

Research Needs Committee

NE Soil Survey Conference

Patrick Drohan and Larry West, co-chairs



Committee

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- ▶ Nancy Cavallaro
- ▶ Patrick Drohan
- ▶ Maxine Levine
- ▶ Jonathan Russell-Anelli
- ▶ Arlene Tugel
- ▶ Peter Veneman
- ▶ Larry West

Charge 1

- ▶ Ways to better link field soil scientists with university scientists to better communicate ideas for research projects
 - What is the best way to develop and maintain linkage between the SSAs and NCSS university cooperators for research planning, implementation, and evaluation?
 - Are current benchmark soils and landscapes appropriate to address research priorities?
 - Can the benchmark concept be more effectively communicated to university scientists as a consideration in research planning?

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
 - What is the most effective means to incorporate research results presented at this conference into future charges for the Research Needs Committees at the regional and national conferences?

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)