#### **FOUNDED 1968**



# OBFS NEWS

Volume 2004, No. 2.

#### The Newsletter of the Organization of Biological Field Stations

Issued December 2004,

Editor: David S. White, Hancock Biological Station

Executive Board (Tel	rm of office, E-mail address)
President	Sedra Shapiro
(2004-2006 - sshapiro	@sciences.sdsu.edu)
Vice President ``	Robert Wyatt
(2004-2006 - wyatt@	wcu.edu))
Secretary-Treasurer	Claudia Luke
(2002-2005 - cluke@	sciences.sdsu.edu)
Member at large	Beth Cline
(2003-2005 - e.w.cline	e@csuohio.edu)
Member at large	Larry Weider
(2004-2006 - Ijweider	·@ou.edu))
Past President	Eric Nagy
(2004-2006 - eric.nag	gy@virginia.edu)
Editor	David White
(2003-2005 - david.wl	hite@murraystate.edu)
Network Coordinator	Mark Stromberg
(2004-2006 - strombe	r@socrates.berkelev.edu)

#### **Standing Committee Chairs**

Administration and Facil	ities Philippe Cohen
Education	(acting)Jan Hodder
International	Rick Wyman
Public Relations	(acting)Sedra Shapiro
Research	(acting)Hilary Swain
NSF Relations	Art McKee
Program	Robert Wyatt
Small Field Stations	Beth Cline
Data Management/Netw	orking Mark Stromberg
AIBS Representative	Eric Nagy

OBFS News is sent electronically as a PDF file to all members in good standing. Hard copies will be sent only to members who specifically request them. A reminder to specifically request hard copies will be emailed to all members in January 2004. The exception will be candidate biographies and the voting cards that will be sent out by hard copy each December. OBFS News will be available also at the OBFS Web Site as a PDF file.

# Check out the new and improved OBFS Web Site

http://www.OBFS.org/

## Table of Contents Volume 2004, No. 2

New Station Members	2
Request for OBFS Photographs	2
Attendees at 2004 Annual Meeting	3
Minutes of the 2003 Annual Business Meeting	3
Executive Board Meeting	3
OBFS Strategic Planning	4
OBFS Business	5
Committee Reports	6
NSF Report	9
Financial Report 2003-2004	11
Adopted Operating Budget 2004-2005	12
OBFS Display & Data Management Workshop	
Reports	12
Improvements in Facilities, Communications,	
and Equipment for Research at Biological	
Field Stations and Marine Laboratories	13
Haikus	13
Ye Olde Official OBFS Ballotte, 2004	
Member at Large	14
Secretary-Treasurer	15
Editor	16
2005 Annual Meeting – Coweeta/Highlands	16
OBFS Notes, etc.	17
NEON update	17
CUAHSI update	17
OBFS Directory	18

OBFS News (ISSN 1533-2195) is an official publication of the Organization of Biological Field Stations. David White edits it with assistance from Gerry Harris at the Hancock Biological Station on Kentucky Lake. OBFS News is published twice per year, usually in December and May. The deadlines for articles submissions are November 1 and April 1, respectively. All articles for inclusion may be mailed to the Hancock Biological Station, 561 Emma Drive, Murray, KY 42071 (USA) or may be sent via E-mail to david.white@murraystate.edu, Phone 270-474-2272, Fax 270-474-0120. Additional or missing copies of OBFS News and copies of some back issues may be obtained from the editor. Copies also may be found at http://www.OBFS.org.

