a copy of the agenda.

Section 2.2.6

Compile and distribute the proceedings of the conference.

Section 2.27

Serve as a member of the editorial board of the Northeast Cooperative Soil Survey Journal.

Section 3.0 Post Conference Chair

The primary responsibility of the past conference chair is to provide continuity from conference to conference. Additional responsibilities include the following:

Section 3.1

Serve as a member of the Steering Committee.

Section 3.2

Assist in planning the conference.

Section 3.3

Serve as the editor of the Northeast Cooperative Soil Survey Journal. This responsibility encompasses gathering information with the other editorial board members, printing the Journal, and distributing it.

Section 4.0 Administrative Advisors

Administrative advisors to the conference consist of the [NRCS Regional Conservationist, East Region], Director of the NSSC, and the chair of the NE Agricultural Experiment Station Directors or their designated representatives.

ARTICLE V - TIME AND PLACE OF MEETINGS

Section 1.0

The conference convenes every two years, in even-numbered years. The date and location will be determined by the Steering Committee.

ARTICLE VI – CONFERENCE COMMITTEES

Section 1.0

Most of the work of the conference is accomplished by duly constituted committees.

Section 2.0

Each committee has a chair and vice-chair. A secretary or recorder may be selected by the chair, if necessary. The committee chair and vice-chair are selected by the Steering Committee.

Section 3.0

The kinds of committees and their members are determined by the Steering Committee. In making their selections, the Steering Committee makes use of expressions of interest filed by the conference participants.

Section 4.0

Each committee shall make an official report of the designated time at each biennial conference. Chair of committees are responsible for submitting the required number of committee reports promptly to the vice-chair of the conference. The conference vice-chair is responsible for assembling and distributing the conference proceedings. Suggested distribution is:

Section 4.1

One copy to each participant on the mailing list.

Section 4.2

One copy to each State Conservationist, NRCS, and Experiment Station Director of the Northeast.

Section 4.3

Five copies to the Director of Soil Survey, NRCS, for distribution to National Office staff.

Section 4.4

Ten copies to the National Soil Survey Center (NSSC) for distribution to staff in the center.

Section 4.5

Two copies to the [NRCS East Region] ^{^**new title**^}

Section 4.6

One copy to each MO 12, 13, and 14 office.

Section 4.7

Two copies to the Region 8 and 9 Forest Service Regional Directors. **Are these correct**

Section 4.8

One copy to Agriculture and Ag Food Canada office. **Is this correct**

Section 4.9

Much of the work of committees will of necessity be conducted by correspondence between the times of biennial conferences. Committee chairs are charged with the responsibility for initiating and carrying forward this work.

ARTICLE VII - REPRESENTATIVES TO THE NATIONAL AND REGIONAL SOIL SURVEY CONFERENCES

Section 1.0

The Experiment Station chair or vice-chair will attend the national conference the year prior to the regional conference for which they were selected. A second Experiment Station representative also will attend the conference. The second representative is to be selected by the Experiment Station representatives at the regional conference.

Section 2.0

One NRCS lead soil scientist from the East Region will be designated to attend the National Conference in addition to the NRCS member of the National Conference Steering Team. **Do we formally do this? ** **What does lead soils scientist mean? **

Section 3.0

One member of the Steering Committee will represent the Northeast Region at the South, Midwest, and West Regional Soil Survey Conference. If none of the members of the Steering Committee can attend a particular conference, a member of the conference will be selected by the Steering Committee for this duty. **Do we formally do this? **

ARTICLE VIII - NORTHEAST COOPERATIVE SOIL SURVEY JOURNAL

Section 1.0

The Northeast Cooperative Soil Survey Conference will publish a journal on soil survey and related topics at least once between conferences. The journal will be

governed by an editorial board made of the Steering Committee for the Northeast Conference. The editor of the journal will be the past conference chair. Their responsibility will be to assist in gathering information for the journal as well as printing and distributing the journal.

ARTICLE IX – NORTHEAST SOIL TAXONOMY COMMITTEE

Section 1.0

Membership of the standing committee is as follows:

1. Lead Scientist, Soil Taxonomy (permanent chair) ****Is this title correct?***
2. Three federal representatives
3. Three state representatives

Section 2.0

The team of membership is three years, with one-third replaced each year. The Experiment Station conference chair or vice-chair is responsible for overseeing the selection of state representatives. The lead scientist, soil taxonomy NRCS is responsible for the selection of federal representatives.

ARTICLE X - NORTHEAST RESEARCH NEEDS COMMITTEE

Section 1.0

This is a standing committee, the purpose of which is to maintain a formal mechanism within the Northeast Region to identify, document, prioritize and address the critical research and development issues related to soil survey.

Section 2.0

Membership of this standing committee is as follows:

- 2.1 [NRCS East Region Soil Scientist] ****new title**** (permanent chair)
- 2.2 One MO Team Leader (four-year term)
- 2.3 One NRCS State Soil Scientist (two-year term)
- 2.4 Two experiment station/university representatives (two-year term)
- 2.5 One NRCS field soil scientist (two-year term)
- 2.6 The National Soil Survey Center Liaison (permanent) ****Will title stay the same?***
- 2.7 U.S. Forest Service Representative (permanent)

Section 3.0

The state soil scientist and field soil scientist will be selected from a different state every two years alternating between each MO. The state soil scientist and field soil scientist will be from different states and different MOs.

Section 4.0

The [regional soil scientist] ****new title**** will be responsible for selecting the state soil scientist and NRCS field soil scientist.

Section 5.0

The Experiment Station Conference chair, or vice-chair is responsible for overseeing the selection of the experiment station/university representatives as described in Section 2.4 above.

Section 6.0

The Northeast Forest Service Experiment Station Research Director will select the appropriate U.S. Forest Service representative.

ARTICLE XI - SILVER SPADE AWARD

Section 1.0

The award will be presented every two years at the conference meeting. It will be presented to a member of the conference who has contributed outstanding regional and/or national service to soil survey. One or two individuals can be selected for the award every two years. The selection committee will be made up of past award winners with the last award recipient acting as chair of the selection committee. If multiple awards were given at the previous meeting, the chair of the selected committee will be elected by the committee. The recipients of the award will become members of the Silver Spade Club.

ARTICLE XII – AMENDMENTS

Section 1.0

Any part of this statement for purposes, policy and procedures may be amended any time by majority agreement of the conference participants.

By-Laws Adopted January 16, 1976

By-Laws Amended June 25, 1982

By-Laws, Amended June 15, 1984

By-Laws, Amended June 20, 1986

By-Laws, Amended June 17, 1988

By-Laws, Amended June 10, 1994

By-Laws, Amended June 13, 1996

NRCS Soil Survey Program Director's Message

Michael L. Golden, Director, Soil Survey Division

- Grew up near Ada, Oklahoma (South Central) Cross Timbers MLRA
- BS 1974 Oklahoma State University
 - Agronomy (Soils)
- 30 years Work Experience TX & NM
- Confirmed as Director January, 2004

Director's Goals

- **Support MLRA Project Office Concept**
- **Support MO Office Structure**
- **Support States' Technical Soil Services**
- **Support NSSC and National Leaders**
- **Support NCGC - Soil Support Branch**
- **Support NRCS Information Technology**
 - Geospatial Data Warehouse
 - Publication "Web Soil Survey" Data Mart
 - NASIS Next Generation
 - Soil Data Viewer/Web Data Viewer
- **Soil Business Area Analysis Group (SBAAG)**
 - Reorganize and Provide New Direction and Charges
- **The group will perform more Business Analysis**
- **Soil Survey Program Reviews**
 - Several every year
 - Working with partners to improve the soil survey
 - FY2004----
 - Indiana – November 2003
 - Washington – February 2004
 - Maine – May 2004
 - Wyoming – August 2004
- **Publication "Web Soil Survey" Data Mart**
 - West Texas Project as Prototype
 - Include Web SDV (GIS and Reports Capability)
 - Include Tabular and Map Unit Information
 - Customized Soil Survey by User
 - Options for Output
 - Examples – print, write to CD, download, or re-access online
 - <http://hydric.itc.nrcs.usda.gov/websoilsurvey/>

NRCS Goals:

- **Raise the Bar in Way We Do Soil Survey Using New Technology**
- **Provide More and Better Technical Soil Services (Internal & External Customers)**
- **Examine How We Can Provide a Better Statistical-Based Soil Survey**
- **Integrate State and Local Soil Lab Information with LIMS**
- **Begin to Address Variability - Time & Space**
 - Dynamic Soil Properties – Use work initiated by Soil Quality Institute
 - Establish protocol for data collection and storage
 - Use of SoLIM and similar landscape modeling/ inference programs
- **Implement New Technology in Soil Survey with Toolbox for Soils**
 - On-Screen editing using ARCGIS
 - Utilize 3D Mapper software
 - Test and implement Soil Landscape Inference Model (SoLIM) or similar systems
- **Reaffirm and Strengthen NCSS Partnership**
 - Establish NCSS Cooperator Award
 - Re-Vitalize NCSS Advisory Group

National Geospatial and Development Center:

- **Establish National Geospatial Development Center (NGDC)**
 - Finalizing MOU and Cooperative Ecosystems Study Unit (CESU-Agreement) with West Virginia Univ.
 - Primary function is research & test concepts with Business Analysis
 - Look out into future a few years & Develop new GIS/Geospatial tools for Soil Scientists & Others
- **Areas of Interests**
 - Spatial Applications (GIS/SSURGO)
 - Database Integration (NASIS/LIMS/OSD/SC)
 - Application Integration (Web Soil Survey)
 - Information Management (Marketing)
- **Use University, Private Contractors & NRCS personnel**

In Closing:

- **Likes to Get Feedback**
 - Discuss Pros and Cons
 - Make Best Informed Decision Possible
- **Big on MLRA Concept**
- **Big on Development/Implementation of Business Plans**
- **Big on People Working Together & Getting Along**
- **Big on Improving NCSS Cooperator Relationships**

NRCS STATE OFFICE REPORTS

Virginia

Soil Survey:

Virginia has completed approximately 97% or 25,200,000 acres of the State's 26,090,600 acres of initial soil survey mapping. Progressive soil survey mapping continues in Brunswick, Buchanan, Floyd, Highland, and Russell Counties. Updates continue in Culpeper, Fairfax, Fauquier, and Loudoun Counties.

Recently soil mapping has been completed in Bland County and the City of Chesapeake.

All NRCS county and state soil survey offices are now equipped with Windows XP desktops and laptops and have improved access to NASIS. Additionally, Garmin GPS units and digital cameras have now been deployed in each soil survey office.

