

# MultiState Projects (NE-1021)

- Administered through the USDA-CSREES (Cooperative State Research, Education, and Extension Service)
- Literally hundreds of multistate projects (nearly all are focused on agriculture)
- Our project is one of the few pedology projects (that is why we have folks from KY, MN, IO, CA as participants even though the project is focused in the northeast)
- Research funds are made available through Land Grant Agricultural Experiment Stations (25% of Hatch funds are supposed to go to multistate projects)
- This is the first time we have tried to coordinate our efforts into a joint presentation, so keep that in mind.

# Hydropedology

## Hydropedology: Genesis, Properties, and Distribution of Hydromorphic Soils

### Overview | Objectives

Because of the environmental and economic importance of wetlands and coastal resources to northeast, pedologists in this region have been developing expertise in the identification, characterization, classification, and land use interpretations for soils within these areas. In this project, we will establish a framework for the systematic study of saturated, hydric, and subaqueous soils across the northeastern US. This project will focus on: documenting the physical, chemical and morphological characteristics of these soils; establishing soil-landscape and soil-vegetation relationships; and developing an understanding of how these characteristics and relationships vary across the region and with changes in land use.

### Next Participants Meeting

The next participants meeting will be held in conjunction with the 2008 Northeast Regional Cooperative Soil Survey Conference, hosted by Connecticut and Rhode Island.

When: June 2-5, 2008

Where: University of Rhode Island, Narragansett Bay Campus

Minutes from the most recent participants meeting, held 6 November 2007 during the SSSA Annual Meeting in New Orleans, LA, are available [here](#).

# List of Participants

- Jay Bell
- **Charles Cole**
- Randy Dahlgren
- **Patrick Drohan**
- **John Galbraith**
- Tasios Karathanasis
- **Henry Lin**
- Andrew Manu
- **Brian Needelman**
- Anthony O'Geen
- **Laurie Osher**
- **Martin Rabenhorst**
- **Mark Stolt**
- **Jim Thompson**
- **Bruce Vasilas**
- **Peter Veneman**

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- Mark Stolt
- Jim Thompson
- Bruce Vasilas
- Peter Veneman
- **Kyungsoo Yoo**

# NE-1021 Goals (the big picture)

- improve our understanding of the processes, characteristics, and interpretations of saturated, hydric, and subaqueous soils;
- establish a framework for the integration of studies investigating soils from a hydrogeological approach throughout the northeastern US.

# Objectives

- Determine frequency and duration of water table depths of **wetland soils** and agricultural soils with imperfect drainage. Address interpretation problems between measured hydrology and vegetation characteristics, and field hydric soil indicators as used by regulatory personnel.
- Characterize the morphology, chemistry and physical properties of **subaqueous soils**. Develop terminology that will be used by soil scientists to describe these soils, and propose adaptations to Soil Taxonomy for subaqueous soil characterization.
- Quantify **carbon** sequestration in seasonally saturated, hydric and subaqueous soils of the northeastern US. Estimate changes in C-storage and other pedological process in response to land use change and predicted sea-level rise.