#### **OBFS WELCOMES NEW MEMBERS FOR 2004**

#### Center of Ecology and Environmental Technology

Susan Mopper University of Louisiana Lafayette LA 70504-2787

## Columbia-Greene Community College Biological Field Station at the Cohotate Preserve

Jon Powell, Director 4400 Route 23 Hudson NY 12534

#### **Estacion del Mar Cortez**

Jose A. Mercade Glendale Community College Glendale CA 91208

#### Field Research Station

Amanda Camp and Kent Rylander P.O. Box 186 Junction TX 76849

#### **Forbes Biological Station**

Stephen P. Havera PO Box 590 Havana IL 62644

#### **Ford Forestry Center**

Glenn Mroz and Jim Schmierer, SFRES HCR 2 L'Anse MI 49946



## Galapagos Academic Institute for the Arts and Sciences (GAIAS)

Susan Carey
Universidad San Francisco de Quito
San Cristobal, Galapagos,
ECUADOR

#### **Gobabeb Training and Research Centre**

John R. Henschel

Desert Research Foundation of Namibia
Walvis Bay
NAMIBIA

#### **Holt Research Forest**

Jack Witham 508 Old Stage Road Arrowsic ME 04530

## Merry Lea Envir Learning Center at Goshen College

Luke Gascho P.O. Box 263 Wolf Lake IN 46796

#### Santa Rita Experimental Range

Mark Heitlinger Campus Ag Center, 4101 N Campbell Tucson AZ 85719

#### **William Beebe Tropical Research Station**

Phil Schaeffer Caligo Ventures Armonk NY 10504

#### **REQUEST FOR OBFS PHOTOGRAPHS**

Do you have any photographs or slides from OBFS Meetings or events from past years that you would be willing to share? I am seeking photo donations to become part of the OBFS Photo Archive file. Former OBFS Historian Robert (Bob) Fisher sent me a large box full of photographs, slides, and albums, consisting of approximately 500 slides, 1,000 prints, and various duplicate prints. These slides and photos are now stored at Washington University's Tyson Research Center, near St. Louis, Missouri.

Historically significant and other appropriate photos and slides will be scanned, as time allows during the coming year(s). They will then be added to the OBFS web page, and will be viewable from the "Gallery" link. These could also be made available as prints or enlargements to OBFS members, upon special request.

I am especially seeking older slides or photos, those from the OBFS "early years" (late 1960s and early

1970s) which may help document some of the early OBFS meetings, activities, and members/officers. However, please feel free to share images from recent OBFS meetings, as they will all be a valuable part of the OBFS historical archives, and could be used to provide examples of OBFS success stories. Your photos and/or slides can be returned to you, after they are scanned, if you wish.

My Email address, phone number, and mailing address are below.

David A. Larson, OBFS Historian Field Station Manager Washington University Tyson Research Center P. O. Box 258 Eureka MO 63025 Phone: 314-935-8431

Email: dlarson@biology.wustl.edu

Fax: 314-935-8433

#### ATTENDEES AT 2004 OBFS ANNUAL MEETING

#### NAME **AFFILIATION**

Anderson, James Anderson Jr., John P. Armsby, Michelle Bogdanowicz, Christine Boyer, Ed Brown, Jeff Cline, Ellizabeth Cohen, Philippe S. Connors. Peter G. Consolatti, Nina Dziadyk, Bohdan (Bo) Ehmann, William J. Faloon, Kristine Felix, Faerthern Folk, Monica Goldman, Jeffrey Greene, Janice Hamilton, Michael Hansen, Ross Hardy, Laura Hodder, Jan Hufty, Mary P. Innes, Jim

Jones, Drew Kim. John

Kloeppel, Brian

Larson, David

Lawrenz, Ron Lohr, Susan

Love, Lela P.

Luke, Claudia

Lvmn. Nadine

Marshall, Samuel D.

Lyman, Ed

University of Mississippi Aton Forest **Shoals Marine Laboratory Shoals Marine Laboratory** Boucher, Virginia (Shorty) UC Davis Campus Reserves Kino Bay Center/Prescott College Sagehen Creek Field Station Woodlake Environmental Field Stn. Jasper Ridge Biological Preserve Bodega Marine Laboratory MSU Kellogg Biological Station Green Wing Laboratory Sigurd Olson Environmental Inst. **Shoals Marine Laboratory** Sagehen Creek Field Station Disney Wilderness Preserve **AIBS Bull Shoals Field Station UC James Reserve** Shoals Marine Laboratory Hardy, Laurence M. (Mac) Ouachita Mountains Bio Station **Ouachita Mountains Bio Station** Oregon Inst. of Marine Biology Archbold Biological Station