Other Activities

NASIS database maintenance and development has been and will continue to be a high priority in Virginia for the foreseeable future. NASIS exports and certifications are being developed for all field office and SSURGO data sets, with population of the soil data warehouse scheduled to be completed by the end of calendar year 2004.

In February 2003, the Virginia State Office soils staff hosted a workshop on "Advanced Concepts in NASIS data population". Workshop participants included NRCS, state and county soil scientists. The session was hands-on, with each soil scientist working on a computer connected to NASIS and populating and editing their county's database. Guides, handouts, manuals and PowerPoint presentations were distributed to each participant. The training was well received by the participants. However, it continues to reveal that additional training needs are required to facilitate the successful population and maintenance of the NASIS database. In addition, soil survey staff members in the MO-14 portion of the state attended a MO-14 sponsored Professional Development Workshop in Sumter, South Carolina in March 2004. The workshop focused on field exercises pertaining to data collection and an overview of NASIS data population issues.

Seeing the need for improved local interpretive materials for urban communities, Virginia has established an urban soil survey work group that includes Virginia Polytechnic Institute and State University (VPI&SU), NRCS field staff, state office staff and a MO-14 soil data quality specialist. Currently, this work group is investigating characteristics of the anthropogenic soils of Fairfax County. The procedures tested and the results obtained from this study will provide actual versus estimated data for use in the development of urban interpretations designed to address locally important urban issues. It is anticipated that others across the state and country working in urban environment will benefit directly from this study.

NRCS continues its cooperative efforts with VPI&SU as an active participant in the National Soil Phosphorus Benchmark Study. Virginia's soil resource specialists (SRS) have been involved in selecting study sites and identifying and sampling soils for this project. Additionally, SRS are also working closely with Dr. Lee Daniels of VPI&SU on mine spoil soils research in southwest Virginia and Dr. Mark Alley of VPI&SU at the Camden Farm research site in Caroline County, investigating soil health and precision farming techniques. An agreement was also initiated with VPI&SU to develop a "Soil Decision Support System for Septic Tank Absorption Fields". Dr. John Galbraith is the lead on this project and Pam Thomas is lead from NRCS.

Recently, NRCS Virginia has entered into a collaborative study with the Colonial Soil and Water Conservation District and the USDA, Agricultural Research Service (ARS) to investigate carbon sequestration in selective coastal plain soils under various agronomic practices. To date, all study sites have been selected and sampling and characterization will be performed in October 2004.

The partnership with Virginia State University continues to strengthen with the NRCS. Through a USDA sponsored program the NRCS has been able to recruit two student interns (one aspiring soil scientists and the other an agricultural economist).

To celebrate the commencement of the 200th anniversary of the Lewis and Clark expedition, a team of Virginia State NRCS personnel took soil profiles found on the grounds of Monticello, home of President Thomas Jefferson. The profiles and associated activities were featured during the month of January in the 2004 NRCS Planner and are now part of a nationally traveling exhibit. An additional 45 soil monoliths have been prepared this spring from samples taken in the coastal plain of Virginia and are now being used as an educational tool for this area.

Virginia's technical soil service program continues to develop into new and different areas, from archeological studies to wetland requests. A recent activity to facilitate program application was the development and publication of Statewide Important Farmland list and maps for each county. Virginia's soil resource specialist positions continue to fill many needs and requests from both internal and external customers.

Soil Survey Digitizing:

Virginia is a designated NRCS SSURGO Digitizing Unit (DU). Production began at the DU in 1996. A total of 230 Soil Survey Areas (SSA) out of a total of 435 SSA in the nine state region of responsibility have been certified at the DU. In Virginia, 56 SSA have been certified out of about 100 SSA. In fiscal years 2003 and 2004, 39 SSA have been certified in the DU region.

Virginia's Soil Survey Staff

Northeast Agricultural Experiment Station Reports

Virginia Agricultural Experiment Station Report

Presented by: Dr. John Galbraith

New Directors & Assoc. Deans:

- **Dr. Patricia Sobrero**, newly hired as Director, VCE
- **Dr. Craig Nessler**, Newly hired as Director, VAES
- **New Dean**, College of Natural Resources
- **Timothy P. Mack**, Associate Dean for Information Technology and Distance Education
- **Michael Bertelsen**, Associate Director, Office of International Research and Development

New Faculty:

- CSES – two new faculty
- Forages Research and Extension
- Turf Extension Specialist

New Buildings:

- \$28 Million Ag-Forestry Building halfway finished

New Centers:

- Center for Geospatial Technologies
 - Integrates new Civil and Environmental Engineering GIS expertise with the existing Remote Sensing Center and Conservation Management Center
 - Adds three New GIS staff at the National Capital Campus Complex in No. Virginia

Students:

- 6 to 12 soils (Land Resources) majors
- About 15 soils-related graduate students
- About 6 new soils-related graduate students

New Courses:

- **New Undergraduate courses**
 - Wetland Soils
 - Reclamation of Drastically Disturbed Lands
 - Soil Interpretation using GIS and Decision Support Systems
- **New Graduate courses**
 - Matching courses for each of the undergraduate courses above
 - New GIT graduate certificate in progress

Research:

- **Organic Carbon**
 - Soil Classification of high-elevation high-OC soil in the Southern Appalachians
 - Soil Carbon Sequestration Potential GIS and Database for VA
 - SOC map of USA using STATSGO and FIA data – USFS, VPI, NRCS
- **Wetland Soils and Systems**
 - Soil CO₂ study variation by land use - Amanda Burdt
 - Growing season study in wet flats - Amanda Burdt
 - Soil temperature and hydrology variation by land use - Amanda Burdt
 - Dynamic Indicators of Aquic Soil Conditions in Two Virginia Piedmont Slope and Adjacent Riverine Wetlands
 - Correlating Dynamic Indicators of Aquic Conditions to the Hydric Soil Technical Standards and to Long Term Hydric Soil Indicators
 - The Spatial and Temporal Hydrology of Virginia Piedmont Slope and Adjacent Riverine Wetlands
 - Red Parent Materials Field Indicator Study
- **Reclamation/Reforestation**
 - Abandoned Coal Mine Soils Reforestation Project – John Galbraith, Carl Zipper, and Jim Burger
 - Wetland Reclamation and Reforestation using Varying Litter Amendment Rates
 - Comparisons of soil OC and Bulk Density in Reference and Mitigation Wetlands
 - Classification and Mapping of Coal Mine Soils – Haering, Daniels, Galbraith and NRCS
- **GIS and Remote Sensing Wetland Soil Interpretations**
 - NWI validation/extrapolation using remote sensing methods and materials
 - Wetland prediction methods using GIS and digital data
 - Reclamation techniques on mineral mining (dredged/bulldozed) areas
- **Hydrology/Soil Interpretations**
 - Saprolite percolation rate study – Conta, Peacock and Galbraith

Extension and Outreach:

- **Training**
 - New Wetland Delineator's Certification Program
 - Wetland Soils training with VIMS for DEQ and VDOT employees
 - GIS - SSURGO - SDV
 - Basic Soils – VA Dept. Health
- **Internet**
 - SSURGO User's Guide (for Non-technical experts)

- Host Soil Taxonomy Forum and Hydric Soils
- **Soil Databases**
 - Update the Virginia Agricultural Land Utilization and Evaluation System (VALUES)

Extension & AES Personnel:

- **The Ugly:**
 - Huge budget cuts, possible 35 positions eliminated, 2 AES closed
- **The Sad:**
 - 22 people retired voluntarily or with buyout
- **The Good:**
 - No stations closed, every position refilled,
 - VCE and VAES budget increased by legislature

NRCS Associations:

- **Soil Judger Newly hired**
 - Sarah Murray
- **VA Septic System SDV tool**
 - Dr. Pam Thomas and John Galbraith
- **Palm pilot version of VA regulations for conventional and alternative septic systems**
 - Heather Mann and John Galbraith
- **Water well study – benchmark and statewide important soils**
 - Lee Daniels and John Galbraith

Professional Activities:

- **IUSS Geomorphology Field Tour (15 New Pits and Monoliths in VA)**
 - David Kriz, Pam Thomas, others (NRCS - VA, PA, NC)
 - Lee Daniels, John Galbraith, and Phil Cobb (VPI)
 - Mike Vepraskas and David Lindbo (NCSU)

WEST VIRGINIA
AGRICULTURAL AND FORESTRY EXPERIMENT STATION
REPORT

**Northeast Cooperative Soil Survey Conference
Canaan Valley Resort and Conference Center
Davis, West Virginia
June 21-25, 2004**

**By: John C. Sencindiver
Professor of Soil Science
Division of Plant and Soil Sciences
Davis College of Agriculture, Forestry and Consumer Sciences
West Virginia University**

Enrollment

For the 2003-2004 academic year, 12 graduate students were enrolled in soil science, and 12 undergraduate students were enrolled in the soil science option of the agronomy major. Approximately 40 undergraduate students were enrolled in the soil and water conservation specialization of the environmental protection major.

Soil Science Faculty

1. Devinder K. Bhumbla, Assistant Professor and Extension Specialist; nutrient management, soil and water quality, soil chemistry. Dr. Bhumbla has resigned his position effective June 30, 2004. Approval has been received to conduct a search to fill this position in 2005.
2. Louis M. McDonald, Jr., Associate Professor; environmental soil chemistry.
3. John C. Sencindiver, Professor; soil morphology, genesis and classification. Dr. Sencindiver will retire effective June 30, 2005. A search is being conducted to fill this position in 2004.
4. Alan J. Sexstone, Professor; soil/environmental microbiology.
5. Jeffrey G. Skousen, Professor and Extension Specialist; mined land reclamation/water quality.

Recently Completed Graduate Students

1. Schnably, Jamie. 2003. Soil Characterization, Classification, and Biomass Accumulation in the Otter Creek Wilderness. M.S. Thesis. West Virginia University. 137 p. [On-line]
http://kitkat.wvu.edu:8080/files/3215.1.Schnably_Jamie_Thesis.pdf.

2. Sekhon, Bharpour. 2002. Modeling Soil Phosphorus Sorption and Control of Phosphorus Pollution with Acid Mine Drainage Floc. Ph.D. Dissertation. West Virginia University. 210 p. [On-line]
http://kitkat.wvu.edu:8080/files/2530.1.Sekhon_Bharpour_dissertation.pdf.
3. Stephens, Kyle. 2003. Characterization of Wetland Soils in the Beaver Creek Watershed. M.S. Thesis. West Virginia University. 131 p. [On-line]
http://kitkat.wvu.edu:8080/files/2864.1.Stephens_Kyle_Thesis.pdf.

