

South Region NCSS Conference - 2012

Soil Interpretations Committee

Bowling Green, Kentucky

Committee Charges

- ◎ Developed at 2011 National Conference in Asheville
 - > Urban Interpretations
 - > Risk Assessment
- ◎ Topics from Poster Session

Committee Discussion

- ◉ Local (state) Interpretations
 - > Most important to users needing state-specific information
 - > Septic Tank Absorption Fields prime example
- ◉ How to display on Web Soil Survey
- ◉ Support needed to develop local interpretations

Local (State) Interpretations

- ◉ National Versions are good starting point
- ◉ Some local interpretations were written to “fix” national ones that did not work correctly
- ◉ Not every state has expertise to program in NASIS
- ◉ Criteria and programming are separate needs

Local Interpretations (cont.)

- ◉ Tennessee septic system interpretation
 - > Criteria developed by workgroup
 - Reviewed by same group
 - > Programming by local field staff
 - > Much assistance needed from NSSC (Lincoln)
 - > Interpretation reviewed and tested
 - > Templates developed for Web Soil Survey, Access report template and Rule Manager

Local Interpretations (cont.)

- Many NRCS soil scientists have been trained
- Few of people have created or modified them to be proficient
- Support at NSSC limited by available staff
- How will Soil Survey Restructuring affect who would assist in creating the interpretations

Local Interpretations (cont.)

- ◉ Develop interpretation tool that may be run outside of NASIS
 - > Universities and others don't have, want, or need access to NASIS to want to make interpretations
 - > Enhance opportunities for modelers to properly use the data elements they wish to utilize

Old Business - Mica

- ◉ Soils containing “significant” quantities of mica
- ◉ Proposals at previous NCSS conferences presented were threefold:
 - > Standards for describing, quantifying, and inclusion in NASIS for data population
 - > Change the micaceous family (drop paramicaceous)
 - > Developing the criteria so that the appropriate interpretations can be revised

Old Business – Mica (cont.)

- Expected interpretations revised:
 - > K factor (erodibility)
 - > Pond reservoir areas (seepage)
 - > Embankments, dikes and levees
 - > Road fill
 - > Slippage potential

Old Business – Mica (cont.)

- Roadblocks to implementation
 - › Key personnel in MOs 14 and 18 retired
 - › In the east, the micaceous soils are in three MO regions
- Factors driving need to implement
 - › NRCS National Bulletin requiring calculation of K factors
 - › National interpretations do not clearly reflect the limitations these soils present

Old Business – Mica (cont.)

- Changes with NRCS – restructuring
 - MLRA 148 – Northern Piedmont reassigned to the Raleigh Mid-Atlantic Region
 - This MLRA has a large acreage of soils high in content of mica
- Raleigh MO ready to increase its focus toward finalizing this effort
- This will be discussed at the NE NCSS conference in Maine

Demand for Fertility and Water Quality Related Issues

- Aluminum saturation and ECEC
 - > Aluminum not routinely populated (SHOULD BE)
 - > ECEC and CEC calculations in NASIS not always appropriate for “mixed” mineralogy soils in Southeast
 - > Total Acidity calculations need to be run
- Watershed Health
- Acid Rain Deposition
 - > EPA study in 1980s
 - > USFS initiatives sample and study on sensitive soils

Urban Interpretations

- Urban Interpretations – what data elements need to be populated?
 - › Erosion and compaction at construction sites
 - › Stormwater management
 - › Managing land where subsoil is exposed from topsoil removal
- National Interpretations are under development and play a key role as starting points for new/revised ones

Urban Interpretations (cont.)

- ◉ Large amount of work was done by many folks in the Northeast NCSS Region
 - > Chris Smith (NE NTSC and New Jersey State Office)
 - > Soil Surveys in New York City, Baltimore, etc.

Additional Needs *(Opportunities)*

- Off-road vehicles – ATVs and 4X4s
- Incorporating dynamic soil properties into interpretations
- Incorporating ecological data into interpretations
- *Real* interpretations to be utilized in subaqueous soils

Additional Needs (cont.)

- Response to natural and biological disasters - examples
 - › Katrina – what was learned
 - › Gulf Coast oil spill
 - › Animal carcass disposal disease-specific (pH)
- Build on past experience to meet future needs
- Publish Interpretation criteria guides

Recommendations

- ◉ Develop step-by-step instructions for local interpretations
- ◉ Complete mica interpretations
 - > Coordinate with research committee
- ◉ National leadership coordinate roles responsibilities between State Soil Scientists (they have responsibility for interpretations) and the MLRA soil survey offices (they have the expertise)

Recommendations

- ◉ Convey these recommendations to other NCSS conferences
- ◉ Participate in Interpretation Committee Northeast NCSS conference (Vick)