> Tyson Research Center St. Croix Watershed Res. Station Lohr Associates, Inc. Archbold Biological Station SDSU Santa Margarita Eco.Res. Division of Marine Fisheries **ESA**

Teakettle Experimental Forest

SDSU-Field Station Programs

Coweeta Hydrologic Laboratory

Hopkins Forest - Williams College

U. Cincinnati

NAME

**AFFILIATION** 

LTER Network Office

UC Systemwide NRS

Davis Campus Reserves

Pymatuning Laboratory

Flathead Lake Biological Station

Kino Bay Center/Prescott College

James H. Barrow Field Station

UC NRS Deep Canyon Res Cntr

UVA Mountain Lake Bio Station

H.J. Andrews Experimental Forest

NSF/Division of Bio Infrastructure

Shoals Marine Laboratory

McKee, Arthur Meltzer, Lorayne Michener, William Mock, Janice Morin, James G. Muth, Allan Nagy, Eric Nakayama, Violet O'Connell, Kari Plehn, Jim Poston, Muriel Quinby, Peter Risch, Thomas Savino, Jeffrey Selzer, Gerald Semans, Sheila Shapiro, Sedra Simons.David

Siri. Paul

Slavik, Karie

Arkansas State University Lake Erie Center NSF/Division of Bio Infrastructure State Coastal Conservancy SDSU-Field Station Programs Ouachita Mountains Bio Station Commonweal Ocean Policy Prog. U Michigan Biological Station Smiley, Kimberly, Rose, Sonrisa

Smiley, John Sponberg, Adrienne Stander, Ryan Stromberg, Mark R. Swain, Hilary Taylor, Dennis Weider, Lawrence Whipple, Amy White, David White, Marshall Wilson, Dawn S. Wyatt, Robert Wyman, Richard L. Yohn, Chuck

UC White Mntn Research Station UC White Mntn Research Station AIBS Director of Public Policy **Ecology Research Center UC Hastings Reserve** Archbold Biological Station James H. Barrow Field Station University of Oklahoma Bio. Stn. Merriam-Powell + Walnut Creek Hancock Biological Station LTER Network Office Southwestern Research Station Highlands Biological Station Huvck Preserve

Raystown Field Station

## Minutes of the Annual Business Meeting of the Organization of Biological Field Stations, Shoals Marine Laboratory, Portsmouth, New Hampshire, September 16-19, 2004

Thursday, September 16, 7:30-10:00 pm

#### **Welcome Address- Sedra Shapiro**

President Sedra Shapiro called the meeting to order with the Tom Callahan Memorial Big-Assed Gavel. The following members of the Executive Board were present: Past-President Eric Nagy, Vice President Robert Wyatt, Secretary Treasurer Claudia Luke, Editor David White, Network Coordinator Mark Stromberg, and Members at Large Nina Consolatti and Larry Weider. Sedra Shapiro welcomed attendees and highlighted the value of the meeting for enhancing communication among our members.

Introduction to Shoals Marine Lab - Christine Bogdanowicz

Christine provided attendees with information and logistics about the meeting.

#### **Executive Board Meeting**

The Executive Board met from 8:30 pm to 10:00 pm. All members were present. discussed included tying the annual congressional briefing to OBFS goals in the strategic plan, strategic planning initiative schedule and effort, future meeting location proposals, clarifying role of OBFS in supporting NEON, concern regarding funding for FSML, the need to update OBFS materials, and need for transferring information and materials between old and new executive board members. The outcomes of the meeting were that the Board (1) felt the strategic plan was not ready for adoption and would like to review it to provide input for further refinement, (2) affirmed support of NEON activities, and (3) affirmed

OBFS's intent to continue and expand its relationship with AIBS and activities concerning Congressional Briefing Day.

#### Friday September 17, 9:00 – 10:15

One-third of the attendees (including President Shapiro) were not present because morning seal viewing tour had not returned. VP Robert Wyatt opened the meeting and asked committee chairs to announce topic of committee meetings.