Current Graduate Student Projects (Students advised by John Sencindiver)

1. Cooley, Brian. Characterization and Classification of Clayey Soils Developing on the Chambersburg Limestone. M.S. Thesis, West Virginia University. Funding provided by Experiment Station; field assistance provided by NRCS.
2. Lanham, Jennifer. Characterization and Genesis of Soils Formed on Bakerstown and Upper Freeport Geologic Materials. M.S. Thesis, West Virginia University. Funding provided by WV Division of Highways and Experiment Station.
3. Miller, Rosa Lee. Properties of Soils Developing on West Virginia Highway Cuts and Fills. M.S. Thesis, West Virginia University. Funding provided by WV Division of Highways and Experiment Station.

Other Studies

1. Phosphorus Retention Capacity of West Virginia Soils. D.K. Bhumbla and J.C. Sencindiver investigators. Funding provided by NRCS and Experiment Station; field assistance provided by NRCS.
2. An Ecological Assessment of Wetland Habitats that Support High Plant Species Rarity and Diversity in Canaan Valley, West Virginia. J.T. Anderson, R. H. Fortney, and J.C. Sencindiver investigators. Funding provided by the Canaan Valley Institute and Experiment Station.

Recent Publications

2002

1. Lanham, Jennifer, John Sencindiver, and Jeff Skousen. 2002. Characterization of Soils Developing in Materials Mined for Upper Freeport Coal. p. 13. *In* Program Schedule and Abstracts of Canaan Valley & Its Environs Conference. Canaan Valley State Park and Resort, WV. Canaan Valley Institute. Davis, WV.
2. Sekhon, B.S., D.K. Bhumbla, J.C. Sencindiver, and S.G. Carpenter. 2002. Modeling Phosphorus Sorption in West Virginia Benchmark Soils. Abstract. p. 5.

In Invited Papers and Abstracts of Contributed Papers. NE Branch of the Amer. Soc. of Agronomy. Madison, WI.

3. Sencindiver, J.C. 2002. The Dirt on Canaan: Soils of Canaan Valley. p. 15. *In* Program Schedule and Abstracts of Canaan Valley & Its Environs Conference. Canaan Valley State Park and Resort, WV. Canaan Valley Institute. Davis, WV.
4. Stephens, Kyle, John Sencindiver, and Jeff Skousen. 2002. Characteristics of Wetland Soils Impacted by Acid Mine Drainage. p. 13. *In* Program Schedule and Abstracts of Canaan Valley & Its Environs Conference. Canaan Valley State Park and Resort, WV. Canaan Valley Institute. Davis, WV.
5. Thomas, K.A., J.C. Sencindiver, J.G. Skousen, and J.M. Gorman. 2002. Soil development on a mountaintop removal coal mine. Abstract. p. 3. *In* Invited Papers and Abstracts of Contributed Papers. NE Branch of the Amer. Soc. of Agronomy. Madison, WI.

2003

1. Jones, J.R., J.C. Sencindiver, J.G. Skousen. 2003. Using minesoil and overburden analyses to locate a highway in West Virginia. p. 533-548. *In* R.I. Barnhisel (ed.) Proceedings [CD-ROM], Joint Conf. of the 9th Billings Land Reclamation Symp. and the 20th Annual Meeting of the Amer. Soc. of Mining and Reclam. 3-6 June 2003. Billings, MT. ASMR. 3134 Montavesta Rd., Lexington, KY.
2. Schnably, J., J. Sencindiver, and T. Jenkins. 2003. Productivity and health of soils in the Otter Creek Wilderness, West Virginia. Abstract. p. 65. *In* 2003 Annual Conference Abstracts. Soil and Water Conservation Society. 26-30 July 2003. Spokane, WA.
3. Sekhon, B.S., D.K. Bhumbla, J. C. Sencindiver, and S. Carpenter. 2003. Modeling phosphorus retention capacity of some West Virginia benchmark soils. Abstract. p. 66. *In* 2003 Annual Conference Abstracts. Soil and Water Conservation Society. 26-30 July 2003. Spokane, WA.
4. Sencindiver, J.C. 2000. (issued 2003). Wetland soils of West Virginia. *Proc. W. Virginia Acad. Sci.* 72(5):30-38.
5. Stephens*, K.M., J.C. Sencindiver, J.G. Skousen. 2003. Characterization of natural wetland soils receiving acid mine drainage. p. 1240-1265. *In* R.I. Barnhisel (ed.) Proceedings [CD-ROM], Joint Conf. of the 9th Billings Land Reclamation Symp. and the 20th Annual Meeting of the Amer. Soc. of Mining and Reclam. 3-6 June 2003. Billings, MT. ASMR. 3134 Montavesta Rd., Lexington, KY.

2004

1. Jones, J.R. and J.C. Sencindiver. 2004. Properties and genesis of minesoils on sites mined for Bakerstown and Upper Freeport coals. p. 980-994. *In* R.I. Barnhisel (ed.) Proc. Joint Conf. Amer. Soc. of Mining and Reclam. and West Virginia Surface Mine Drainage Task Force. [CD-ROM] ASMR. 3134 Montavesta Rd. Lexington, KY.
2. Miller, R.L. and J.C. Sencindiver. 2004. Properties of constructed soils along four-lane highways in West Virginia. p. 1315-1337. *In* R.I. Barnhisel (ed.) Proc. Joint Conf. Amer. Soc. of Mining and Reclam. and West Virginia Surface Mine Drainage Task Force. [CD-ROM] ASMR. 3134 Montavesta Rd. Lexington, KY.
3. Skousen, J. and J. Sencindiver. 2004. Soil properties important to stream development on mined lands. p. 1750-1768. *In* R.I. Barnhisel (ed.) Proc. Joint Conf. Amer. Soc. of Mining and Reclam. and West Virginia Surface Mine Drainage Task Force. [CD-ROM] ASMR. 3134 Montavesta Rd. Lexington, KY.
4. Slagle, A., J. Skousen, D. Bhumbla, J. Sencindiver, and L. McDonald. 2004. Trace Element Concentrations of Three Soils in Central Appalachia. Accepted for publication in Fall Issue of Soil Survey Horizons.

National Committee Reports

International Committee for Anthropogenic Soils (ICOMANTH) John Galbraith, Chair

Recent ICOMANTH Activities:

- Compiled existing pedon data, pictures, and classification systems of Anthropogenic soils on CD-Rom for distribution (November 2002)
- Sent out 4th circular letter for comments (January 2003)
- Published CD with data collected Ver. 1.0 (January 2003)
- Sent out 5th circular letter for comments (June 2004)
- Submit proposed changes to USDA-NRCS system (September 2004)
- Send out 6th circular letter for comments (December 2004)
- Publish CD with data collected Ver. 2.0 (Summer 2005)

ICOMANTH Circular Letter #5 Objectives:

- **To propose:**
 - New terms for making soil descriptions
 - Revisions in the definitions of fragments
 - New horizon nomenclature
- **To provide:**
 - A summary of responses from Circular #4
 - Rationale for modifications
 - Questions for readers

New Terms for Making Soil Descriptions:

- **Human transported materials (HTM)** – any material (artifacts, organic materials, soil, rock, or sediment) moved horizontally into a pedon from a source area outside of that pedon by directed (intentional) human activity, usually with the aid of machinery (*from humanus*; akin to Latin *homo* human being + Latin *transportare*, from *trans-* + *portare* to carry). **Directly transported and deposited materials result in the creation of a constructional type of landform** defined in the NSSH Part 629.02 (c) as:
 - **“anthropogenic feature”** – “An artificial feature on the land surface, having a characteristic shape and range in composition, composed of unconsolidated earthy, organic materials, artificial materials, or rock, that is the direct result of human manipulation or activities; can be either constructional (e.g., artificial levee) or destructional (quarry).”
 - **Evidence of HTM on constructional anthropogenic features**
 - **Within the pedon:**
 - Artifacts abrupt contact edges with dissimilar soil material in the surface horizons; or;

- Freshly fractured, uncoated rock fragments with splintered or sharp edges; or
- Easily weatherable minerals or rock fragments that have Distorted bedding planes; or
- Irregularly-shaped, abrupt horizon boundaries; or
- Bridging voids between rock fragments; or
- Randomly-oriented or distributed rock fragments, lithochromic mottling, organic carbon, masses or layers of contrasting textures, or diagnostic horizons in the subsoil; or
- Scars or scrape marks or shattered rocks left by mechanical tools; or
- A surface or near-surface layer of human-compacted densic materials or isolated fragments of densic materials; or
- Fine stratification of materials due to water deposition; or
- **Other evidence:**
 - Historical evidence or observation of human transportation; or
 - Professional judgment or knowledge of human transportation events.
- **Artifacts** - Something created (or modified) by humans usually for a practical purpose (from Latin *arte* by skill + *factum* to do).
 - **Examples:** wood products, liquid petroleum products, coal combustion by-products, asphalt, fibers and fabrics, bricks, cinder blocks, concrete, plastic, glass, rubber, paper cardboard, iron and steel, altered metals and minerals, sanitary and medical waste, garbage and landfill waste, distorted horizonation patterns and scrape marks and freshly-broken rock surfaces left in the soil or on bedrock by machinery and equipment.”
 - **Types include:**
 - Particulate artifacts - sand topdressing, municipal sludge residue, coal ash, and detritus of larger artifacts
 - Discrete artifacts - bricks, concrete, wood products, iron rods, asphalt, and discontinuous or broken pieces of liners
 - Liners - asphalt, concrete, plastic, geo-textile, rubber

Redefining Soil Fragments

- ICOMANTH proposes that the definition of fragments in NSSH 618.27 (a) be modified:
 - “Fragments are unattached cemented pieces of bedrock, bedrock-like material, **discrete artifacts**, durinodes, concretions, and nodules 2 mm or larger in diameter; and woody material 20 mm or larger in organic soils.
 - Fragments are separated into **four** types:
 - rock fragments,
 - pararock fragments,

- discrete artifact fragments,
- wood fragments.”

New Terms for Defining Classes of Discrete Fragment Content:

- ICOMANTH proposes that **the following terms be added to the Soil Survey Manual as Texture Modifiers** (and to NSSH Exhibit 618-15 and part 618.27 (j) (3)) for discrete artifacts following the example for non-flat fragment classes.

