LTER Coordinating Committee
April 18-20
Sevilleta LTER site

Representation: all sites represented.

Attachments: List of attendees
Agenda
Committee reports
PowerPoint presentations
Working group reports
NRCS handouts
NET posters

Friday, April 19

NSF report

Henry Gholz presented the report from NSF. He made the following points:

- We did a good job on science theme meeting at NSF
- There is increasing interest in Education at DEB. The EPA Environmental Education program is probably moving to NSF. NSF is hungry for excellent bullets on education programs. Most of BIO Advisory Committee will focus on education
- Renewal panel next Thurs and Friday
- Eight sites will be reviewed in 2003. Scheduling will take place in late summer or early fall of this year.
- There is a major shift towards defense in the Federal budget.
- At NSF, focus areas in the new budget will be a) education, b) biocomplexity, and c) NEON.
- There are several new GEO initiatives:
  a) carbon science
  b) hydroecology
  c) biogeosciences initative
  d) GEO is struggling to find reviewers for these programs
- International programs is moving from SBE to the Office of the Director. This implies increased visibility, and probably funds.
- Getting the news out early – sites need to feed NSF public affairs information on projects and keep NSF informed in good digestible bits. The contact in the Office of public Affairs is Cheryl Dybas. One mechanism to do this is through publication of the vignettes. Patty Sprott will be contacting sites to request their cooperation in finishing this up.
- GEO carbon program planning meeting was almost entirely unaware of biological aspects - focus was on geosciences work, not biology, but they are interested in linkages. One obstacle is that they are unfamiliar with the community. We may want to bring GEO folks into some informational meetings. Perhaps the next annual symposium at NSF may want to have a Carbon-linked theme. Individual contacts with GEO may be important. Having hydrologists press the need for biological interactions may be important.

Q&A:

Q: Any word on longer term for Microbial Observatories?
A: As far as we know, will be continuing

Q: Any plans for getting all 24 sites on the same funding cycle?
A: Working to deal with "out of cohort" sites (e.g., two urban sites up for renewal next year)

Q: Any possiblility of returning to ramped budgets?
A: Not sure why that got switched. I thought sites wanted it front-loaded. I can raise this issue if you want me to.

Q: When will there be a cross-site competition again? Will it include SBE funds?
A: This is a great idea, but we need to mobilize other programs. There is no plan for a competition for this year. However, INT has interest in cross-site international competition.

NEON report

Scott Collins made a brief report on NEON:

- NEON was put in the budget as a homeland defense issue, but that focus was removed in the final form
- Doubled funding 20M each
- Very short timeline - so only well prepared groups will be ready; not much more than 90 days; announcement possibly as early as JULY with proposals due in JAN
- Want NEON to be a NETWORK, so arguing for additional funds

Q&A

Q: Will there still be core sites within observatories?
A: Yes, the field station will be the core site, with field-based satellite sites

Q: With increased funding, can some of the projects be university-based?
A: Mostly at field stations, but may be able to have some facilities at Universities (e.g., isotope lab)

Q: Does NSF expect LTER to play a role in coordination of NEON network?
A: NET could play role in coordination; there will be a coordinating unit to control standardization across NEONs; NEON will be built using a different approach, needs to be more community thing; grassroots cooperation key is key; results of workshops will go into program announcement; there will be very strict accounting standards for NEON expenditures; will also have $2-3M in operating funds; NEON proposals will be very different - need to build collaborative structures; there will also be additional NEON-based research funds

Q: Why would you want to do this? could be $30M albatross since lacks research funds
A: Separate funds will be available for competitive research proposals. You should be clever enough to find ways to use NEON data in interesting ways

All Scientists Meeting

Bob Waide presented the status of planning for the 2003 ASM. He requested input on seven points: date, venue, program committee, format, duration, cost analysis, and whether to meet alone or with another group.

The most critical point is whether to meet with another group. One alternative is to meet with the Association of American Geographers, whose annual meeting is from March 4-8, 2003 in New Orleans. The upside of this suggestion included increased interaction with AAG, the possible development of a joint symposium relating social sciences and ecology, possible linkage with biocomplexity projects, share a conference organizer, and NSF/SBE interest in promoting joint meeting. Downside includes conflicts with other meetings, fact that hotel is booked after AAG; would need to use hotel one mile away, cost of conference organizer (around $60K), and more expensive lodging (first quote:

$199 for a double room).

A general discussion followed regarding the desirability of meeting with AGU or some other organization. The CC instructed NET to develop and present three alternatives for meeting arrangements. The three alternatives would include an upscale meeting with another group, a stand-alone meeting where we control costs, or as a jointly-sponsored meeting with ESA, either at the same time as the ESA annual meeting or not.

It was moved, and seconded that the Exec decide among the alternatives. The motion was passed.