#### Friday September 17, 10:15 - 10:30

President Shapiro formally began OBFS Business meeting.

National Environmental Observation Network (NEON) Update - Bill Michener, LTER

Two days ago, Bill Michener and Jeff Goldman's NSF proposal for a 2-year NEON planning project was funded for \$2 M. The NEON Inc website (http://www.neoninc.org/) used to coordinate this project is on-line and has a downloadable copy of the proposal. NEON is a program that seeks to draw funds from the MREFC account at the National Science Foundation (NSF). The account was originally set up for massive capital investments that involve large teams of scientists and that are expected to transform science. NEON seeks funding from this account to transform environmental research by studying processes on a geographically-distributed continental scale. One of the difficulties has been to clearly identify the ecological questions that could be addressed by a large investment in infrastructure. A "big question" committee led by David Tillman reinvigorated NEON by laying the groundwork for the kinds of questions that could be addressed. Congress is now in support of NEON should a credible plan be developed. NEON funding would range from \$500 M to \$1 B. The program would incorporate a build-out phase and have a 30-year life span. If successful, additional NEONs would be funded.

Planning Project Overview - The current funded planning grant to develop NEON questions and distribution of infrastructure is a 2-year design process based on a series of consortiums organized into a Science and Education planning group and a Networking and Informatics planning Committees within these planning groups include sciences, education, facilities and infrastructure, and consortium development. The Science and Education Plan will be completed in 13 months and will be community driven and transparent. It will meld IBRCS process (AIBS) and NRC process (focused on sciences). The Networking and Informatics Baseline

Plan will make data accessible for use by many and take advantage of the Terragrid network. Bruce Hayden and Bill Michener are Co-Pls and will head up the Science and Education and Networking Information groups respectively. They will work with consultants and AIBS (Jeff Goldman) to carry out the project. All committees will meet concurrently in January, March and June 2005 at locations scattered across country.

OBFS Involvement – OBFS is encouraged to participate in the planning effort in a number of ways:

- Contribute to regional NEON meetings
- Self-nominate and /or nominate others to serve on NEON committees and subcommittees. Criteria for participation include exceptional and relevant expertise, must play well with others, and can attend every meeting.
- At large participation via web
- Peer review: reference design, NEON Inc.
- SUPPORT NEON!

#### Friday September 17, 10:30 -11:20

## Report on OBFS Strategic Planning – Susan Lohr, Art McKee, and Eric Nagy

In February 2003, OBFS submitted a planning grant to NSF for a one-year strategic planning effort. The effort was funded in August 2003 and a web survey was distributed to solicit input on OBFS goals and priorities from the membership. The survey was followed by input from attendees at the annual meeting in September, a web forum discussion, and a weekend planning meeting in January 2004. Drafts of the strategic plan were circulated to the Executive Board and general membership.

A lot of ideas were gathered from the community, many overlapping, and were summarized and condensed down to manageable number. The next step is to start prioritizing our goals and make the document more practical. The current document is still a working draft and needs our input. During this meeting, the team is soliciting additional input from attendees regarding committee structure and commitments and funding issues. This additional information will then be incorporated and the document sent out to the membership for review.

One item presented for Susan for consideration was how to address an "overly" ambitious strategic plan. These could include (1) extend timeline to 20 years, (2) identify half as many 5-year tasks, (3) phased and/or merged committees, and (4) make personal time commitment: chairs 10 hrs/mo and members 5 hrs/mo. Monthly meetings is a possibility.