Defining New Terms in Lieu of Texture:

- ICOMANTH proposes that the term “**discrete artifacts**” be used as a “**term used in lieu of texture**” (NSSH Exhibit 618-15) “for layers made up or 90 percent or more discrete artifacts.”
- ICOMANTH proposes the following terms be added as new “**terms in lieu of texture**” (NSSH Exhibit 618-15) to identify the most common **types of liners**.
 - Concrete
 - Asphalt
 - Plastic
 - Geotextile
 - Rubber

Defining New Texture Modifiers:

- ICOMANTH proposes that horizons that contain **high amounts of particulate artifacts** be added as a Texture Modifier (NSSH Exhibit 618-15 and part 618.67 (h) (2) (vi)) and defined as:
 - “**Particulate artifactious** -- material that contains 15 percent or more by volume particulate artifacts,” following the example for Gypsiferous.
- ICOMANTH proposes the following terms be added as a texture modifier for horizons that contain **high amounts of discrete artifacts** to help identify important interpretive considerations in soils that contain a significant amount of discrete artifacts by volume.
 - “**Urbic** – For horizons and layers with $\geq 15\%$ by volume discrete artifact fragments of all kinds (from Latin urbanus, of, relating to, characteristic of, or constituting a city).”

- **Use of Urbic Texture Modifier (proposed):**

| % vol artifacts | Modifier |
|--|---------------------------|
| 0 to < 15 % | N / A |
| ≥ 15 to < 35 % | Urbic † |
| ≥ 35 to < 60 % | Very Urbic † |
| ≥ 60 to < 90 % | Extremely Urbic † |
| ≥ 90 % | Discrete Artifacts |
| | † |

† New terms for NSSH exhibit 618 - 15

Terms for Interpreting Artifacts

- **Consistence** may be described using the existing terms (SSM Table 3-14 and NSSH 618.27 (i)) if helpful to understanding the nature of the artifacts.
- **Buried, decomposable natural organic materials** should be identified as such so that the soil can be properly interpreted for subsidence and methane gas production problems.
- **The excavation difficulty of liners** may be described if that is important to soil interpretations (see Table 3-21 of the SSM – Excavation Difficulty Classes).

Describing Artifacts

- ICOMANTH proposes that in narrative soil horizon and layer descriptions:
 - **Particulate artifacts** should be described by the:
 - % by weight (estimated or measured),
 - human-safety category, and
 - specific identity (if possible and if important for interpreting or classifying the soil).
 - **Discrete artifacts** should be described by the:
 - percent volume (estimated or measured),
 - human-safety category (for minerals, metals, and other artifacts where the safety category is not obvious),
 - size-class,
 - rupture-resistance term (if important), and
 - specific identity (different kinds may be grouped if they produce the same interpretation or classification).
 - **Liners** should be described by the:
 - continuity estimated distance between vertical gaps or cracks (if any), and
 - specific identity as “terms used in lieu of texture” (NSSH Exhibit 618-15).

New Horizon Nomenclature:

- ICOMANTH proposes the “prime” symbol (') be used to identify horizons and layers of HTM, following the example of the numerical prefixes used for discontinuities (Keys to Soil Taxonomy, Ch. 18, SSM Ch. 3, and Field Book for Describing Soils, 2nd. Ed. p. 2-4).
- ICOMANTH proposes a change in current definitions (in bold text):
 - *“Arabic numerals are used as prefixes to horizon designations (preceding the letters A, E, B, C, and R) to indicate discontinuities in mineral soils. **The “prime” symbol is used as a prefix to horizon designations (preceding the letters A, E, B, L, C, and R) to indicate human-constructed discontinuities in mineral or organic soils caused by the deposition of HTM. The prime in***

the prefix position is not to be confused with the prime used in the suffix position.”

- *“A natural discontinuity is a difference in the materials from which the horizons have formed and/or a significant difference in age, unless that difference in age is indicated by the suffix b. A **human-constructed discontinuity is one that forms when humans transport and deposit materials on top of an existing pedon or any other base.**”*
- *“Where a soil has formed entirely in one kind of material, the whole profile is understood to be material 1 and the number prefix is omitted from the symbol. **For human-created discontinuities, however, all horizons and layers formed in HTM are indicated by the use of the prime as a prefix.**”*
- Master Horizon
 - The uppercase letter “M” would be used to identify physically root-limiting subsoil layers defined as liners.
 - The M horizon follows the conventions used in the SSM for the O, L, and W horizons that reflect a type of material (Soil Survey Staff, 2003, Ch. 18, p. 314).
 - EX: ‘2Md -- 23 to 28 in (56 to 70 cm); very dark gray (10YR 3/1) asphalt; structureless, massive; extremely firm; no roots; no pores; few cracks about 100 cm apart; 65% crushed sandstone pebbles; neutral; abrupt smooth boundary (5 to 9 inches thick).
- ICOMANTH proposes that the lowercase letter “u” be used to identify horizons or layers that contain an observable amount ($0 \leq x < 15\%$ volume) **discrete artifacts**
 - Higher amounts of discrete artifacts are identified by the texture modifiers.
- ICOMANTH proposes that the lowercase letter “u” also be used to identify horizons or layers that contain an observable amount ($0 \leq x < 15\%$ weight) **particulate artifacts**
 - Higher amounts of particulate artifacts are identified by terms in lieu of texture.

Example Description

A hypothetical pedon formed in HTM over a buried natural soil.

'Ap – 0 to 26 cm; reddish brown (2.5YR 4/4) loam; common, fine distinct dusky red (10R 3/4) lithochromic mottles; weak coarse subangular blocky structure; friable; common fine and medium plus a few coarse roots; no pores; 5 percent sandstone pebbles; moderately acid; clear wavy boundary.

'Cdu – 26 to 50 cm; reddish brown (2.5YR 4/4) loam; few, medium distinct dusky red (10R 3/4) lithochromic mottles; structureless, massive; extremely firm; no roots less than 10 cm apart; no pores; 5 percent sandstone fragments; **3 percent medium, brick fragments**; slightly acid; clear wavy boundary.

'Cu – 50 to 79 cm; reddish brown (2.5YR 4/4) gravelly loam; common, medium distinct dusky red (10R 3/4) lithochromic mottles; structureless, massive; firm; common fine and medium plus a few coarse roots; no pores; 15 percent sandstone gravel, 5 percent sandstone cobbles; **8 percent medium brick and concrete fragments**; neutral; clear wavy boundary.

'C - 79 to 117 cm; reddish brown (2.5YR 4/4) **urbic** gravelly loam; common, medium distinct dusky red (10R 3/4) lithochromic mottles; structureless, massive; firm; few fine and medium roots; no pores; 15 percent sandstone gravel, 5 percent sandstone cobbles, and **15 percent coarse concrete fragments, 5 percent medium brick fragments**; slightly alkaline; abrupt smooth boundary.

Circulars Letter #5 also provides:

- A summary of responses from Circular #4
- Rationale for modifications
- Questions for readers

All information can be found at the ICOMANTH web site:

<http://clic.cses.vt.edu/ICOMANTH>

Proposed Regional Conference Committee Charges

Regional Conference

Background: A concern has been raised at various NCSS meetings that we may have lost some of our effectiveness in communicating needs and concerns within the structure of the National Cooperative Soil Survey program. Some of the issues that have been raised as concerns include:

1. When NRCS maintained four regional technical centers, the regional soil scientist was charged with heading the planning committee for the regional conference, participating in the national conference steering committee and attending the national conference. This helped ensure that concerns from the regional conferences were passed along to the national leadership and national activities were reported back to the regional conferences. A perception exists that the current structure does not provide the same level of communication from regional to national conference and back.
2. Conferences no longer commit the same level of resources to deliberation of committee charges as was the case in past years. For example: in 1982 the North Central Regional conference agenda, in 28 hrs. 45 min. of meeting time (excluding breaks) included 15 hours of committee meetings and reports, 5 hours of informational reports, 3:45 of agency meetings and a 5 hour optional field trip on Friday morning. In addition, committee deliberation was largely done prior to the conference by mail so that many individuals that could not attend the conference could contribute. By the time of the conference committees were expected to have a draft report completed including any recommendations that would be proposed. These reports were then discussed at the conference. Many committees now have limited activity prior to the conferences, limiting the effectiveness of their deliberations and development of recommendations.
3. In earlier years, the national conference was attended by invitation only and was a working conference. In recent years the attendance at the national conference has been opened to allow many more state program managers (NRCS and Partners) to attend. This may be contributing to the national conference agenda becoming more of an informational agenda than a working agenda.

Potential Charges

1. What are the high priority issues that require a regional and national conference structure to deal with? Some suggestions are that it be a few items like Taxonomy (Standards?) and Research Needs and that they be made standing committees in the national and regional conferences that are identified in the bylaws.
2. How can these issues best be discussed within the National and Regional Conference structure?
 - a. Between regional and national conferences
 - b. Between NRCS and cooperating agencies
 - i. University partners

- ii.** Federal agency partners
 - iii.** State agency partners
 - iv.** Private consultants

- 3.** Given the current structure of NCSS and activities within partner organizations, what is a proper mix of agenda time devoted to informational topics, committee activities, and field trips at NCSS conferences?
 - a.** National Conferences
 - b.** Regional Conferences

- 4.** What specific recommendations would you make to encourage participation in national and regional conferences by:
 - a.** University faculty?
 - b.** Federal agency partners?
 - c.** State agency partners?
 - d.** Private sector soil scientists?

Items to consider:

Loss of regional tech center reps

Loss of resources (agency budgets, loss of institutional knowledge through retirement and reorganization)

References available:

National and regional bylaws

University Cooperators' report from 2003 National Conference

Past Conference Proceedings (available on CD)

COMMITTEE REPORTS

Northeast NCSS Research Needs Committee Report Davis, West Virginia June 2004

Committee members and participants at meeting

Joyce Scheyer, NRCS-NSSC Liaison (chair)
Stephanie Connolly, USFS- MNF
Debbie Frigon, NRCS- CT (representing Shawn McVey)
Tony Jenkins, NRCS -WV
Eileen O'Neill, NRCS-WV
John Galbraith, Virginia Tech Univ
Chris Fabian, NRCS-PA
Cara Sponaugle, USFS/WVU
Robert Dobos, NRCS-NSSC
Chris Smith, NRCS-NJ
Jeff Thomas, NRCS-VA
Henry Lin, Penn State Univ.
Sharon Waltman, NRCS-NSSC
Lenore Vasilas, NRCS-EPA Liaison
Dave Kinsbury, NRCS-WV
Neil Babik, USFS -Region 9 Milwaukee

Suggestions for Research in 2004-2006

- Compaction of soil due to bulk application of wastes
- KSAT for Cr and R horizons and influence on interps.
- Tailored interps. for reclaimed mine soils
- Radon data collection
- Quantification of soil structure
- Wetland ID for NWI validation
- Develop data model for scalable soil resource data
- Quantifying science behind digital soil mapping (i.e. SOILM, etc.)