We should move ahead with the development of a program committee. Waide, Michener, and the grad-student co-chairs are agreeable to serve on the committee. Kay Gross and Berry Lyons also agreed to serve. The program committee should also be responsible for looking forward to meetings in 2006 and 2009.

Status of 20-year review

The report will be presented to the BIO Advisory Committee next week, but it is unclear when it will be released to us. Our understanding is that the 20-Year Review Committee is pleased with the report and that it is forward-looking, progressive, and supportive.

Feedback from the committee indicated that they were disappointed that they were not invited to visit more sites. In addition, response to their survey was very weak. This prompted a discussion of the response rate by sites, and the formation of a working group to suggest response to this problem.

Report from Education meeting

Sonia Ortega was introduced as an NSF Program Officer working through an IPA at the Network Office on Education in LTER. Sonia presented an overview of the results of the recent meeting of LTER Education representatives. Major points included:

- History of Education activities
  - 1998 SLTER supplements
  - 1998 fall workshop - Inquiry based Learning
  - 1999 workshop - EHR grant writing
  - 2000 ASM and ESA workshops
  - 2002 Educational Rep. Meeting
- Goal of meeting was to develop a strategic education plan that relates to LTER white paper and that integrates education at all levels seamlessly
- The meeting resulted in the creation of an Education EXEC Committee (Alan Berkowitz - BES; Stephanie Bestelmyer – JRN, Elena Sparrow - BNZ, Susan Steiner - CWT, John Moore - SGS, Monica Elser - CAP, David Smith - VCR, Robert Bohanan - NTL , ex officio members (Diane Ebert May, Patty Sprott, Sonia Ortega)
- Development of LTER education success stories
- Discussion of full range of educational activities supported by NSF
- Discussion of challenges, including sustainability of funding, data entry and data sharing, faculty involvement, and teacher recruitment.

Key Issues:

- Use the uniqueness of LTER to promote teaching and learning of ecological processes
- Use 5 core areas and comparative studies as a framework for Ecology Education

Recommendations from the meeting included:

- Site level

    - Further develop local K-12 linkages
    - Pursue external funding as appropriate to build existing programs
    - Make details of education programs available to the network
- Network level
    - Pool resources - collaborative grants
    - Foster intellectual climate for LTER Education
- NET office
    - Summarize activities
    - Sponsor workshops
    - Identify funding sources/partnerships

How should LTER Education work in future? It is a fundamental point to have an education program director at NET, education coordinator at each site, and additional funding to go beyond SLTER. The goal should be to integrate research and education at each LTER site and for NSF to use the LTER model to plan its Environmental Education activities. Previous discussions of education by the CC have focused on graduate and post doctoral education. The recommendations from the Education community have a different flavor.

NRCS presentation - Joel Brown, Tom Calhoun

Major points:

- Soil needs questionnaire filled out by sites has been forwarded
- Want to improve quality of soil survey - since data is used as basis for policy decisions
- National Cooperative Soil Survey is a collaboration of land grant universities and Federal/State agencies
- Last year got report on needs from LTER sites, but forgot that one agency needs to pay to use land controlled by another agency
- The National NCSS conference group meets biannually in odd numbered years...
- In even number years have Regional NCSS conferences; we are encouraged to become involved in conferences - we can get you on the agenda in early June; talk about your needs to people doing soil survey; priorities for work are set state by state
- MLRA offices - major land resource area - do quality control on surveys and also develop budget initiatives. We should consider a coordinated budget initiative for group of LTER sites. For sites on Federal, we can prioritize and get land management agency to propose the initiative.
- immediate needs.... if could develop crosscut initiative in the next month or so could pursue this year
- The key contact is the state soil scientist:
    - Explain your needs
    - Decide upon scale
    - Level of detail
    - Order 2 normally 1:12000
    - Order 1 surveys down to 1:400
    - Prioritize your needs - determine what can be done immediately
    - Attend state work planning conferences
    - Develop cross-cut budget initiative
    - On Federal lands, provide reimbursement
    - Determine if area has soil map
    - Determine status of soil map

Q&A

Q: Should the contact person be a soil scientist or data person?
A: We want someone who knows network and experienced with budget initiatives; a soil science background would be helpful

Q: How much are analyses?
A: About $1500 per sample looking at hundreds of parameters; can do some related to mapping, gratis; depends on state situation

Q: Could we do crosscutting transcontinental soil based work - requiring level 1 on some sites?
A: Yes, we could do that

Q: Could we submit request to NSF for minimum standard soil survey?
A: Complicated. Depends on research questions. Soil science falls between the cracks at NSF. There is no programmatic element, although the Biogeo working group report may include some recommendations.

Election for new Executive Committee members

Nominees were 1) Hopkinson, 2) Hayden, 3) Grove, 4) Covich, 5) McCartney. There was a suggestion to designate an alternate in case on of the regular members can't attend a meeting. It was moved, seconded and passed that Peter McCartney be elected as the data management representative by acclamation. Bruce Hayden was the other person elected, and Chuck Hopkinson is the alternate.