Discussion from the floor indicated that attendees generally supported an extended timeline

as long as there was a plan to revisit the plan every 5 years. Other comments on the plan included: the strategic plan takes a committee-oriented approach; member would like to see how the priority goals cluster relative to responsible groups (exec board to committees); there are lots of committees, and would require over half of the organization be on committees; recommendation that committees be limited in size to 2 or 3 because they would be more productive; specific outlines for each committee would be helpful for engagement; the plan is lacking land stewardship focus and role of field stations in improving education and learning and is not high enough on the priority list; missing university administration as part of our outreach to stakeholders; encourage everyone to review their strategic plan relative to OBFS strategic plan to align goals; recommend include future strategic planning in the plan; some communities are associated with a goal and some not. Also some discussion ensued regarding where values, such as transparency and diversity, should be incorporated in the plan - as a goal or a policy to be incorporated in all activities? To provide some clarity for level of effort and organization, Susan Lohr will develop an appendix during this meeting with list of each committee and their specific tasks and how they relate to the plan's goals (see meeting notes below).

Friday September 17, 11:15 – 12:30 Concurrent Committee Meetings

Friday September 17, 1:30 – 4:30 Concurrent Committee Meetings

Friday September 17, 4:30 - 6:00 pm

#### **OBFS Business**

Historian Report - David A. Larson

Former OBFS Historian Robert (Bob) Fisher has sent 4 cardboard file boxes of OBFS papers and files to David Larson. Bob also sent one box full of photographs and slides. The 5 boxes are now being stored at Tyson Research Center. David has begun to sort through the 5 boxes, and is creating an inventory list of items stored in each box. Appropriate photos and slides will be scanned, and added to the OBFS web page, as time allows during the coming year. These files and photos will prove useful to help fill in information gaps, and provide examples of OBFS success stories. David Larson welcomes any OBFS photo donations (old or new), and any comments relating to the OBFS items now stored at Tyson.

A group photograph was taken by David Larson, in front of the "Kiggins Commons" building on Appledore Island. It was taken with a Casio QV-

300EX digital camera, a 3.3 megapixel model. Photos of other events during the meeting were also taken. The resulting photo images are high-resolution, and are stored on computers and backup CDs at Tyson Research Center.

NSF Education report- Jan Hodder and Hilary Swain

In 2002, Mike Klug, Jan Hodder and Hilary Swain received an NSF grant to develop a report entitled, "The Role of Biological Field Stations in Education and Recruitment into the Biological Sciences." The report was prepared by workshop participants at a workshop held in Washington D.C. in February 11-12, 2002. The primary goals of the workshop were to explore educational opportunities that capitalize on the unique learning environment of FSMLs and the role that FSMLs can play in enhancing student diversity in the biological sciences. Important features of FSMLs that were identified at the workshop included: long-term research efforts that facilitate repeated teacher-student involvement, experiential learning opportunities, well-developed organizations that allow sharing successful learning and recruitment modes, wide geographical distribution of sites that may also be close to urban and suburban areas, and access to areas of unusual beauty.

Sessions at the workshop explored the topics of facilitating field-based experiences for K-12, undergraduates, and the community at large. Participants discussed current conditions at FSMLs, challenges and barriers to participation by the educational group, strategies that FSMLs may take to enhance participation and increase diversity of participants, what is needed to research and evaluate needs, and recommendations for the FSML community and NSF.

The full text of the report is online at <a href="https://www.obfs.org">www.obfs.org</a>. A major goal of the report is that it is useful to your field station. Distribute this report to your Department Head, Dean, local curriculum coordinator for K-12 program, faculty members using you station, local community college, county commissioners, local movers and shakers etc. Hilary and Jan will mail sets to other national organizations (e.g., LTER, DOE sites, National estuarine research reserves, national association of biology teachers, etc.)

#### Investment Committee Report -Philippe Cohen

The roughly \$37,000 that OBFS current holds in the Citizens funds did very poorly. Socially responsible green funds made on average about 10% this year. Our funds were at negative 1.5%. The committee will find out what is happening with these funds, allow 6-month probation and, if not satisfied within that time frame, will make transfer to other green funds. The committee also recommends that

the bylaws be changed to reduce the responsibilities of the investment committee, which currently has responsibilities to audit, fundraise, write grants and in general act as a development group. The fund raising responsibilities should not be "housed" in one group since these efforts must be tied to the activities generated by other groups.