Proposals for Research in 2004-2006

- 1) *Long term forest productivity* - on-going
- 2) *Benchmark Water Table Study*
 - Water table monitoring of red parent material soils
 - Regional prototype for water table studies
- 3) *Red Parent Material study*
 - Found in every state, so every state should select sites
 - What should be measured?
 - Water table, soil temp., soil moisture, etc.
 - Equipment needs?
 - Wells, piezometers, soil moisture probes, temp. thermocouples, etc.

- What personnel?
- 4) *Prototype research project on water tables*
- Bare bones to top of the line
 - Look for models for predicting water tables throughout landscape
 - Develop a position dedicated to water table monitoring support in the northeast (NRCS or cooperator) or create a working committee with funding for travel

Detailed Reports from sub-committees (attached)

Saturated Hydraulic Conductivity (Ksat) of Lithic and Paralithic Materials
Literature Review to Develop BMPs to Alleviate or Prevent Soil Compaction

Saturated Hydraulic Conductivity (Ksat) of Lithic and Paralithic Materials

Purpose:

To determine typical Ksat values of lithic and paralithic materials in the northeast.

Area of Emphasis:

Northeast Region (might initially concentrate on MLRA 147, 127 and 140).

Project Description:

Some interpretations, including the “soil surface runoff” interpretation provided for P-based nutrient management plans are influenced by Ksat of lithic and paralithic materials especially for shallow and moderately deep soils. However, Ksat values populated in our NASIS database can vary by a factor of 1000 within the same geology formations. While permeability of bedrock is highly variable, it would improve the quality and consistency of our data to get baseline Ksat values (RV and range) for near surface lithic and paralithic materials.

The focus should be on collect data for lithic and paralithic materials that occur within 100 cm of the surface. Sampling should also include the overlying horizons. The most common formations in the northeast should initially be sampled. Initial investigation will concentrate on MLRA 147, 148 and 140. Initial soil series are proposed as Berks, Weikert, Dekalb, Opequon, Klinesville of MLRA 147, Penn of MLRA 148, and Arnot of MLRA 140.

An additional focus will determine methods to measure Ksat in lithic and paralithic materials.

Approach:

MO12 and MO13 soil scientist will choose appropriate formations to sample and work with the NSSC staff in Lincoln to do the sampling.

Expected results:

1: Baseline Ksat values for near surface lithic and paralithic materials in the northeastern US. Initial investigation to concentrate on Berks, Weikert, Dekalb, Opequon, Klimesville of MLRA 147, Penn of MLRA 148, and Arnot of MLRA 140.

2: Determination of appropriate methods to measure Ksat in lithic and paralithic materials.

Resources needed:

Assistance from the Lincoln staff (Phil Schoenberger or Doug Wysocki or others). Possible purchase of Amoozemeters. Pennsylvania has made an initial request for NSSC staff to provide assistance for an initial investigation in FY2004.

Contacts:

Ed White, NRCS-PA. Chris Fabian, NRCS-PA. Phil Schoenberger, NSSC.

Submitted by:

Northeast NCSS Research Needs Committee, 2004

Literature Review to Develop BMPs to Alleviate or Prevent Soil Compaction

Purpose: To determine if adequate information exists to write BMPs to both prevent soil compaction and to restore soil porosity to previously compacted soil.

Area of Emphasis: East Region

Background: A system of medium and large pore connected to the surface is central to the most processes that soil performs. The loss of these pores is similar to soil lost to erosion, except that when porosity is restored, soil function can be recovered. Soil compaction of agricultural and forest soil has long been identified as a potential problem of resulting from heavy equipment including bulk spreaders, skidders as well as the tractor and tillage equipment. More recently, soil compaction has also been identified as a major problem in reestablishing soil function to drastically disturbed soils in areas of cuts and fills for subdivisions, mining reclamation and storm water basins.

Preserving and restoring pore space in soil is central to reducing non-point source pollution by increasing infiltration and reducing runoff. Soil compaction threatens the long term productivity of our lands. In severely compacted soil, wetting and drying and freeze-thaw cycles are ineffective at restoring porosity. It is also impossible for plant roots to penetrate these high density soils, essentially rendering the soil permanently loss unless restoration is undertaken.

Approach: BMPs are needed to suggest management alternatives to prevent soil compaction as well as to restore soil porosity to presently compacted soils. Many investigations and research have already learned much about the factors affecting the

compaction process. Before initiating new research it is important to determine if enough information exists to make specific recommendations.

The Research Committee is requesting report an analysis of existing literature and other relevant information that could be used to write BMPs. In addition, the report will list what information gaps prevent completion of a comprehensive set of BMPs that can be utilized to maintain or restore soil porosity.

Resources needed: Approximately 2,000 hours of staff (\$20/hr) and 500 hours (\$40/hr) of team leader time to review literature and prepare report of findings. Total cost not to exceed \$60,000.

Contacts: Dr. John M. Galbraith, VPI

Submitted by: Northeast NCSS Research Needs Committee, 2004

Taxonomy Committee
2004 Northeast Cooperative Soil Survey Conference

No new proposals were presented. No items were referred from other committees or from the National Committee. We are in the post 9th edition lull.

The new Standards Committee is considering what the scope of its activities will be. Some of these items were formerly sent to the Taxonomy Committee. We sat in with the first session of the Standards Committee in their discussions.

The content and results of those discussions will be in Standards Committee Report.

Steven Fischer
Acting, Acting Co-Chair

**Technical Soil Services
Ad Hoc committee report
Northeast Regional Conference, National Cooperative Soil Survey
June 2004
Canaan Valley, WV**

Introduction

- The term “Technical Soil Services” refers to non-production soil survey activities.
- Titles of soil scientists performing these activities include soil resource specialist, **resource soil scientist**, and area soil scientist. Others in NRCS that may perform these duties include, assistant state soil scientists, state soil scientists, and soil survey project leaders and members. Many of our partners provide these services as well. They include Forest Service soil scientists and Technical Service Providers (TSP). We will use **resource soil scientist (RSS)** as the working title of a full time technical soil services provider in NRCS.
- The list of activities in this area is long and varied. On it is anything from on-site investigations for farm bill practices to educational services like the Envirothon or code enforcement officer workshops.
- Technical Soil Services are the link between soil survey and it’s users

- The Soil Surveys for Resource Planning and Development Act of 1966 (P.L. 89560). clarified the legal authority for the Soil Survey Program of the United States Department of Agriculture by specifying: that the soil surveys are needed by "...states and other public agencies in connection with community planning and resource development for protecting and improving the quality of the environment, meeting recreational needs, conserving land and water resources, and controlling and reducing pollution from sediment and other pollutants in areas of rapidly changing uses..."
NRCS was charged to:
 - Make an inventory
 - Keep it current
 - Make useful formats (interpretations, GIS, special reports)
 - Provide technical services

Background:

- This Ad Hoc committee was proposed by the East Region Technical Soil Services Network made up of State Soil Scientists and New England NRCS soil scientists involved in technical soil services delivery. We met for the first time at the Northeast Region NCSS Conference in NY in 2002.
- If you are interested in being added to this email list, contact lisa.krall@ct.usda.gov

The Charge

- Establish effective communication among technical soil service providers and others to maintain consistency, reduce duplication, and improve technical soil services in the east region.

The Members

- Lisa Krall, co-chair, CT
- Thom Villars, co-chair, VT
- Jim Turenne, RI
- William Taylor, MA
- John Davis, MAIRT
- Shawn McVey, CT
- Ed Stein, NY
- Chris Smith, NJ
- If you are interested in being on this committee, contact lisa.krall@ct.usda.gov

Information about the National Technical Soil Services Advisory Group

This group was formed to address technical soil services at the national level. It has had face to face meetings and several teleconferences.

- Russ Kelsea: Advisor
- Kip Kolesinskas: Chair
- Members:
 - Clayton Lee, MO
 - Edward Ealy, GA
 - Lisa Krall, CT
 - Gerald Stratton, NM
 - Larry Natzke, WI
 - Trahan, Larry LA
 - Michael Petersen, CO
 - Neil Peterson; WA
 - Steve Depew, MS
 - Rich Gehring, OH

The advisory group will be rotating some slots and adding some non-NRCS members. If you have recommendations, please let Russ know.

The committee developed a prioritized list of issues to consider.

- 1-Establish a basic skill set for RSS, and define the accompanying training need *Sample PD and development plan complete*
- 2-We need a place to share presentations, outreach materials, etc. Create a user-friendly website for users of soil survey materials.
- 3-Ensure there is a link between technical soil services and the soil survey program *Article published in Soil Survey Horizons*
- 4-We need more people doing TSS, we are below a critical mass
- 5-Promote TSS as to what we do with the CTA program
- 6-Promote the use/need for soils information and expertise to carry out the Farm Bill
- 7-Develop soils training outlines which include the role of TSS, that can be used with new employees, leaders, etc.
- 8-Develop guidelines/certification standards(educational and/or experience) for TSPs completing work related to TSS

First meeting of the Ad Hoc East Region committee at the Northeast Regional Conference, National Cooperative Soil Survey, 2002

Six focus areas surfaced during our discussions in 2002.

1. Communications
2. Address problem interpretations
3. Coordinate the establishment of a minimum skill set and level
4. Identify research and data collection needed for technical service delivery
5. Market Technical Soil Services and National Cooperative Soil Survey
6. Guidelines Needed

Second meeting of the Ad Hoc East Region committee at the Northeast Regional Conference, National Cooperative Soil Survey, 2004

Thanks to all those who joined our discussions in 2004

- Alex Topalanchik –WV
- Maxine Levin – HQ
- John Nicholson – VA
- David Kriz - VA
- Shawn McVey – CT
- Rich Gehring – OH
- Kip Kolesinslas – CT
- Lillian Woods – WV
- Dean Cowherd – MD
- Carlos Cole – WV
- Rick Jones - WV

Update on focus issues

1) Communications, 2002

- Better communications between soil resource specialists and state, regional, and field offices, university, private sector, NCSSC, SSD, as well as *among* resource soil scientists is needed.