Committee Reports

Q&A

Q: Who should be in graduate student database?
A: Only students collecting LTER data

Q: When will new social science core areas be added to LTER announcement?
A: This depends on what 20-year report will say. We need more explanation of core areas. Perhaps this could be done as part of the second white paper.

Network Office Budget

Bob Waide presented a preview of the proposed budget for the Network Office renewal proposal. The budget includes a series of activities that are already being done by the Network Office as well as three expanded (synthesis, network information system, ILTER) and one new (education) budget area. There was strong support for the areas of synthesis and network information system as presented in the proposed budget. In particular, funding for post-doctoral and IM support for synthesis activities were singled out as necessary. While there was also support for ILTER and education activities, the consensus was that increased funds for these activities should be sought from directorates other than BIO.

Network Information System

James Brunt, Don Henshaw, and Peter McCartney gave an overview of the status of IM activities relating to the NIS. A discussion of the importance of IM and the NIS followed. The consensus was that the IM group was doing valuable work, but that there needed to be stronger interactions between IM and investigators. Sample comments included:

- How do science and IT connect?
- Always comes down to site level - will we build something at NET at that sites can't implement because of lack of resources
- If you don't know what questions you are going to be asking, how can you know the metadata will be usable?
- This is really critical point for LTER - we don't have a network without integrated databases
- Over the last decade we have bought IT managers into fold – data person on EXEC etc. but IT interactions with PIs are still inadequate
- I disagree.... PIs do see incredible importance of IT – but at site level. We want to push up IT level at sites as

well, but we want this grounded in research oriented questions

- This is ideal opportunity for when science and IT agenda can mesh, through synthesis themes.
- There are few examples of where you can really get at integrated data within LTER
- I was a bit of a skeptic about NIS, but thinking over presentations and history - see real value in moving in parallel.
- In the intersite comparison of variability, Magnuson traveled around to sites to get disks of data. Our present model is not very different! We need to develop these tools to change that process
- We have called for focus on synthesis over next 10 years. It will be difficult to accomplish this without increased efforts in information management.

The Executive Committee presented the following recommendations:

1. We support continued development of information systems to support synthesis
2. We need to establish an ad hoc working group to improve coordination of IM development with synthesis work. Investigators leading current or recent synthesis activities will be asked to participate in this working
3. NET Office budget should request additional resources to allow these synthetic activities
   a) Post doc to work with site PI on synthesis
   b) Information manager salary
   c) Programmer and network developer positions

A discussion of these recommendations followed. Waide requested clear guidance from CC on moving forward with NET budget.

There was a motion to accept EXEC recommendation as recommendation from CC. The motion was seconded and passed unanimously.

The consensus was that ILTER and ED are add-ons that should be pursued if funds are available from sources other than DEB.

Nancy Grimm requested further discussion of the NET budget to determine where resources might be redirected towards synthesis and NIS development.

Upcoming CC meetings

Niwot – fall 2002 meeting; Science theme is “Causes and consequences of species change”. Still looking for speakers on aquatic systems and plot-to-regional scaling. Niwot is at high elevation, and conditions are rustic.

Kellogg - last week of April 2003; won’t have science theme; consensus was to cancel spring meeting if ASM was held in March

Bonanza Creek - third week of August 2003; science theme: “Interactions of multiple disturbances in a changing climate”

Considerable discussion centered on selection of science themes. The consensus was that a better mechanism was needed.

Saturday, April 20

Four working groups met for an hour in the morning and presented the following reports

ILTER – Jim Gosz, chair

Why is international collaboration important to the LTER Network?

a) Replicate sites
b) Extend gradients
c) Compare gradients
d) Expand educational opportunities
e) Expand diverse funding opportunities
f) Achieve global science

Recommendations

1) Maintain current travel budget for international meetings
2) Enhance budget for long-term staff person; this position would eventually become self-supporting. Responsibilities would include:

a) Liaison between CC and ILTER network
b) Document projects
c) Success stories
d) Seek foundation funding
e) Facilitate funding by NSF and others for student and PI exchanges
f) Facilitate cross-site projects
g) Facilitate student exchanges at K-12 -> graduate
h) Administer LTER network international travel budget
i) Guidance for transport of field samples across international borders

There was a discussion of the appropriate level for a new staff hire, and it was decided that a faculty level, multilingual foreign service graduate with interests in science would have the right skills. This discussion included tacit approval of seeking funds for enhancing ILTER, with resources coming from INT, not DEB

Education – Hayden (presenter), Davis, Zimmerman, Hollibaugh, Sprague, D'Aoust, Ortega (chair)

An important goal is to have coordinators at local sites, but its not clear that direct support is available within NSF at this time. The Education Committee recommended development of a strategic plan for education across all levels. They also recommended an education coordinator at NET. This person would perform many functions, including EHR liaison, keeping aware of EHR supplements, and technical exchange/ lessons learned exchange, conducting site visits to LTER sites, identifying additional sources of funding and potential partnerships.

