

LTERR Supplement 0102 - Palmer Long-Term Ecological Research
REU, Schoolyard and Information Management Development

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Introduction

This proposal is a supplement to the original LTER Palmer proposal (Smith et al., 1996) and, as with past supplements, incorporates Antarctic marine science and emphasizes the concept of long term research.

Schoolyard Education: Sustaining Teacher-Researcher Partnerships

Support for education outreach is requested to develop interaction with local schools and education partnerships, to sustain existing teacher interactions and projects as well as to gather multimedia materials for outreach efforts such as online presentation, conference presentation, and network synthesis. An overview of Palmer LTER education outreach efforts is provided online at (<http://www.icesb.ucsb.edu/lter/education>) including working groups, publications, milestones and teacher-on-board programs.

TO DRAW UPON TEACHER EXPERTISE, we will continue to work to identify teachers in schools where Palmer LTER PIs are already involved as parents or mentors. Existing teacher-researcher interactions have been largely determined by partnering with TEA program selected teachers regardless of geographic location. Local individual educators identified in an earlier Palmer LTER education forum (Baker et al, 1998) will be contacted as potential Palmer teacher-researcher partners while technology and education centers identified will be re-contacted to assess potential synergies.

TO PARTNER AND COORDINATE WITH ESTABLISHED PROGRAMS, we will continue ongoing collaborations with developing Schoolyard LTER (SLTER) and the established NSF Teacher Experiencing the Arctic and Antarctica (TEA). Participation in the All Scientist Meeting Schoolyard Workshops and with the SLTER Working Committee identified potential site-coordinated activities as well as education-information management partnership opportunities. As host for the December00 Schoolyard Meeting at the Supercomputer Center and as an SLTER working committee member, the Palmer LTER Information Manager and Education Liaison Karen Baker, created and maintains a working web page for SLTER activities (<http://www.icesb.ucsb.edu/lter/education/slter>).

A Palmer Education Outreach poster was presented at the August 2000 LTER All Scientist Meeting (Baker et al). Both data and images will be needed to support additional activities and conference presentations at education forums such as the Ecological Society of America education symposium (August 2001).

The TEA program provides support for teachers to work with scientists in the field. This requested LTER supplement will provide the support needed to continue communications with teachers who have interned with our research group and to develop the full range of field activities

inspired by teachers who have been in the Antarctic. Some of the activities initiated this year which appear promising for sustained support include:

- Digital photographs from Swanson field season (Nov-Dec 2000)
- Video segments featuring ice fish and penguin rookeries
- Palmer LTER Outreach Trunks to be augmented with pertinent education materials such as books, posters, videos, CD's journal publications, and artifacts

Karen Baker, Palmer LTER Information Manager and TEA Advisory Board member, will continue to interface with the TEA Program. Topics of common interest include communications among LTER sites and TEA, educational metadata extensions as well as program evaluation instruments. Past TEA participants began a suite of multimedia projects focused on the Antarctic ecosystem which will require further support to develop into ongoing outreach rather than one-time outreach activities. Support is requested to coordinate continued interaction with past TEA participants mentored by Palmer LTER, specifically last-year's participant Bill Swanson. Continuing activity will build on his internship last fall at UCSD and UCSB using the extensive digital photographs, videos and artifacts collected during past teacher field activities.

MULTIMEDIA EFFORTS

Digital photographic materials involving landscape, seascape, and artifacts will be collected into a single location. These products will be sorted, catalogued and annotated by Swanson during a return visit to UCSD and/or UCSB and with the help of existing staff familiar with multi-media equipment and materials. Although the Palmer brochure completed last year provides a glimpse of Palmer activities, a Palmer LTER overview slide presentation for use by education partners will be developed.

Digital image materials will be developed in such a way to coordinate with existing Network Office image collection activities. Thus the use of Extensis Portfolio Image software and the exchange of materials with the LTER Network Office will be explored. Coordination with the Schoolyard Activities will involve selected data sets and their annotation within a specified thematic context.

The ultimate goal is to establish self-sustaining schoolyard LTERs that include classroom materials, field measurements, data handling and inquiry-based analyses incorporating long-term data sets from other schools and/or other LTER sites. Sustainable schoolyard LTERs require a high level of understanding, cooperation and organization among LTER PIs, local administrations and local teachers. We plan to continue use of the very practical "sustainability through compatibility" strategy by focusing on partnerships where we can augment existing classroom curricula and education programs.