#### Report of the Secretary Treasurer - Claudia Luke

A MOTION made to accept the minutes from the last annual meeting was approved unanimously. As of September 2004, total membership was 208 members with 176 station members and 32 individual members. Eleven new members joined this year. Membership in OBFS has increased since 1981 from around 60 to over 200 (a bar graph of memberships during the time period was presented). The administrative database developed by Mark and Andrew Stromberg has had a few additional improvements to help manipulate the database for use as mailing labels and other mail merges. Please remember that the administrative database is independent of the information displayed on the website for individual field stations. Current administrative contact information was circulated for editing by attendees. A review of all historic OBFS newsletters allowed the Secretary to identify Executive Board officers and meeting sites since the inception of OBFS. A few mysteries still remain. The list was passed on the David Larson and as soon as these issues are resolved, will be posted to the website.

The financial report (August 31, 2003) for Operating and Restricted Funds follows these minutes. Operating Fund: The balance as of August 31, 2003 was \$34,435.50 up from \$30,856.04. Restricted Fund: This fund was established in 1998 and is managed by the Investment Committee (Philippe Cohen - Chair, Peter Connors, and Hilary Swain) and is currently divided between two green funds (Citizens Index and Citizens Emerging Growth Funds). The balance in the Restricted Fund as of August 31, 2004 was \$42,945.14, up from \$38,219.47 on August 31, 2003 after earning and capital gain/losses, auction proceeds, and member donations. The auction produces money for the restricted funds each year. Many thanks to the generous contributions of auction items, the generous bidding, and the creative efforts of the auctioneers.

#### Audit Report - Robert Wyatt)

Vice President Wyatt reported that his review of the financial records for this fiscal year showed that all expenditures were properly accounted for.

A MOTION made to accept the Operations and Restricted Budget reports was approved unanimously by the membership.

#### **Committee Reports**

Data Management/ Networking - Mark Stromberg

The committee reviewed strategic planning goals to determine how to translate these into website services. These included developing tools to conduct provide real-time conferencing surveys, and capabilities. Presently the OBFS web page gets about 30,000 hits per month and the page that most people are reading is the job page. Mark is looking for a group of support staff to upload information to the website. Check out the new OBFS website now online (www.obfs.org). It has a new look and includes a revised display and interface for the field station databases.

#### Education Committee - Robert Wyatt

In the absence of an officially appointed chair, Robert Wyatt served as interim chair and agreed to keep the minutes. There were 15 people in attendance. It was noted that OBFS members represent a tremendous range of diversity with respect to educational programs, which creates opportunities as well as challenges.

Discussion of the OBFS draft strategic plan highlighted that the plan is not explicit about how we might achieve the laudable goal to "be the primary advocate for enhancing resources for field science and field-based scientific education." It was generally agreed that the plan did not articulate clearly enough the tasks that the Education Committee should take on (in contrast to some other areas, in which the tasks are very clearly listed).

Jan Hodder reported that a "New Horizons" survey of educational programs at field stations, done in 1985, has not been updated and is in dire need of being repeated and improved. Based on her recent experience on an NSF-sponsored study, she suggested two initiatives: (1) an assessment of the current level of educational activity at field stations and marine labs, including minority participation; and (2) the development of uniform assessment procedures that will reveal effective strategies in education that can be shared among OBFS members and others.

There was considerable discussion of the need to improve communication and sharing of experiences among field stations on issues such as how much various educational alternatives cost and how instructors at field stations can be adequately compensated for their time. It was also argued that administrators on campus need to be encouraged to take a broader view of the impact of what they regard as "costly" field and lab experiences for students. For

example, the role of such experiences in recruiting students to major in field sciences and in retaining students should be factored in, but seldom is this considered.

Muriel Poston argued that field stations need to link up with community colleges in their area to help offer field experiences that students might otherwise miss out on. She pointed out that many students choose a major before they transfer to a four-year college; hence, their early experiences can be determinative. She also recommended that field stations consider offering opportunities for community college faculty to receive additional experience/training in field sciences at field stations and marine labs. These might take a form similar to REUs (for undergraduates) or RETs (for K-12 teachers).