LTER sites may become sites for education research; because we have resources, we may be an attractive target for research, which could have positive effects on our ecological research programs.

Should we seek site or net coordinators first? It's easier to do NET first and the NET coordinator would be asset to sites in getting resources for site coordinators. The bottom line is that this is something the network would like to pursue if funding becomes available.

Improving electronic communications among and between sites – Waide (chair), Henshaw, Sprott, Porter, R. Smith, Reed, Kratz

One clear goal is to improve our ability to manage graduate student information so they can be included in communications. We propose to charge site representatives to the GS committee to send a current list of graduate students at their site to NET every September. Grad reps would be reminded by NET through sending a sorted list of students by site to the grad reps. Updates to the personnel directory would be requested through site data managers or alternatively by sending a message to support@lternet.edu.

More general communication breakdowns require re-evaluation of e-mail protocols. The bottom line on communication is that sites need to be responsible citizens, but NET can make this easier. In particular, the following actions need to be taken:

- Reorganize aliases in the following way
    - LPI – only lead PIs, used for top priority communications
    - Managers – signatory PIs, for information distribution
    - All_LTER - everyone in personnel directory
    - Response list - Lead PI and one other person – person supposed to actually DO something
- Use one of the following phrases in subject line: for your information, for your response, response needed by
- Put explanatory information on first line of text
- Add a link to alias list at the bottom of text so people can check who else got the message; sort alias list by site
- Develop WWW page that lists who has responded to each specific message
- Request replies in outlook
- Set mail response when out of town

As an aside, there was a request for information on how sites are organized. Waide will accumulate and summarize organizational charts for all sites.

EPA ecological effects of atmospheric deposition proposal – Mills, Lambert, Hopkinson, K. Jones, Gross, Grimm, Mark Williams (chair)

There is an opportunity to get funds from EPA to synthesize LTER data on ecological effects of atmospheric deposition. NET organized a working group to lead this initiative. Mark Williams and Charlie Driscoll are summarizing ideas for this project.

EPA could provide approximately $150K over next three years. Money probably will be used for a post-doc to bring data sets together. The LTER Network has intensive data on N deposition to complement extensive data. NCEAS may cooperate by funding a working group. The project will collect no new data, but will collate and synthesize existing data. This could lead to an NIS module for N deposition, but this would require support for information management. We could also identify data gaps for future proposals to EPA.

Publications Committee

Dave Coleman wishes to step down, and recommends Phil Robertson as new chair. This recommendation was approved unanimously.

Network Budget Redux

The major issue discussed was whether resources could be diverted from existing activities to expanded synthesis and NIS efforts. The point was made that the budget should be zero-based for each task. In addition, there should be strong correspondence between activities in the proposal and goals of the White Paper. In addition, the priorities survey should be reflected in the NET proposal.

It was suggested that the CC and EXEC committee could be more deeply involved in the budgeting process, but time constraints limit that possibility. In addition, NET responds to NSF as well as CC and also has leeway to pursue independent tasks.

Henry Gholz commented that the discussion provided insights into how to look at a budget. There is lots of support for NET activities, which are not seen as detracting from sites but rather looking beyond sites at network. There are restrictions in the Cooperative Agreement on what NET MUST do that prevent us from starting from scratch. The bottom line expectation regarding the NET budget is step increase similar to sites; things above that need to be clearly justified and sellable up the line. Getting a strong sense of network priorities and rationales is critical.

Kay Gross concluded the discussion by pointing out that the network has grown by 33% since the last NET proposal and the proposed budget is still only 10-12% of total program costs, which is reasonable for management of such a

large program. The CC should not micromanage, but rather should thank NET for doing a good job of predicting where we will be in 6 years.

MiniSymposium at NSF in February

Nancy Grimm delivered a brief report on the successful science presentations at NSF. The Executive Committee will identify science theme for next February. In addition, Sonia Ortega is organizing an education minisymposium targeted at EHR, non-BIO directorates and agencies involved in environmental education.

White Paper

Gus Shaver reviewed the history of the development of the white paper. Comments from the 20-year review were largely positive regarding the White Paper, but suggested the development of a second document focusing on implementation and organizational steps needed. The Executive Committee needs input from the 20-year review, NSF response, and the CC to develop the second document. Thus, this will be a major item on the agenda for Niwot Ridge Meeting.
feedback from committees

Science Themes

There are already science themes selected for the next three years. The CC wants a mechanism to detach science themes from sites hosting meetings. We should initiate a call at the fall meeting for science themes for 2005.