M I N U T E S

LTER Coordinating Committee Meeting
Virginia Coast Reserve LTER Site
April 21-22, 1995

IN ATTENDANCE:

LTER representatives: Caroline Bledsoe (NET/Exec), Linda Blum (VCR/host), John Briggs (KNZ), Indy Burke (CPR), Carl Bowser (NTL/Technology), Dave Coleman (CWT), Charles Driscoll (HBR), David Foster (HFR/Exec), Jerry Franklin (NET/Exec), Josh Greenberg (NET/Student), David Greenland (AND/NWT/Climate), James Gosz (NET/Chair), Kay Gross (KBS/Exec), Kris Havstad (JRN), Bruce Hayden (VCR/host), Alan Knapp (KNZ), John Magnuson (NTL), Stephanie Martin (NET), Rudolf Nottrott (NET), John O'Brien (ARC), Peter Reich (CDR), Phil Robertson (KBS), Robin Ross (PAL), Tim Seastedt (NWT), Ray Smith (PAL), Fred Swanson (AND/Exec), Keith Van Cleve (BNZ), John Vande Castle (NET/Exec), Les Viereck (BNZ), Bob Waide (LUQ), Bob Wharton (MCM)

NSF representatives: Mike Allen (Environmental Biology), Tom Callahan (Environmental Biology), Scott Collins (Environmental Biology), Roger Hansen (Polar Programs) Polly Penhale (Polar Programs)

Minutes: Prepared by S. Martin (NET)

COORDINATING COMMITTEE

April 19, Wednesday, 7:00 to 9:00 p.m.

Technology Committee (Carl Bowser, Chair)

New Technology Committee chair Carl Bowser (NTL) put out a call for new members and noted that he would be accessing ideas to be addressed by the Committee. His hope is to identify as members representatives of the atmospheric sciences/remote sensing, microbial scale biology, and data management areas, as well as networking activities and/or larger ecosystem scale processes.

Among the ideas the group may consider: (1) a retrospective analysis of past technology supplements and how they've served the research function of the LTER sites; (2) needs identified in previous Technology Committee reports that still deserve attention, (3) identification/discussion of emerging issues in LTER that will need
(4) recommendations about site-level needs (in cooperation with a similar effort underway by the Data Managers group) and identification of larger-scale shared facility needs (genetics, isotopes, etc.), and (5) appendices documenting site status, prior support, etc.

LTER Workshops (Jim Gosz)

Jim Gosz and Jerry Franklin noted that, with the reduced budget for the Network Office over the next two years, the workshop priorities decided at the Coweeta meeting last fall would need to be revisited. Funds designated for workshops in the present two-year budget total $20,000 in Year I (1995) and $50,000 in Year II (1996), considerably less than the annual amounts proposed in the six-year Cooperative Agreement budget.

Representatives were asked to consider priorities and note where they might be able to take advantage of meetings to attach workshops and cut costs. Among the topics proposed at or since last meeting were:

- Animal/Nutrient Patch Phenomena (Frost/NTL)
- Biodiversity (Waide/LUQ)
- Effect of Snow Ice on Habitats & Ecosystems (Ross/PAL)
- EMAP-Indicators
- Food Web Dynamics (Ross/PAL and Meyer/CWT, et al.)
- Hydrologic "Plumbing" of LTER Sites (Grant/AND)
- LIDET (Harmon/AND - funded through other sources)
- Medical Aspects of Emerging Diseases & Environmental Data (Parmenter/SEV)
- Regional Biochemical Characteristics of Watersheds (Meyer/CWT & others)
- Soils Standardization (Robertson/KBS)
- Other Standardizations (common measurements and questions)
- Trace Gas (Mosier/CPR)
- X-Roots (Bledsoe/NET & Hastings/MCM-other sources)

ACTION: A motion was advanced and seconded to continue to follow a theme of standardization in selecting topics for Network Office-supported workshops.

