

Committee Report Summary – Northeast Regional NCSS Conference, 2008
(compiled by Margie Faber from final Committee Report presentations)
(recommendations in blue color)

Bylaws Committee

Charge 1:

Article IX Section 2.0 membership of the Research Needs Committee.

Currently the permanent chair is the National Leader for Investigations or as assigned by the NRCS Director of the Soil Survey Division. Due to the issue of availability with overlap of other regional meetings and undo influence, should this be changed?

Recommendation: National Leader for Investigations serves as an advisor to the committee.

Section 3.0 The Committee Chair is nominated to the Steering Committee by the Research Needs Committee as in Section 4.0. Term of responsibility starts at the end of one conference and finishes with end of next.

Section 4.0 The Chair-Elect is nominated to the Steering Committee by the Research Needs Committee. Term of responsibility starts at the end of one conference and finishes with end of next. The Chair– Elect for the committee should rotate to the Chair at the conclusion of each conference.

Charge 2: Clarify who recommends membership or participation on committees and who contacts them.

Article IV - Organization & Management

Responsibilities of the Steering Committee Chair Article 4 –

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 air and vice-chair of each committee chair of each committee will be contacted personally by the conference chair or vice 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.

Other items for consideration

Permanent and/or Research Needs Committee Membership
Other (private consultants, other academic institutions)

General Revisions General Revisions

Article III - Participants, 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 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 IX, Section 3 ([proposed as Section 5](#)): [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 soil scientist will be from different states and different MOs.](#)

Hydric Soil Committee

2010 Co-Chairs

Committee Voted Jim Turenne (Northeast) and Jared Beard (Mid-Atlantic) to chair the 2010 committee.

1. Review progress on dark parent materials indicator. In 2006, the Committee identified this as an issue for New England.

[Re-write using the National Guidelines](#) (copy of proposed dark indicator below)

[Discussed during tour NEHSTC dark soil subcommittee will review pedons to see if chroma is needed for surface, and if redox features should be changed to distinct or prominent.](#)

Proposed Dark Indicator

• **A₁. Dark Mineral Soils.** For use in LRR R. A mineral surface layer with matrix value 3 or less that is directly underlain by a different layer also underlain with a matrix value 3 or less. Within 30 cm (12 inches) of the top of the mineral soil material or directly underlying the mineral surface layer, whichever is shallower, there are 2 percent or more redox depletions and/or concentrations that extend to either a depth of 50 cm (20 inches) below the top of the mineral soil material or to a depleted or gleyed matrix. The matrix chroma is 2 or less to a depth of 50 cm (20 inches) below the top of the mineral soil material.

• **User Note:** With or without an O horizon.

Version 3 NE Guide

2. Review progress on red parent materials indicator. In 2006, the Committee identified this as a shared issue for New England and the mid-Atlantic.

[Proposed the test indicator for region.](#)

[Support data being written and will be sent to NTCHS.](#)

3. Review progress on folists and other histosols indicators. In 2006, the Committee identified this as an issue for New England.

[Pete Fletcher recommended looking at drying out the organics – folists not firm, histic becomes firm and lighter color.](#)

4. Review progress on anthropogenic soils indicators. In 2006, the Committee identified the need for a better understanding of what to look for to identify anthropogenic hydric soils. Studied during NEHSTC tour, monitoring sites are ongoing, still considered difficult soils to analyze.

Recommend using the new HTM designations, detailed descriptions of redox feature (Tech Bulletin 301, boundary distinctness, etc.).

5. Review and comment on spodosols indicators. In 2006, the Committee identified an issue with the current indicators identifying non-hydric spodosols as well as hydric spodosols.

Mesic spodic indicator was written for 144A, 145, and 149B (copy below).

Indicator developed by extensive review of 35 pedons most with data to back up wetland classification, upland pedons also checked. Support data will be sent to NTCHS.

NEHSTC will review comments from NY NRCS and reply or change – support data will be requested.

Mesic Spodic Indicator Proposed by NEHSTC

A__ . Mesic Spodic. For use in MLRA 144A and 145 of LRR R, and MLRA 149B or LRR S. A layer 5 cm (2 inches) or more thick starting within 15 cm (6 inches) of the mineral soil surface that has value 3 or less and chroma 2 that is underlain by either: **a**) an illuvial layer(s) 8 cm (3 inches) or more thick occurring within 30 cm (12 inches) of the surface that has value and chroma 3 or less; or **b**) an eluvial layer(s) 8 cm (3 inches) or more thick occurring within 30 cm (12 inches) of the mineral soil surface that has value 4 or more and chroma 2 or less that is directly underlain by an illuvial layer(s) 8 cm (3 inches) or more thick with value and chroma 3 or less.

