

## **Workshop to promote synthesis products from the EcoTrends project**

**Rational and goals.** The EcoTrends project was initiated in 2004 as a multi-site, individual investigator project that subsequently expanded into a network-wide initiative that directly supports the Decadal Plan and ISSE. The EcoTrends project is *the* major synthesis product in the Decadal Plan, and provides a key link between long-term data sets from all 26 LTER sites with data from an additional 24 long-term sites funded by other agencies (<http://www.ecotrends.info>). At present, the EcoTrends project has > 1200 datasets on climate, biogeochemistry, disturbance, and biotic responses as well as >10,000 datasets at the county level for human population and economy data. A book describing these datasets will be submitted for publication this fall after the data have been verified and checked by the individual sites and PIs. In addition, a first-generation web site containing these data was recently released. Given the significant progress in accumulating, verifying, and posting the data from the EcoTrends project, there is now an excellent opportunity for two new directions based on these data: (1) synthesis products to be generated that will further encourage the direct involvement of all LTER sites in EcoTrends, and (2) a critical assessment of the current status of the web page with the goal of providing input to future developments that will enable and promote synthesis products. Our goal is to address these two new directions with a meeting between an expanded and revamped EcoTrends editorial committee and the LTER Network Information Systems Advisory Committee (NISAC). We request support (\$34,500) for 39 people to attend a 2-day meeting to address this goal and to generate multiple synthesis products that involve all LTER sites.

**Mechanism, timing, and participants.** We propose to hold one 2-day meeting in fall-winter (2008) with participants from as many sites as possible selected to represent one of five synthesis themes (patterns in productivity and biodiversity, state changes and threshold dynamics, response to disturbances, patterns in landuse and human populations, patterns in biogeochemical responses). We will solicit names and credentials of potential participants from the lead PI from each site for each theme. Invitees will be selected based on criteria such as: experience in collecting or analyzing long-term data relevant to the theme of interest, interest in writing synthesis papers or proposals, and ability to work effectively in a group setting. Theme leaders will be invited from the pool of applicants that includes current EcoTrends editorial committee members. We will attempt to include all sites and members of under-represented groups including young professionals with state-of-the-art analytical skills when determining invitees. Final decisions on invitees will be made by the chair of the EcoTrends committee (Peters) and chair of NISAC (Sheldon) with input from the other committee members. Meeting with NISAC will allow a critical assessment of the web page capabilities and potentials by scientists, IMs, and LNO personnel with technical expertise. We propose to hold a 2 day meeting to allow time for each thematic group to meet individually on science questions, and to meet with NISAC members to determine the graphing, viewing, and analytical needs of the web page relative to the science questions.

**Expected products.** There are two products expected from this meeting. First, we expect that each thematic group will work on at least one synthesis manuscript during the

meeting with subsequent revisions handled via conference call or PolyCom VTC. Although the EcoTrends editorial committee has viewed the data for each theme in order to write a short chapter in the EcoTrends book, there is great potential for additional analyses and syntheses to be conducted. Additional data have also been included in the EcoTrends database that will not appear in the book, but will be available for analyses. The workshops at the ASM in Estes Park (2006) and at the SC in Portland (2007) based on EcoTrends provided preliminary information and identification of potential attendees. However, the EcoTrends project has changed considerably since then and now is an ideal time for the project to engage with a larger group for synthetic analyses. Second, we expect to complete a critical analysis of the EcoTrends web page taking into consideration the science questions that can be addressed using the database. The initial EcoTrends web page contains some, but not all, of the features needed to take advantage of the wealth of information in the database. A workshop that combines NISAC expertise with science teams would allow for this critical assessment with recommendations for future enhancements to the webpage. This exercise will also help NISAC and LNO identify and prioritize additional cyber-infrastructure needed to support integrative network-level science projects over the coming decade.

**Budget and justification. Total request = \$34,500.**

We request funds for one 2-day meeting for 30 people at an estimated cost of \$1000 per person (\$500 airfare, 3 nights lodging @\$85/night= \$255, meals for 2 full days and 2 travel days @\$40/day = \$160, miscellaneous expenses for the workshop average \$85 per person) for a subtotal of  $30 * \$1000 = \$30,000$ .

We also request support for 9 people from NM (Peters, Laney, Ramsey, Vanderbilt, Pockman, Collins, Waide, Servilla, Brunt) at a reduced cost of \$500 each on average ( $9 * \$500 = \$4500$ ) for a total request of \$34,500. The meeting will either be held in Las Cruces or Albuquerque, NM to minimize travel costs since many of the EcoTrends and NISAC personnel are in one of these two locations.

Submitted by:

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