- Communications is a challenge throughout the agency because there is so much work to do and information being circulated, people are overloaded. Meetings like this help us to share information.

- We have an East region Email list and there is a soil quality forum

- The national committee's next piece is a resource depot for resource soil scientists, web based would like input for that.

- Sharing of products among resource soil scientists such as generic presentations, fact sheets, photos, templates, etc. that could be localized for use by others.

Communications, 2004 Recommendations

- Develop a comprehensive communication plan

- Hold regularly scheduled (every other year, rotate with NCSS regional meetings?) regional meetings for Resource Soil Scientists to include:

- Training

- A national portion presented to all regions

- Approach the new regional soil scientists about assisting with this

- **Action: Submit issue paper supporting regional meetings. Identify most important issues.**

- Web site and email list

- Create a website dedicated to technical soil services providers (NRCS and others) for sharing tools, templates, photos, etc.

- Have a Technical Soil Service provider forum similar to the data quality specialist list. (also for NRCS and others?)

- Action: Work with the National Technical Soil Services Advisory Group on establishing a web site and forum.**

2) Address problem interpretations, 2002

Identify

- problems with national interpretations

- state data issues

- new interpretations needed

Prioritize

Seek resolution

Examples:

- Soil potentials for on-site septic disposal have been developed in many states, including CT and ME.

- In MO12 we were having a problem with soils rating unsuitable for recreational interpretations such as Camp Areas, Picnic Areas, Playgrounds, and Paths and Trails, . This was because the unified texture of our thin O horizons found in forest soils triggered the soil rating of unsuitable. The MO figured this out and rewrote the interpretation to ignore the unified texture. This solution was possible because the original interpretation contained redundant rating criteria.

Address problem interpretations, 2004 Recommendations

- Role of the MOs
 - Communicate with states
 - Coordinate fixes
 - Reduce duplication
 - Promote consistency
- At a regional resource soil scientist meeting, share some examples and show positive results.

3) Coordinate the establishment of a minimum skill set and level, 2002

- **Address training needs**
 - Technical and “people” skills
- **Recommend basic qualifications for the soil resource specialist position.**

Coordinate the establishment of a minimum skill set and level, 2004 Recommendations

- National advisory group work
 - Draft position description
 - Draft employee development plan

The national advisory group developed a draft position description and employee development plan (proficiency model). Both are included (RSSproposedPD.doc, IDPSept2003.xls). Feel free to use any part of them that you need. Address comments or questions to anyone in the group.

The employee development plan is being reviewed by several people at the center. We would like any comments or suggestions from you as well. It goes from GS 5 – 12. It establishes a career path and skill set for soils scientists wanting to perform technical soil services.

Position description: Russ is working with Terry Evans, an HR specialist in Fort Worth, to classify a resource soil scientist from GS 5 – 12 and match it up with the proficiency

model. It is in draft form at this time and not classified. If you are working on these descriptions in your state, Russ will be happy to provide assistance. He also used this to provide feedback about TSS performance measures that could be reported as progress.

4) Identify research and data collection needed for technical service delivery, 2002

- Communicate with research needs committee.
 - Ex. Many requests come in for background levels of metals in our soils. Testing is needed. The research needs committee has this on their project list. Soil technical services group should ad input, possible assistance if appropriate (sample collection, perhaps). Additionally, the USDA-NRCS Soil Geochemistry Data website http://nm6.ftw.nrcs.usda.gov/website/trace_elements/viewer.htm has this information on select soils and uses interactive ArcIMS technology for the viewer. Communication about this resource and how to contribute to the data may be needed.
- Joyce keeps in touch with a number of us, ongoing

Identify research and data collection needed for technical service delivery, 2004 Recommendations

- At a regional resource soil scientist meeting, include
 - Training / info on sampling techniques / ongoing sampling plan needs
 - State and transition models
 - Benchmark soils

5) Guidelines Needed, 2002

- For resources soil scientists performing
 - On-site evaluations
 - High intensity soil surveys
 - Single use soil surveys
 - Corrections to official soil survey
 - Documentation / archiving of additions to the soil survey
- Many exist in handbooks and manuals. Explore available guidelines in NCSS handbooks and manuals first to see what we already have.
- Explore what individual states already have.

Guidelines Needed, 2004 Recommendations

- Think twice – when in doubt, ask the State Soil Scientist

- Concern: Different sources of soil data exist (FOTG, written reports, field office materials)
- Recommended action:
 - Identify official copy
 - Make sure everyone has the proper version
 - Remind often

6) Market Technical Soil Services and National Cooperative Soil Survey, 2002

- Identify Technical Soil Services required by the new Farm Bill.
- Bring technical soil services to the level of the agency's other services
- Take credit for success stories

Examples: Describe CTA – non farm bill technical assistance. Russ Kelsea and Kip Kolesinskas both provided input to the National CTA committee on technical soil services charged to conservation technical assistance programs

Members of the national advisory group published an article in Soil Survey Horizons on the importance of keeping soil survey activities and technical soil services linked.

Market Technical Soil Services and National Cooperative Soil Survey, 2004 Recommendations

- Internal
 - Articles in
 - MO newsletters
 - NRCS this week and State success stories for better visibility by non-soil scientists
 - Recommend a standing committee on technical soils services in each region
- Public
 - Trade publications: articles on using technical soil services
 - Trade shows: market to users of soil surveys
 - Video series on, "How To Use A Soil Survey", or various interpretations.
- Action:
 - Set goals on number of articles
 - Explore a possible portfolio – look for articles in certain subject areas
 - Explore getting help from MO newsletter editors and state information specialist in writing good articles
 - Encourage resource soil scientists to share their successes

- Plan ahead for the 2006 all-digital soil survey. Make sure RSS have the training and equipment to assist in requests (meeting).

New focus area for 2004, Enhance Partnerships

- Working with TSP and others outside NRCS
 - Use of products
 - Include in forum, regional meeting, committees
 - Problem solve together
 - Offer CEU's
 - Communicate via local meetings
 - Use the United States Consortium of Soil Science Associations to share information

Technical Soil Services Ad Hoc Committee Action plan for 2004 - 2006

Completed:

#3) Coordinate the establishment of a minimum skill set and level, 2002

A draft position description and employee development plan has been written.

2004-6 actions

- 1) Communication (also addresses interpretations and research needs) Submit issue paper supporting regional meetings. Identify most important issues.
- 2) Communication
Work with the National Technical Soil Services Advisory Group on establishing a web site and forum.
- 3) Marketing
Set goals on number of articles
Explore a possible portfolio – look for articles in certain subject areas
Explore getting help from MO newsletter editors and state information specialist in writing good articles
Encourage resource soil scientists to share their successes
Plan ahead for the 2006 all-digital soil survey. Make sure RSS have the training and equipment to assist in requests (meeting).

Position Description Template – Resource Soil Scientist

**Soil Scientist
GS-470-XX**

INTRODUCTION

The position is located at the *office name* in *city name, state*. The incumbent serves as resource soil scientist responsible for maintenance, interpretation, and distribution of soil survey information; conducting information and education activities related to soils and soil survey; providing support to users of soil survey information; and assisting with conservation planning, environmental assessment, and natural resource management activities throughout the *geopolitical area name*.

MAJOR DUTIES

[examples related to Conservation Programs]

Assists with the implementation of the Farmland Protection Policy Act. (xx%)
Develops or reviews land evaluation groupings using the Computer Assisted Land Evaluation System and completes the NRCS portion of Farmland Conversion Impact Ratings (forms AD-1006 and CPA-106). Works with local governments in the development of site assessment scoring categories.

Assists in the implementation of the Farm and Ranchland Protection Program. (xx%)
Establishes and maintains contacts with State, tribal, or local governments and non-governmental organizations interested in partnerships related to agricultural conservation easements from landowners. Serves on the Farm and Ranchland Protection Program committee to develop or revise an offer ranking system.

Provides technical expertise in the application of Farm Bill programs. (xx%)
Develops or reviews ranking systems, eligibility criteria, program specific data, and practice applications for CRP, GRP, EQIP, EWP, WRP and other programs. Expertise varies with each program, but includes farmland classification (prime, unique, etc.), wetland identification, and Highly Erodible Land (HEL) determinations. Assists Field Office staff with interpretation of soil data and determinations during the program signup and application periods.

Provides technical expertise in program appeals. (xx%)
Serves as a technical soil specialist for highly erodible land, wetland conservation, and conservation compliance. Provides soil expertise (e.g., assignment of soil erodibility factors and identification of hydric soils) at appeals that are elevated to the County Farm Service Agency Committee, State Conservationist (Technical Reviews), and the National Appeals Division.

Delineates wetlands. (xx%)
Delineates wetlands following procedures outlined in the Wetland Memorandum of Agreement (MOA) or as outlined by the state's MOA workgroup. Recommends changes to hydric soil lists to the State Soil Scientist (SSS). Serves as soils instructor for training such as the COE Regulatory IV course, and National Food Security Act.

[examples related to Information, Education, and Field Office Support]

Maintains Section II of the Field Office Technical Guide. (xx%)

Reviews, edits, maintains, and creates material for the Field Office Technical Guide. Coordinates changes with the State Soil Scientist and State Technical Guide Committee. Collaborates with other discipline specialists to assure accuracy and consistency of soil survey data in Section II with other parts of the Field Office Technical Guide, including natural resource data, quality criteria, and practice standards.

Assists technical specialists with soil interpretations. (xx%)

Serves on multidisciplinary teams to assist technical specialists from other disciplines with appropriate application of soil survey information, including soil properties and interpretations.

Conducts information activities. (xx%)

Provides soils expertise for the accurate delivery of soil information in the form of correspondence, articles, and effective presentations to internal and external users groups. Provides support for technical publications.

Provides training in soils and soil survey. (xx%)

Develops and provides training in soil science and the use of soil survey information to NRCS personnel and non-NRCS users. Training includes principles of soil science and use of soil survey information in hardcopy and digital data formats.

Supports educational activities. (xx%)

Develops and provides training in soil science to teachers and students in support of envirothon, land judging and conservation field days. Makes soil displays and monoliths, creates formal presentations, and maintains a photo library.

Assists field offices with the distribution of soil information. (xx%)

Develops fact sheets, job sheets, technical notes, and other publications to address locally important soil issues. Assists field office with distribution of soil survey information, and integration of soil issues in overall program activities.

Conducts on-site soil investigations. (xx%)

Provides on-site technical assistance to agency personnel and the public on the interpretation and application of soil survey information related to specific soil, water, air, plant, and animal resource concerns. Assists with or conducts special projects such as high intensity soil surveys, natural resource inventories, Soil Quality initiatives, and multi-discipline or multi-agency natural resource studies.

