

Minutes of NCR-59
Technical Committee on Soil Organic Matter: Formation, Function and Management
Manhattan, Kansas
September 16-17, 2002

Administrative Advisor:

Dr. Gerald Miller
Associate Dean
Iowa State University
College of Agriculture
132 Curtiss Hall
Ames, IA 50011-1050

Chair:

Dr. Ron Turco
Agronomy Department
Purdue University
1150 Lilly Hall
West Lafayette, IN 47907-1150

Secretary:

Dr. Peter Motavalli
Environmental Soil Science
University of Missouri
302 ABNR Bldg.
Columbia, MO 65211

Members in Attendance:

Deborah Allan - Minnesota, Rhae Drijber - Nebraska, Peter Motavalli – Missouri, Charles Rice – Kansas, Ron Turco – Indiana, Gerald Miller - Administrative Advisor

Additional members and federal representatives participating through conference call: David Bezdicek – Washington, Jonathan Halvorson, USDA-ARS, William Horwath - California, Sigelinde Snapp – Michigan, Michelle Wander - Illinois

Members Absent:

Richard Dick – Oregon, Serita Frey – New Hampshire, Larry Halvorson – Iowa, Robin Harris – Wisconsin, Laurie Osher - Maine, Robert Todd - North Dakota, Ray Weil – Maryland

Guests:

Gary Tibke - NRCS
Micky Ransom - Kansas State University
Ray Knighton - USDA-CSREES

Detailed Notes from the Meeting:

The annual meeting of NCR-59 was held in Throckmorton Hall on the campus of Kansas State University in Manhattan, KS on September 16-17, 2002.

Ron Turco, Chair of NCR-59, coordinated the meeting.

Dr. Turco called the meeting to order at 8:30 AM and each participant at the meeting introduced themselves.

The Chair then led a discussion on future joint projects of NCR-59:

- No resources available for NCR committees to promote joint projects.
- Projects would need to be beneficial to mutual research programs and not unsupported add-ons.
- Group should also consider writing joint research proposals to obtain research funds from funding sources, such as NRI, NSF and NIH.

- Ideas for joint research:
 - Biotechnology risk assessment and fate of crop residues from transgenic crops
 - Transport of antibiotics from animal wastes
 - Environmental effects of dissolved organic C
 - Effects of climate and management on soil C sequestration
 - Focus on human health issues (e.g. dissolved organic C on chlorination, antibiotic issues)

An update on collaboration between NCR-59 and the Consortium for Agricultural Soils Mitigation of Greenhouse Gases (CASMGS) was discussed with Dr. Rice.

- Non-CASMGS members can get funding for travel.
- Potential for CASMGS staff support for proposal grant writing.

NCR-59 is co-sponsoring several symposium at the 2002 American Society of Agronomy Meetings:

- “Economics of Managing for Soil Quality” chaired by Dr. Horwath - California
- “Environmental Impact of Transgenic Crops on Soil Biological Processes and Functions” chaired by Dr. Motavalli – Missouri and Dr. Robert Kremer, USDA-ARS.

Dr. Turco announced the establishment of a list server for NCR-59 (send a message to NCR59-L@purdue.edu to send a message to the entire NCR-59 membership).

Members discussed requiring two-paragraph summary research reports for future NCR-59 meetings.

- The first paragraph would be required and would be a research report of the individual NCR-59 member.
- The second paragraph would be optional and would describe relevant research in the member’s state.
- A list of publications and/or workshops that were NCR-59 related would also be prepared by each member for the report.
- The reports will be included in the annual minutes.

A motion was made and seconded to approve the requirement for the summary research report. The motion was then approved unanimously by the members.

The host of each NCR-59 meeting will arrange for 2 –3 presentations and a field trip on the first day of the meeting and then reserve the second day morning for business meeting. Meeting in June and July is preferred to facilitate participation of federal researchers.

Dr. Rice discussed the possible role of NCR-59 in the establishment of the International Carbon Network that is being targeted for scientists with limited resources. The executive committee for the project includes scientists from Canada, Mexico, the U.S. and Australia. The project would have paired sites with and without management in which several soil characteristics would be determined (e.g. soil organic C, bulk density, trace gas measurements, soil C fractions) with the

objective of accumulating sufficient data for soil C and climate for modelling. Possible roles of NCR-59 are:

- Develop reference sites in North America.
- Have a limited role in guidance and training.

In a conference call with NCR-59 members, Ray Knighton (USDA-CSREES) reported on the state of federal programs, including proposed changes in NRI funding, the dissolution of the IFAS program, and new integrated water quality research programs.

The conference call participants then discussed project ideas for joint research including methodologies to measure C sequestration, soil C at depth, decomposition of transgenic crop residues, environmental effects of dissolved organic C, mitigation of N₂O. Dr. Wander stressed the importance of NCR-59 as a forum for technical discussions.

Group concluded that proposal development will be the future focus of NCR-59 and the list-serve and conference calls will be used to develop project ideas.

Group broke for lunch.

After lunch a presentation was given by Ed Brennan (Kansas State University) entitled "Spatial Relationships of Selected Above- and Below-Ground Carbon in a Peten, Guatemala Tropical Forest.

After the presentation, the group visited Konza Prairie and was shown the extensive ongoing research studies at the site.

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The meeting got underway at 8:30 AM.

New Member at Large: Dr. Sieglinde Snapp was approved unanimously as Member-at-Large.

Dr. Micky Ransom (Kansas State University) gave a presentation on KSU's undergraduate agronomy curriculum

Dr. Gerald Miller gave a report on several issues:

- NCR-59 on a 5-year schedule (Oct. 1, 2001 – Sept. 31, 2006). Midterm review may be at the end of next year.
- NC Region of Agricultural Experiment Station Directors web site (<http://www.wisc.edu/ncra/>) was modified to provide an interactive support site for regional committees and administrative advisors. The major change was the addition of the National Information Management and Support System (NIMMS) which can be accessed at: <http://www.lgu.umd.edu/menu.cfm>

- Dr. Serita Frey has changed to New Hampshire from Ohio; Ray Weil is new official representative from Maryland; and Dan Olk is a new federal participant from the USDA-ARS Soil Tilth Laboratory.

The minutes of the 2001 NCR-59 meeting were reviewed. A motion was made and seconded to approve the amended minutes. The motion was then approved unanimously by the members.

Dr. Rice then made a presentation updating members on CASMGS and a proposal to establish an International Consortium on Monitoring Greenhouse Gases. He also reported on the Kansas Coalition for Carbon Management (website: www.oznet.ksu.edu/kccm).

Next Year's Meeting Date and Site:

Columbia, Missouri. The date of the meeting was suggested to be during the middle week of July.

The executive committee for 2003 is: Peter Motavalli, chair; Serita Frey, secretary; Sieglinde Snapp, member-at-large; and Ron Turco, past-chair.

The members of NCR-59 thanked Ron Turco for his service as chair of this committee for 2002 and Chuck Rice for hosting the meeting at Kansas State University in Manhattan, Kansas.

The meeting was adjourned at 11:30 AM.

Approved:

Signed: *Peter Motavalli*
Peter Motavalli,
NCR-59 Secretary 2002

Signed: *Gerald A. Miller*
Gerald Miller
NCR-59 Administrative Advisor