ACTION: After discussion, there was confirming support for the soils workshop, for which development of standards for data management are already in process, and the biodiversity workshop, which will be an attachment to the Fall 1995 LTER/CC meeting at Cedar Creek LTER.
Bob Waide recommended inviting representatives of the Smithsonian Institution sites for the biodiversity workshop if the CDR has room, and meeting participants agreed. John Magnuson said that such a random approach to workshop topic selection was problematic, and asked that the group consider developing a peer review strategy and a strategic focus. After brief discussion, it was agreed that this task would be added to the agenda for the next day's meeting. Kay Gross added that developing a link to NSF's Systematics and Collections in seeking workshop funds would strengthen the NSF "cluster" concept, and Mike Allen concurred. Indy Burke noted that the new Synthesis Center provided an opportunity to compete for workshop funds (the Center advisory board was to hold its initial meeting May 1, with the RFP to be ready by the August Ecological Society of America meeting).

April 20, Thursday, 8:30 a.m. to 5:00 p.m.

NSF Report/Funding Projections (Mike Allen)

The Office of Management and Budget is not allowing incremental increases, which means that LTER will need to operate on a flat budget through the year 2000. All divisions have also been asked to consider what adjustments they would make if it became necessary to operate under a 20 percent reduction. A possible $560,000 would likely be the maximum available per site. The only other alternative would be to begin eliminating sites. In the present budget climate, the Division can follow one of two strategies: (1) retrench and take an extremely conservative approach, or (2) try to position itself to respond to new opportunities that may arise into the next decade.

NSF is committed to maintaining the site augmentations; although the funds don't presently exist, DEB has been authorized to "scrounge" for them. This aspect of the program is viewed as a long-term experiment, and the initial sites will need to demonstrate its value. Allen appealed to other sites to support NTL and CWT to help make the initial effort successful. He reiterated the Division's intention to announce an open competition for the operation of a Network Office.

(At this point, NSF and NET representatives were excused while site representatives discussed approaches to writing a competitive Network Office proposal. Among several models explored was the possibility of the award going to the chairperson's home institution with a major service subcontract to the University of Washington.)

ACTION: It was decided that the Executive Committee would write a proposal for an LTER Network Office. (Subsequently, it was decided that the LTER/EXEC would visit the Network Office June 6-7 to review staff duties and operations preliminary to this task.)
LTER Affiliation (Bob Waide)

At the fall 1994 Coweeta LTER/CC meeting, Bob Waide agreed to develop draft criteria for national and international LTER affiliation. He provided a handout containing a series of possible characteristics to consider (including such factors as site size, diversity of disciplines, willingness to provide access to legitimate users, "free" exchange of data, etc.) if the group chose to move towards a more restrictive definition. After discussion, it was generally agreed that site representatives were not comfortable with validating other sites or networks, despite recent requests for an LTER Network "seal of approval" from Hungarian and Taiwanese scientists with whom LTER has interacted. A looser affiliation based on a common philosophy or way of doing research was deemed more appropriate. It was suggested that since some research groups now charge for data (example: Canadian climatological datasets), perhaps at a bare minimum LTER ought to require of affiliates an equal free exchange of data. There appeared to be general agreement with this idea.

Jim Gosz reported that after the recent ILTER East Asia conference, he was less inclined to pursue defining LTER affiliation restrictively. He reviewed for the group the recommendations and goals developed at the first two ILTER meetings (available on-line at LTERnet.edu via gopher (Under "About LTER") or the Web page (http://lternet.edu), suggesting that they already contained the basis of an affiliation "policy."

ACTION:  Further discussion of LTER affiliation was tabled indefinitely.

International Activities (Jim Gosz)

Chair Jim Gosz reminded representatives that NSF will not fund foreign research (i.e., grant funds to foreign researchers), but that it will fund joint workshops and exchange visits. LTER researchers need to make this distinction very clear to their international research partners from the outset and reinforce it periodically.

Upcoming and ongoing scientist-to-scientist exchanges: (1) The Prague trip previously announced via e-mail will be June 11-17, 1995. LTER scientist participants have been identified, and efforts are being undertaken to find a data manager who can go (contact Rudolf Nottrott). (2) A supplement request has been sent to International Programs for funds for a trip to Spain and Portugal in September 1995. A potential trip to Mongolia in October 1995 is being explored. (3) A proposal for support for a November 1995 meeting in Mexico has been submitted. (4) Seven site-specific proposals to do work in Hungary have resulted from initial exchanges (Robert Waide has list).