Develops, trains and assists with GIS products. (xx%)

Assists with development and maintenance of NRCS technical tools and resources. Provides training and assistance in development and analysis of GIS products and modeling programs. Trains personnel in the use of technical resource evaluation tools.

Conducts geophysical investigations. (xx%)

Uses geophysical and other technological tools such as Ground Penetrating Radar, Electrical Conductivity and Electromagnetic Induction meters, Calcimeters, permeameters, and infiltrometers and interprets the results.

Evaluates soil characteristics. (xx%)

Evaluates existing soil properties and characteristics for their applicability and use in conservation practices and land management.

Evaluates new technologies. (xx%)

Tests and evaluates new technologies such as the soil quality test kit and soil conditioning index, and makes recommendations regarding applicability in the field.

[examples related to Soil Interpretations]

Maintains and supports soil interpretations. (xx%)

Reviews existing interpretations for inaccuracies due to data errors or deficiencies in the interpretive criteria. Assists agency technical specialists and the public with the understanding and application of existing soil interpretations and identifies soil properties and interpretations needed to improve the delivery and utility of soil survey information. Works with database managers and others to resolve data completeness and data quality issues.

Data maintenance and delivery. (xx%)

Assists with maintenance of soil survey data in NASIS, including quality control and data entry. Monitors and updates soil survey data as necessary to meet current needs and initiates export of soil survey data to the soil data warehouse. Downloads or exports soil survey data for users, including customized exports for specific uses. Develops and maintains non-technical soil descriptions. Maintains information in Customer Service Toolkit, Soil Data Viewer, and MS Access databases. Assists users with these databases and with soil report writing tools.

Develops interpretations. (xx%)

Identifies and documents interpretive needs. Develops interpretive criteria in collaboration with technical specialists in related disciplines. Implements interpretive criteria in NASIS. Assists in the development of soil interpretive groups as needed for tools such as ecological site descriptions and forage suitability groups.

[example related to Soil Survey Products]

Develops general soil maps. (xx%)

Develops general soils maps by aggregating SSURGO soil map units according to broad land use planning needs. Resolves issues related to joining soil maps with adjacent areas.

[examples related to Soil Survey Project Activities]

Collects soil samples for laboratory characterization. (xx%)

Directs, coordinates and conducts soil sampling for laboratory characterization. Locates suitable sites, contacts landowners and coordinates with the National Soil Survey Laboratory. Identifies and selects sites for sampling benchmark soils.

Participates in soil survey field reviews. (xx%)

Represents the *state/area/MLRA office name* at soil survey progress field reviews, correlation conferences, and other technical assistance visits.

Conducts field investigations in support of soil survey. (xx%)

Participates in soil survey data collection projects such as water table monitoring, temperature studies, and GPR surveys for use in the update or maintenance of soil surveys. Conducts studies on use-dependent, near-surface soil properties to improve interpretations and evaluate soil quality.

Performs soil mapping and other soil survey field activities. (xx%)

Completes temporary details to ongoing progressive soil surveys to perform field mapping, collect field documentation including soil profile descriptions and map unit transects, and participate in other phases of soil survey field operations.

Reviews policies and technical guidance documents. (xx%)

Provides comment and review of national soil survey standards and procedures. Emphasizes the state and regional perspective in the review and commentary.

Assists with map compilation, digitizing, and map finishing. (xx%)

Assists State Soil Scientist with map compilation. Provides support and resources for digital soil survey projects and products.

Reviews and edits soil survey manuscripts. (xx%)

Conducts additional review of soil survey manuscripts. Assists with technical review and edit. Checks for completeness and consistency of manuscript text and tables.

Participates in functional reviews and program appraisals. (xx%)

Serves as a team member for field office quality assurance reviews and appraisals. Reviews field office use of soils information (source data) in the application of conservation practices and programs. Recommends necessary changes to policies, guidelines, organizational structure, or field office procedures.

[examples related to Education and Outreach]

Markets soil survey products. (xx%)

Develops and implements a marketing plan for soil survey products. Establishes and maintains contacts with soil survey user groups.

Provides training in soils and soil survey. (xx%)

Develops and provides training in soil science and the use of soil survey information to NRCS and non-NRCS audiences. Training includes principles of soil science and the

appropriate use of soil survey information in hardcopy and digital soil data formats. Training is provided to a wide range of users including public officials for land management purposes, and university or industrial researchers for research design and data analysis purposes.

Participates in public policy forums. (xx%)

Serves on committees and special task groups at the state, regional or national level to help formulate and recommend policy changes, improve soil interpretations and management, or refine soil data.

Provides training in new technologies. (xx%)

Utilizes GIS and GPS technology and trains others in its appropriate use in the field. GIS training includes the use of SSURGO digital soil surveys and Soil Data Viewer.

[other example activities]

Serves as soil survey liaison. (xx%)

Serves as a liaison with federal, state and local agencies to help coordinate and integrate agency programs and activities related to use and application of soil survey information. Attends and participates in state, regional, and national conferences and professional society meetings.

Coordinates the soil survey technical services program. (xx%)

Assists in the preparation of plan of operations, business plans, budget plans, long range plans, and training plans related to soil survey technical services.

Performs other duties as assigned.

EVALUATION FACTORS

[Evaluation factors are specific to each position and must be written in a manner that describes the exact requirements of the position. Position classification specialists determine the grade level of a position based on these evaluation factors. Contact your Human Resource Specialist for guidance in writing evaluation factors.]

1. Knowledge Required by the Position

Knowledge of all phases of the soil survey program as gained through training and actual experience in the conduct of soil survey mapping, interpretation, and information delivery in order to provide products and services that meet requestors' needs.

Knowledge of pedology, geology, hydrology, engineering, climatology, biology, soil physics, soil chemistry, conservation planning, and environmental land use planning in order to participate in interdisciplinary teams and appropriately manipulate soil survey data.

Knowledge and understanding of database systems and geographic information systems in order to maintain soil data, manipulate datasets, create reports, and produce custom data formats.

Knowledge of instructional techniques in order to develop effective training materials and conduct training.

Ability to communicate with others (verbally, TTY, sign language or lip reading) in order to express ideas, convey facts, make effective presentations, and facilitate an open exchange of ideas.

Skill in written communication in order to clearly, concisely, and completely describe ideas, facts, and procedures in training materials, popular articles, technical notes, and scientific papers.

Knowledge and understanding of federal agricultural programs and local land use laws and regulations and associated legal and political processes in order to effectively apply soil survey information.

2. Supervisory Controls

The position is supervised by the *position title*, who provides guidance in defining priorities and commits resources to projects based on local business plans and agency strategic plans. Guidance defines objectives. The incumbent defines specific activities to meet objectives, creates work plans, develops methods, and apportions time spent on various phases of work.

Incumbent works in a team setting and exercises initiative in collaborating with colleagues to identify objectives, set goals, and define solutions in a team concept. Many teams function autonomously. The team concept is dynamic and expected to change. The incumbent is expected to perform various roles in the team as the situation demands.

The incumbent is a technical authority, and work products are normally accepted without significant change. When work is reviewed, it is for relevance of the technical objectives and for contributions to the Soil Survey Division and Agency mission.

3. Guidelines

Primary guidelines are set forth in NRCS policy and NCSS technical standards. Most guidelines exist in the form of policy statements or general instructions. Some guidelines exist as specific instructions. The incumbent is responsible for developing specific guidelines where necessary to accomplish objectives. The position requires judgement on the part of the incumbent. Originality and creativity are needed to develop products and services.

4. Complexity

The position involves coordination of products, services, and activities. Demands for products and services are constantly changing. New and innovative data manipulations,

interpretations, and presentation modes are sometimes needed to satisfy needs. The incumbent must deal with a wide array of topics from agronomy to environmental engineering, and from traditional hardcopy manuscripts to Web-based products.

5. Scope and Effect

The position affects agricultural producers, the general public, NRCS, and cooperating agencies in the assigned area. The work impacts a wide range of soil survey program activities, and agricultural programs.

6. Personal Contacts

Contacts are with private citizens, NRCS employees, and employees in other USDA and USDI agencies at the local level.

7. Purpose of Contacts

Contacts are for the purpose of delivery of soil survey data and information, and for the purpose of providing training in the use of soil survey data and interpretive information. In some cases, contacts are necessary to resolve controversial issues.

8. Physical Demands

The work occurs in both outside and office environments. Outside activities involve strenuous walking over steep terrain and lifting and carrying of moderately heavy soil samples, tools, and specialized scientific equipment. The incumbent must be able to operate a four-wheel drive vehicle and other motorized equipment.

9. Work Environment

The work includes occasional contact with poisonous plants and snakes when working outdoors, and everyday risks and discomforts typical of offices and meeting rooms.

Northeast Hydric Soils Committee

No chair was assigned to committee so participants appointed Lenore Vasilas chair.

Charge

To encourage dialogue between the Mid-Atlantic and New England on similar hydric soils issues.

Problem

Charge could not be addressed because there was no representation from New England at the committee meeting.

Discussions

The mid-Atlantic Hydric Soils Committee has published an updated version of Field Indicators of Hydric Soils in the Mid-Atlantic United States. They have also published A Guide to Hydric Soils in the Mid-Atlantic (CD publication) in cooperation with the MO office in Morgantown, WV. All NECSS meeting participants received a copy of the CD publication.

Research Needs

Problem soil monitoring and indicator development
Growing season/ biological zero study

Recommendation

Unless there is participation by members from New England the committee cannot fulfill its charge and therefore be discontinued.

Alternate Recommendation

Change charges and/or merge with the subaqueous soil mapping committee

Subaqueous Soils Committee Report

Members present:

Martin Rabenhorst – University of Maryland
Mark Stolt – University of Rhode Island
David Kingsbury – NRCS, Morgantown, WV
Steven Indrick – NRCS, Syracuse, NY
Kip Kolesinskas – NRCS, Tolland, CT
Maxine Levin – NRCS, Washington, DC
Bruce Dubee – NRCS, Richmond, VA
Dean Cowherd - NRCS, Annapolis, MD

Committee Charges from 2002:

1. Develop and describe a general strategy or protocol for conducting a subaqueous soil survey.
2. Develop a list of available resources.
3. Compile a list of preferred terms and definitions to be used in describing subaqueous soil landscapes and special subaqueous soil features.
4. Consider possible proposed changes to *Soil Taxonomy* regarding inclusion and accommodation of subaqueous soils.
5. Compile a list of possible soil interpretations to be developed for subaqueous soils.

