St. Paul, MN

Scientists

John Baker – micrometeorology, soil physics. Carbon balance, trace gas transport.

Bill Koskinen – chemist. Pesticide fate and mobility.

Rod Venterea –soil physics. Measurement and simulation of trace gas exchange, especially NO, N2O, CH4.

Pam Rice – toxicologist & chemist. chemical transport, particularly in turf systems.

Kurt Spokas – soil physics & chemistry. Biochar impacts, trace gases, especially fungicides.

Gary Feyereisen – Hydrologist. Water quality in ag systems, tile drainage.

Location-specific Equipment/resources

- Full suite of chemical analytical equipment for pesticide & nutrient analyses
- Micromet instrumentation for trace gas flux measurements (CO_2 & N_2O)
- Automated and manual chambers for soil gas exchange measurements
- Specialized equipment – pelletizer, frozen soil auger, high-boy tractor with penetrometer, etc.
- Trees

Accomplishments in Agroforestry

Biochar impacts on pesticide retention, greenhouse gas emissions.

Potentially Relevant Accomplishments

- Measurement and modeling of net primary productivity, greenhouse gas exchange, and carbon sequestration.
- Measurement of pesticide retention, volatilization, and transport

Complementary Resources Needed to Contribute to Agroforestry

- Foresters (collaborators)
- Funding for supporting staff, graduate students