Jim Gosz suggested that sources of funds for the Hungarians or other international partners might include the World Bank or bilaterals with the State Department. Bruce Hayden reported that the Hungarians have prepared an electronic personnel directory which will be transferred to
the Network Office server following the ILTER Steering Committee meeting in Budapest this summer. Rudolf Nottrott (NET) will attend to assist with Internet connectivity issues.

Workshop Strategy (John Magnuson)

Picking up this dialogue from the previous day's session, John Magnuson noted that short of peer review the sites need some way to determine who should be supported. A strategy or process is needed. Should it be top down or bottom up? Should workshops address the eight to ten overarching hypotheses that sites tend to have in common?

ACTION: It was decided that the Executive Committee would develop a workshop policy for the larger group's review at its June meeting.

1-800 # Issue (Rudolf Nottrott)

Rudolf provided a handout detailing costs and advantages of three options from which sites can choose to solve the problem of how to more economically provide long-distance dial-up to LTERnet. It had previously been reported that the funds designated in the Network Office two-year budget for this service would, at the current rate of site use, be fully expensed by this June. (The complete handout, filename "netoptn.txt", is available online at LTERnet.edu under "Basic Documentation.")

The three options: (1) sites may obtain their own 1-800 numbers via American Sharecom, the company that now provides service to LTERnet through the University of Washington; (2) sites may obtain service via a local "near distance" provider by paying a monthly service charge; or (3) through larger national providers like Compuserve, American On-line or Prodigy (not all of these have full standard dial-up SLIP/PPP access).

ACTION: Sites were asked to select and implement one of the options over the next two months.

Graduate Student Committee (Josh Greenberg)

Graduate Student Committee Chair Josh Greenberg reported on recent student activities. He has been working with Stephanie in the Network Office to include a student section in the "About LTER" Web page and reorganize the student information available on the LTERnet gopher server.

Alison McGill (HFR) will organize a student social at ESA in conjunction with the Long-Term Studies Section event. Josh appealed to PIs to spur students to identify a site representative with whom he can work. Only a few sites have followed through on meeting this goal since the 1993 All Scientists Meeting.

At the last CC meeting, Josh proposed that $20,000 ($2,000 each for 10 students) in Network Office funds be made available to students to provide incentive for them to initiate or participate in intersite research. The proposal was approved; however, the six-year NET proposal was not funded and the current two-year grant doesn't have sufficient
funds to follow through. Josh suggested a revised version: As a catalyst to get intersite student projects underway, the Network Office (NET) grant would provide a maximum of $1,500 per student for three students ($4,500 total) to travel to another LTER site. Each student request for funds would need to include a budget justification, a letter of support from his/her major professor, a student CV, and five copies of the complete packet. Student requests would be reviewed on merit by Josh (possibly) and selected NET staff.

ACTION: A motion was advanced and seconded to cover participant support from the Network Office budget for three students ($1,500 each) for travel to do intersite work.

Data Managers Committee (John Briggs)

John Briggs distributed the report of the August 1994 Data Managers workshop in Seattle and noted it is also available online at LTERnet.edu. The outreach-oriented 94 meeting included speakers from outside the Network. As a measure of the interest in LTER data management, organizers reported a 100% acceptance by speakers. The meeting included further discussion on updating the 1988 Minimum Standard Installation (MSI) document to the Recommended Technological Capabilities (RTC), which outlines recommended hardware, personnel, and high-speed access to the Internet. Also discussed were standards for metadata (data on data) draft documents and protocols, spatial data, and mechanisms for data publishing use of collaborative datasets. Briggs appealed to the PIs present to encourage their data managers to attend the annual workshops and be more participative.

Publications Committee (Bruce Hayden)

Chair Bruce Hayden reported on the recent survey conducted to identify synthesis publications produced across the Network, from individual articles to site volumes. He handed out a draft compilation and noted that he would work with Stephanie to have it posted on-line at LTERnet.edu for sites to review and make additions and corrections. Yale, Springer-Verlag and Oxford presses have all expressed interest in producing LTER cross-site volumes, including international work.