• **User Notes:** This indicator is used to identify wet soils with spodic morphology in MLRA 144A, 145, and 149B of Region R and S only. The eluvial layer with evidence of translocated organic matter is typically described as an E or Eg horizon (these typically have a color pattern referred to as stripped matrices). The illuvial layer is typically described as Bh, Bhs, or Bhsm horizons that typically have several color patterns or cementation indicative of translocated iron, manganese, aluminum, and/or organic matter.

**6. Review for resolution hydric soil indicator S6.
S-6 dropped from region R**

7. Review for resolution regional indicators for use in the national indicators.

NEHSTC will review comments from NY NRCS and reply/make changes to our proposed indicators.

Will review comments from NTCHS and send comments back.

Study sites will continued to be monitored a tour for fall 2008 is planned, invite will be sent to Mid-Atlantic and NTCHS.

Support data for each will be sent.

New Technology Committee

Recommended GIS/RS skills for soil scientists

Marc Crouch, Soil Survey Division Training Coordinator, and a team of soil scientists developed GIS and Remote Sensing training recommendations for soil scientists. That information is available from the Soil Survey Division Training Page (<http://www.soils.usda.gov/education/training/>)

Recommended training for soil scientists at various levels within the division are posted in the strategic plan (<http://www.soils.usda.gov/education/training/plans.html>)

2008 Themes:

Theme 1: Explore data collection tools for improving the quality of existing soil survey data

Theme 2: Explore new ways of visualizing and delivering soil survey data

Theme 3: Explore data analysis tools and effects of data quality on the analysis

Theme 4: Explore strategies for information sharing and technology transfer

We recommend that these themes carry forward to 2010

2008 Recommendations

Theme 1

Support continued acquisition of high resolution elevation data and high spatial and spectral resolution imagery.

Develop a resource base that describes how DEM or RS data are used, what kinds (NED vs. LIDAR, CIR, satellite, leaf-on vs. leaf-off), choice of resolution, choice of software to use, available methodologies (and their pros and cons), examples, etc.

Theme 1

Promote further development of data collection tools, particularly improvements to PedonPC
Finger-driven navigation and data entry

Interactive data entry (voice-driven)

Usability Matrix –Pros, Cons, Uses of field tools

Theme 2

Develop realistic, three-dimensional block diagrams that illustrate relationship between soil map unit boundaries and what is happening below the surface.

Deliver soil survey data draped over a DEM (as well as imagery) Web Soil Survey.

Theme 3

Provide more explicit guidance on pros and cons of imagery, elevation data sources, and digital mapping methods

Theme 4

Investigate how NRCS (e.g., the corporate soils database) can exchange data (in addition to laboratory data) from non-NRCS or non-NCSS partner sources.
Similarly, work with non-NRCS and non-NCSS partners to ensure that data collection methods and data recording protocols are commensurate with current NRCS standards

Bylaws Update:

The New Technology Committee proposed to establish a Chair and Chair-elect for 2010 conference. At the end of each conference the Chair rotates off the committee, the Chair-elect becomes the Chair, and a new Chair-elect is elected

2010 New Technology Chair and Chair-elect

- Chair: Tim Prescott, MO-13 GIS Specialist
- Chair-elect: Darcy Boellstorff, Assistant Professor, Bridgewater State College

Research Needs Committee

Charge 1 Linkage

Method will vary among states

Funds for travel and laboratory support

Graduate student opportunities

Benchmark soils

Need subaqueous soils included

Soils dominantly in urban/suburban environments

Re-evaluate list and clarify meaning and purpose

Develop complete data set for subset

Multiple pedons for mean and variance

Hydrologic properties

Promote for research sites

Charge 2 Identify priority research needs related to the soil survey missions

Charge 2 National

Soil change (dynamic soil properties)

New technologies and techniques for inventory and evaluation

Hydropedology

Applicability of property ranges for urban/suburban interpretations

Site specific guidance needed

Must be regional

Carbon

Geochemistry

Other Suggestions

Post active acid sulfate soils

Order 1 soil survey guidelines

Basic research on interpretations

Development of a geospatial data model to scale pedon measurements to landscapes, MLRAs, eco-regions, etc.

Soil change – database structure

Sampling protocols for subaqueous soils

Wet Spodosols – difficulty in hydric soil identification (depth of season saturation)

Subaqueous Soils Committee

Issues that were considered

1) Proposed revised definition of sulfidic materials for Soil Taxonomy (Del Fanning).

Fanning will continue to seek suggestions before finalizing the proposal.

2) Subordinate distinction for horizons with sulfides (Mark Stolt)

The committee agreed that the symbol is needed. Discussion focused on several issues:

Is “si” the best to use? Or could other symbols be used. “s” and “i” are never used together so one is used for organic soils and the other mineral. Sulfides has an “s and an “i” in the word, so seems appropriate. Should be able to use for organic soils id they meet the criteria of sulfidic materials. Is 3% peroxide strong enough? Is 30% too strong? How about 10%. (will be tested) Are there other morphologic characteristics that we could use? (none were suggested)

3) Thickness of sulfidic horizon for use for classification purposes. (Mark Stolt)

Most agreed that some thickness should be required. The thickness was debated. 15 cm was agreed upon.