Activities related to charges:

1. Subaqueous Workshop

- A workshop on Subaqueous Soils was held July 14-128, 2003 in Georgetown and Rehoboth Beach, DE.
- Organizers were Marty Rabenhorst, Univ. MD, Mark Stolt, Univ. RI, Phil King, NRCS-DE, Laurie Osher, Univ. Maine
- There were 20 participants from a wide variety of agencies, universities, etc. Morning sessions were in the field and lectures were held in the afternoon. The session was a great success!!

2. Symposium

- It was proposed that we host an informational meeting (1 day symposium) to facilitate communication and collaboration with other federal, state and local agencies, to help give us an opportunity to explain the strengths and benefits of using a pedological approach to mapping subaqueous substrates
- This has not yet scheduled for a regional and or national event. Maxine Levin will pursue this issue. The symposium is to be held in 2005. Plans are to make the session similar to what has already been done in RI with a group of cooperators and partners in the MAPCOAST group.

3. Document Development

- A draft document is planned to be written over the coming year which will outline strategies and protocol for conducting subaqueous soil survey. Locations of available resources will also be included.

4. Compilation of terms and definitions related to subaqueous soils

- Mark Stolt wrote and revised a glossary of soil geomorphological terms pertinent to subaqueous systems and landscapes. This is available at www.nesoil.com/sas/glossary.htm
- Efforts have been made to ensure that terms are as consistent as possible with terms in the *Glossary of landforms and geologic materials* (Part 629, National Soil Survey Handbook).

5. Soil Taxonomy

- An initial proposal to adopt the use of subaquic subgroups of various great groups of Aquents has been temporarily tabled as alternate approaches are considered.
- Mark Stolt will be developing an alternate proposal during his upcoming sabbatical later this year.

6. Subaqueous Soil Interpretations

- Phil King prepared an initial list of potential interpretational needs.
- Additional possible interpretations were compiled during a meeting with potential users in RI.

2004 Subaqueous Soils Committee Recommendations:

1. That this committee be combined as a subcommittee of the Hydric Soils Standing committee of the NECSSC, and that the committee continue work to complete the outlined charges.
2. That a one day symposium be held in 2005 for the purposes of improving communication and collaboration with other interested agencies and parties.
3. That a Subaqueous Soils Working group be formally established to address ongoing issues.
4. That a host be sought (somewhere within NCSS) for a subaqueous soils website, that would include:
 - Introductory and background materials on Subaqueous Soils
 - Bibliography on Subaqueous Soils
 - Summary of current Subaqueous Soils research projects around the country (with links)

Standards and Procedures Committee
“A Study in the Making”

Northeast Cooperative Soil Survey Conference
Canaan Valley, WV
June 2004

Preface

The Standards and Procedures committee signifies itself in the following way. Standards are considered any quantitative or qualitative model for measurement or comparison. Procedures are deemed any method, process, system, or practice. In simple terms, standards will answer the question “how much” or “how good” and procedures will explain “by what means” or “in what order”.

Co-Chairs

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Members

Debbie Anderson, SDQS, MO-14, Raleigh, NC
Steve Baker, Soil Scientist, NRCS, Philippi, WV
Jared Beard, Resource Soil Scientist, NRCS, Moorefield, WV
Skip Bell, SDQS, NRCS, Morgantown, WV
Debbie Chase, Resource Inventory Specialist, NRCS, Morgantown, WV
Wayne Hoar, State Soil Scientist, NRCS, ME
Melissa Marinaro, GIS Specialist, NRCS, Morgantown, WV
Debra Murphy, Cartographic Technician, NRCS, Summersville, WV
Tim Prescott, GIS Specialist, NRCS, Morgantown, WV
Pam Thomas, Soil Scientist, NRCS, Richmond, VA
Mark Van Lear, SDQS, NRCS, Morgantown, WV
Sharon Waltman, Soil Scientist, NRCS, Lincoln, NE
Many more are needed

Additional Participants

Steve Carpenter, MO-13 Team Leader/SSS, NRCS, Morgantown, WV
Teresa Huffman, Cartographic Technician, NRCS, Summersville, WV,
Don Flegel, SDQS, NRCS, Buckeye, WV

Jennifer Sweet, Soil Scientist, NRCS, Fort Worth, TX
Bruce Dube, Soil Scientist, NRCS, Richmond, VA
Charles Delp, Asst. SSS, NRCS, Summersville, WV
Marc Crouch, SDQS, NRCS, Raleigh, NC (Richmond, VA)
Dr. Willem Van Eck, Private Consultant, Cary, NC
Maxine Levin, Liason, NRCS, Washington, DC
Jim Ware, Soil Scientist, NRCS, Washington, DC
Steve Fisher, SDQS, NRCS, Amherst, MA
Henry Ferguson, SDQS/Database, Indianapolis, IN

Background

Proposed at the 2002 NE conference.
Very little information to go on
No one from that meeting participated
Considered combining with Taxonomy
In the absence of direction...

Goal

Evaluate, modify, and (if necessary) develop guidelines, processes, and ways of “doing business” in the NE for the betterment of the soil survey program both regionally and nationally. Evaluations and recommendations will be passed on to the National Committee in May 2005.

Rationale #1

Since reorganization – somewhere between 18 and 70 different ways of doing things - without a strong central influence
Contrast this to pre 1995 – at least 52 programs and a more influential and stronger NSSC
Are we better off now? Worse?

Rationale #2

New technologies, new processes
New ways of carrying out business
New roles, new responsibilities
Various standards, processes, and guides are simply out of date
We are rapidly changing!

Guiding Principle

“The focus is on solutions”

Roadblocks

We are presently unorganized and unfocused
This is a huge chunk of real estate to bite off
Many different avenues and levels where work is needed

We have different perspectives and priorities
Standards versus processes (procedures)

Monday Meeting (6/21/04)

Slow start

Highly varied ideas ranging from broad and idealistic to narrow and specific

Phase out the acronym "SSURGO" since this refers to a product rather than a process. At the present, there is much more to think about.

"Toolbox" for digital soils information.

Need a location/process to request tool development.

Uniformity in state publications.

Update versus maintenance projects

Review definitions in NSSH and other technical references

Respond to recent flooding/ponding proposal

Tuesday Meeting (6/22/04)

Much more productive

Brainstorming turned up several "areas" where work is needed

Evaluate existing standards

States and MOs – "Can't we all just get along?"

New projects - update versus maintenance status

Digital soil surveys

NASIS

SDQS versus MLRA PL

Many, many others

Evaluate Existing Standards

Establish relevancy

Achieve consistency

Are they adequate?

Room for improvement?

Quantify!

Do we understand why they are in place?

Are we going to follow them?

States and MOs

Perspective makes all the difference

Lets put our heads together and compare notes

Tell us what we are doing wrong

Accept our criticism (constructive)

Evaluate current responsibilities and make adjustments

Communicate!

New Projects - Update Versus Maintenance Status

Who decides (states)?

Should the MOs be involved?
Individual survey evaluations versus entire state?
What is the criteria used to make this decision?
Are evaluation items applied consistently?
Could separate individuals/teams arrive at the same conclusions?
NSSH guidelines are geared toward the once over.
Loophole in the NSSH regarding quality control/quality assurance.

Digital Soil Survey

New technology, new challenges
General soil map development
Update part 647 of the NSSH
Creating and modifying digital soil layers using GIS
Whose data/layers?
Quality control and assurance – how do we evaluate correlation decisions?
NSSH guidelines, certifications, checklist developed for the once over
How are the DU and DMF centers responding to these changes?

NASIS

Urban soil interpretations
All manuscripts NASIS generated
OSD object in NASIS
OSD pedons, DMUs, linking, sharing, joining, representative pedons
Population standards
Metric –English difficulties
Re-think database structure
Additional data elements

SDQS Versus MLRA PL

Update era
new ideas, breaking traditional methods and processes
Roles and duties may be changing, may be forced to change

MLRA PL

field expertise, quality control of maps and mapping
Responsible for more field checking and verification

SDQS

concentrate more on processing decisions?
Need for faster correlation
updates are supposed to be faster

Electronic field reviews

speed up correlations using quarterly process
Shrinking budgets may necessitate less travel

Teleconferences and net meetings may become the norm
Requires coordination of responsibilities

Other areas where work is needed

NSSC to develop and maintain a technology and information clearinghouse where literature, tools, programs, and methods are housed and made available to others.
Tools and methods developed by universities, field staff, MOs, states, cooperators
Lessen duplication of effort

Committee Membership Recruitment:

At least one representative from each state
At least one from each MO
Cooperators (Universities, other agencies)
Private consultants
Others?

Join our committee!

Thank you

Technical Presentations

Forest Plan Revision Update for the Monongahela National Forest

By: David Ede, USDA-USFS, Elkins, WV

One Soil Scientist's View: From the Fernow and Beyond

By: Dr. Mary Beth Adams, USDA-USFS, Parsons, WV

Update on Forest Soil Characterization in Appalachia

By: Anthony Jenkins, USDA-NRCS, Oak Hill, WV

Sugar Maple Decline in NE Forests

By: Dr. Steve Horsley, USDA-USFS, Warren, PA

Monitoring Water Table Depth using Locally Available Materials

By Dr. Mark Stolt, University of Rhode Island, Kingston, RI

Using Iris Tubes to Measure Iron Reduction in Red Parent Material Hydric Soils

By: Dr. Marty Rabenhorst, University of Maryland, College Park, MD

Update from the NRCS National Cartographic and Geospatial Center

By: Nathan McCaleb, NRCS Soil Survey Support Branch, Ft. Worth, TX

Hydropedology and Modern Soil Survey

By: Dr. Henry Lin, Penn State University, University Park, PA

Surface Mine Reclamation in West Virginia

By: Dr. Jeff Skousen, West Virginia University, Morgantown, WV

Hillslope Hydrology Study

By: Dr. Pam Edwards, USDA-USFS, Parsons, WV

The Changing World of Providing Soil Information

By: Sharon Waltman, NRCS National Soil Survey Center, Lincoln, NE

Soil Phosphorus Retention in some Appalachian Soils

By: Dr. D. K. Bhumbla, West Virginia University, Morgantown, WV

Activities at Canaan Valley Institute

By: David Kinder, Canaan Valley Institute, Davis, WV

The I-95 Corridor, "A Region Apart"

By: Steve Carlisle, USDA-NRCS, Seneca, NY