#### NSF Relations - Art McKee

The main focus of the committee was to come up with ways to reaffirm the FSML competition. We agreed to put together a package to be presented to NSF program officers. A large portion of FSML funding last year was delayed until this fiscal year. In addition, the level of funding has not matched inflation. The NFS relations committee will be submitting a request to OBFS members for information to support the package to NSF in the next month or so.

#### Administration and Facilities - Philippe Cohen

The committee had a broad ranging discussion that initially began with the sharing of experiences with unfunded management mandates. That is, when either government regulations or permitting agencies result in requirements for which there are little or no funding support. How does one address these sorts of situations and how does one navigate the court of public opinion? Many of the examples ranged from mosquito control due to the threat of West Nile Virus, to the construction of new facilities. This eventually became a discussion of how increasingly field stations are face with urban/wildland interface issues. The group consensus is that ultimately, many of these problems are only successfully addressed through outreach and education, and that there can never be too much of either. Discussion ended with discussion of perimeter issues and easements, and the complex political, conservation, and public issues they entail.

#### Public Relations - Chuck Yohn

Sedra Shapiro approached the committee with a proposal to use a graphics artist to create a standard graphics "look" for OBFS. This look not just encompasses the logo, but also color schemes/patterns and overall material look to create a distinctive, uniformly recognizable gestalt for OBFS

public interface. Materials that would ultimately be affected include: displays, course poster, brochures, newsletter, website, NSF Reports, and OBFS Letterhead. The new "brand" products should be easily reproducible and accessible. The committee recommended that Sedra begin working with a graphics artist on this project and that \$5000 dollars be allocated to the project. The products will be submitted for approval to the executive committee and membership.

Mark Stromberg reported that the OBFS Field Courses poster produced relatively few hits to the website. We noticed that hits from the poster spiked in February, just after the poster was sent out and then dropped to zero hits. It may be possible that the posters are depleted of the pull-off tags after one month. Nina reported that the current usage of the OBFS display is very low (only two instances this year). We concluded that we need to promote the display more aggressively.

A higher national profile for OBFS as outlined in the strategic plan will require a greater emphasis and sophistication in our PR efforts. It will also require closer coordination with the executive committee. We make the following recommendations: (1) PR committee be combined with government relations committee and reconstituted as a public affairs committee. Within that committee, individuals or task pairs could handle the aspects media production, media relations, lobbying to provide a coordinated professional public image; (2) the existing committee does not feel that it currently has the committee commitment or composition of professional expertise to help in the transformation of OBFS. We discussed the possibility of obtaining this help for the organization. One suggestion is that the committee write a capacity building grant to provide support for a part-time PR person in the OBFS office if such an office is created.

#### Friday September 17, 4:30 - 6:00 pm

New Facilities Slide Show and Next Year's Host Station

Next year's meeting will be Sept 22-25<sup>th</sup> cohosted by **Coweeta Hydrological Lab** (Brian Kloeppel) and **Highlands Biological Station** (Robert Wyatt) both located in Macon County, North Carolina. Pre-meeting field trips will include interpretive hikes in the White Mountains including tour of the waterfalls or a whitewater rafting trip. More information available on the OBFS website.

Sagehen Field Station – Jeff Brown. This station, founded by Starker Leopold, is located in the Sierra Nevada and administered by UC Berkeley. It is the 35<sup>th</sup> reserve in UC Natural Reserve System. The

field station runs the Sierra Snow Lab, which has oldest snow dataset in the country.

Ouachita Mountains Biological Station – Laurance Hardy. Dr. Richard Speairs could not be here because he has contracted West Nile virus. The reserve consists of 380 acres over two sites and is surrounded by USFS lands. Habitats are predominantly mixed deciduous forest and facilities are comprised of two buildings that contain a dorm, classroom, office and library.

Jasper Ridge Biological Preserve – Philippe Cohen. The field station has new facilities. Data regarding the performance of the facilities is available on their website.

Hastings Reservation – Mark Stromberg delivered a new building to the reserve with a difficult delivery that involved making bridges and jacking up a moving truck.