4) Proposed amendments to Soil Taxonomy to accommodate subaqueous soils.

Similar concerns were voiced at the meetings in 2006 and previous recommendations will be followed.

Stolt will consider the comments and suggestions from other regions and adjust accordingly.

5) NASIS proposals focused on Subaqueous Soils

Proposals that have been sent in to the NSSC for adding attribute information to NASIS and Pedon PC for subaqueous soils.

a) Manner of Failure Proposal

Already accepted. Rabenhorst suggested the n-value equation or values should be investigated some more based on recent findings.

b) Oxidized pH Proposal

Will be added once the proposed revision to the definition of sulfides is accepted.

c) pH Oxidized Laboratory Method
Change and add.

d) Reaction to Peroxide Proposal
See “si” horizon designation.

e) Multiple Primes Proposal
Will be included in NASIS.

f) Mean Water Depth Proposal
Suggested that depth be recorded as part of the profile description, as well as elevation. The depth should be a phase attribute in the mapping unit.

6) Additions of landform, landscape unit, and anthropogenic feature terms to subaqueous soils glossary and NSSH
Terms will be reviewed and proposed accordingly.

7) Proposed new Drainage Class
Subaqueous is now used.

8) Measurement of Salinity/Conductivity
Any labs performing characterization of subaqueous soils should be aware of these issues.

9) Salinity Class

System	Salinity modifier	Salinity (ppt)
Marine	euhaline	>30.0
Estuarine (brackish)	polyhaline	18.0-30.0
	mesohaline	5.0-18.0
	oligohaline	0.5-5.0
Riverine	fresh	<0.5

New terms were necessary. Suggestions will be entertained and reviewed.

10) Annual Average Water Temperature
Needs further investigation

Taxonomy Committee

Proposals:

Group 1

Normal year definition

Natraquerts

The committee voted to recommend approval of the changes.

The Subaqueous Proposal -- All

This proposal was heard in the Subaqueous Soils Committee. The proposal was amended and additional comments have been received. The author will complete the amendments. The committee recommends the Subaqueous Proposal with the amendments.

Group 2

Ashy-skeletal over clayey particle size class

The committee voted to take 'no opinion' of this proposal because it does not impact the Northeast Region.

Correction to Temperature limits

Micaceous Soils

The committee voted to recommend approval of the changes

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Clarification of Clay Requirement: Paleustalfs, Palexeralfs, and Palexerolls

The committee voted to recommend approval of the change to replace the particle size control section language, but recommends a possible rewording of the clay percentage language for clarity.

Cemented Layer Criteria for Four Great Groups: Durudands, Duricryepts, Durudepts, and Petraquepts

The committee voted to not recommend approval of the change. It recommends work on the language confirming that the layer is pedogenic and recommends consideration of the terms 'soil', 'horizon', and 'dura' as used in the text.

Aridic Lithic Subgroups in Some Great Group: Xerolls, Calcixerolls, Argixerolls, and Haploxerolls

The committee voted to recommend approval of the change. The committee recommends that a similar amendment may be needed in the Ustolls suborder, also.

Group 3 Permafrost affected and other Cold Soils:

Changes to the Gelisols Order - the committee was informed that this proposal is being withdrawn for additional work.

Addition of a Gelic temperature regime

Change to the criteria for Histels

Addition of an Oxyaquic Subgroup to Haplogells

Addition of an Aquic Subgroup to Gelorthents

Addition of Turbic Subgroups to 8 Great Groups

Revision to the Gelepts Great Group

Changes to Family Criteria (depth for B.S. and pH)

The committee voted to take 'no opinion' of these proposals because they do not impact the Northeast Region.

Addition of Folistic Subgroups to 12 Great Groups - this one subpart of the Group 3 amendments affects 11 series in the Northeast.

The committee voted to recommend approval of the change.

Group 4

Proposal to Add Humic Great Groups to the Udepts, Ustepts, and Xerepts And to Revise the Current Humic Subgroups in Various Great Groups – All or Parts, Partially from here

The committee voted to recommend approval of the change. It was a close vote with several people not voting. One could not consider this a 'consensus'. The committee recommends that consideration be taken into the difference in the order of placement of the Greatgroups within the Suborders. It may need to be amended.

Group 5

Jarosite & Suffix j

The committee voted to recommend approval of the change. It may need to be considered whether the last sentence of the amendment is appropriate where it is located. It is valuable information, but perhaps should be recorded elsewhere in Soil Taxonomy.

Kanhapludults

The committee voted to recommend approval of the change.

Paleaquults

Paleudults

Gypseous Soils

Anhydritic Mineralogy, Anhydritic Diagnostic Horizon, & Revision to the Aquisalids

The committee voted to take 'no opinion' of these proposals because they do not impact the Northeast Region.