

Use of Ecosystem Models at NREL during the Past 50 Years

TUESDAY, NOVEMBER 14 | 2 – 3:30 P.M.

Lory Student Center Grey Rock Room

The use and development of ecosystem models and the system ecological approach are key parts of the research conducted at the Natural Resource Ecology Laboratory (NREL) from the 1960's to present time. We will trace the historical development of ecological research at NREL and demonstrate the important role that ecological models had in this research. Most of the major research projects included a mixture of ecological model development, field and laboratory research, and the use of ecological models for improving our understanding about ecosystem dynamics. We summarize the development and application of ecosystem models at Colorado State University, because this lab has been a leader in ecosystem modeling. We trace how model complexity, extent of validation and application, interactions between modeling and measurement projects, usefulness of model outputs, and other factors have evolved through time. Panel members will show how the modeling efforts at NREL have influenced ecosystem model development around the world. We close by prioritizing future research efforts needed to reduce uncertainties and better address contemporary issues.

Organizer and Moderator: Dr. Bill Parton, Professor Emeritus, CSU; NREL Senior Research Scientist

Panelists:

- Dr. Steve Del Grosso, United States Department of Agriculture, Agricultural Research Station (Fort Collins, CO)
- Dr. Keith Paustian, Professor, Soil and Crop Sciences, CSU; NREL Senior Research Scientist
- Dr. Stephen Ogle, NREL Senior Research Scientist
- Dr. Tom Hobbs, NREL Senior Research Scientist
- Dr. Will Wieder, Research Scientist, National Center for Atmospheric Research (Boulder, CO)