ACTION: A draft compilation of the LTER synthesis publications list will be posted on-line at LTERnet.edu for sites to review and make additions and corrections.

Climate Committee (David Greenland)

Chair David Greenland handed out a brief report on the Climate Analysis and Synthesis Project led by Greenland and Tom Kittel, which was
described in the report submitted at the last CC meeting. Lynn Rosentrater at the University of Oregon is collecting site data via Internet and is finding that the site gopher and Web servers are not very useful for finding and retrieving data.

Data files are poorly indexed and often buried three or four levels down. There are few documentation files or monthly climate summaries. Most sites that have on-line datasets have chosen to make their daily data available. In one case, monthly summaries are embedded in the daily files, and are unnecessarily complicated to extract. Since files for a given variable are often broken up into individual years, downloading and concatenating files to produce a time series is very time consuming. One of the outcomes of the project will be a dataset of monthly temperature and precipitation for the sites. This data set will reside at the Network Office and should be easier to access than the present data.

Other activities: The El Nino monograph published last fall was received favorably. Fifteen calls from reporters resulted when its existence was noted in the NSF Science News tipsheet, and several e-mail requests for the document were received. Doug Schaefer (LUQ) is continuing work on a review of climate work undertaken across the Network. Over the past six months, the Committee has responded to a number of requests from the sites, the Network Office, and individuals and institutions, including the National Climate Data Center and the Czech Academy of Sciences.

Core Areas (Kay Gross)

At Jim Gosz' request, Kay Gross conducted a review of the five LTER core areas and site activity in each across the Network. Using the 1991 site directory and some more recent site proposal summaries, she found activity in disturbance, nutrient cycling, trophic structure and population processes, foodwebs, community structure, biodiversity and controls on NPP and SOM (though these were less obvious). She considered what ideas can be generalized across ecosystems and what key hypotheses might apply across sites. Were there, say, three hypotheses that could be addressed by all sites in a non-trivial manner? Do existing hypotheses allow cross-site analyses?

Key ideas included: scaling, complexity, gradients, habitat interfaces, and variability/heterogeneity

Hypotheses sorted out in terms of: controls on biodiversity (productivity, history, landscape), trophic interactions, and foodwebs

Discussion included consideration of whether the current core areas were hampering or helping the research, whether the current set should be added to or changed, whether there is a good "match-up" between core areas and the core datasets catalog (how do outputs match to core
areas?), and whether a more explicit statement of hypotheses would help to make the relationship to the core areas more clear. David Greenland and John Magnuson pointed out that the Climate Committee had formally requested after the last All Scientists Meeting that if the core areas were revisited climate be considered as a core area, especially since the majority (if not all) sites have long-term, comparable data. Rudolf Nottrott noted that the Data Managers group had proposed data management as a core area.

ACTION: Kay Gross will write up the results of her review and disseminate it to the Executive Committee and the sites for later discussion and evaluation.

Network Office Tasks Discussion (Jim Gosz)

Mike Allen handed out a list of Network objectives and activities or tasks under consideration for the preparation of the competition now being developed and asked for help prioritizing the work of a Network Office. Each site was asked to choose two priority items from each area (see handout). Results showed that objectives favored included: (1) "facilitate electronic communication and data sharing among the LTER sites and between the LTER Program and other scientific communities," (2) "develop linkages with other relevant long-term research programs, site networks and science and technology centers," and (3) "promote the relevance of long-term research for understanding environmental problems."

Activities favored included: (1) "develop and maintain electronic and resource linkages among the LTER sites to facilitate communication and information transfer," (2) "develop publications on network activities, information brochures, and workshop reports," (3) "provide planning and logistic support for meetings of the Executive and Coordinating committees, and the ILTER Steering Committee, and maintain records of their proceedings," and (4) "facilitate cross-site research and synthesis (this item was added to the list during discussion)."

HANDOUTS: (copies will be sent with hard copies via regular mail)

Criteria for Affiliation (Waide)

Climate Committee Report (Greenland)

Objectives and Activities of the Network Office (NSF)

LTER Publication of Scientific Synthesis and Collaborative Research Progress and Recommendations (Hayden)

NRC EPA/EMAP Review Prepublication (very large; sent by request only)