Kino Bay - Ed Boyer. The field station has new facilities, a new truck, and new personnel and is located in Mexico on the Sea of Cortez

#### Saturday, September 18, 9:00 - 10:30 am

#### **Committee Reports**

Small Field Stations Committee - Beth Cline

Fourteen persons attended the meeting. A result of a discussion concerning the definition of a small station was that small stations are those that have extremely limited resources (e.g., personnel (perhaps just one person), funds). Acreage may vary but often these sites may be one person away from elimination. The purpose of the Small Field Station Committee is to assist new stations, act as a "support" group, and exchange experiences and advice (e.g., how to conduct research and education programs on limited scale). In reviewing the strategic plan, the Small Field Stations Committee felt that operationally, they were best suited to continue as a Working Group that would be part of the Operations Committee. As this working group, they would: (1) develop materials to present administrators with examples of small field stations, what they do, and the purpose they serve; (2) identify field stations within x miles as potential new members of OBFS and send information to the Membership Committee, and (3) perhaps form regional consortia of small stations. The committee also felt that a one-page summary of outcomes of the annual meetings that are relevant to small stations would be helpful for justifying meeting attendance.

#### International Committee - Rick Wyman

Rick and Art McKee visited Washington DC this year and met with congressional representatives, Smithsonian, and NSF staff in an attempt to find money for an international field station program. The

program would consist of a series of international meetings to bring field stations together from different countries. Rick is also developing a proposal to use university scholarships to bring international students to do work at field stations. Discussion from membership after Rick's report centered on how field stations could help international students. For example, many international students do not have money for housing or food while they are here. Archbold Biological Station is participating in a Conservation Biology GIS training program that is sponsored by ESRI. NSF's REU program may be another option for funding international student participation.

#### Research Committee - Hilary Swain

The committee highlighted areas of the strategic plan that would be the responsibilities of the research committee. The committee recommended focusing on national efforts (NEON and LTER) where there is clear and immediate need. They decided to incorporate transparency into this process by posting minutes of their meeting on the website. committee decided to focus on four areas: (1) data on research success stories from the field stations are needed. Hilary Swain, Beth Cline, and John Smiley agreed to form a working group to gather one story from each field station member over the course of the year. They will work with Mark to set up a form on the website to assist in this process. (2) Many field stations are not participating in the NEON process because they are intimidated by the process. The committee identified one OBFS volunteer from each of the regional NEON areas to call field stations in their region to attend the NEON planning meetings. (3) The committee decided to generate a list of nominations for the upcoming LTER strategic planning process. (4) A committee member brought up the issues of bioethics for conducting research at field stations. Anyone with existing policies about finding a balance between preservation and disturbance should post their statements on the research code link in the online Operations Manual.

#### Adoption of Budget for 2004-05 – Claudia Luke

I presented the proposed costs of various activities proposed by the membership and committees. Discussion primarily centered on the expenditure of \$5,000 for developing a materials for OBFS. After discussion from the floor, the membership decided to use the money to update and revise the OBFS brochure. The "look" developed for the brochure would be evaluated by the membership for incorporation to other OBFS materials. The membership specifically commented that they wanted to make sure the logo for the organization remained

"as is." Brochure revision will be organized by Sedra Shapiro.

A MOTION made to accept the proposed Operations Budget for 2004-05 was approved by the membership: all but one in favor and one abstaining.

#### Update on AIBS – Eric Nagy

OBFS is an organizational member of AIBS. Eric is our AIBS representative and attends council meetings on our behalf. As an organizational member, our membership receives AIBS reports every other week regarding issues and activities in Washington D.C. In addition, we attend annual council meetings and post a ½ page advertisement in Bioscience for free. (OBFS has a simple blurb about field stations that we do every year and is available to the membership for review and editing. Please see Eric if you would like to help with the ad). Several years ago, OBFS began contributing \$1,000 per year to support AIBS's public policy office. This amount increased last year to \$2,500. As part of this initiative, AIBS provides support and training for OBFS members to contact and meet with their congressional representatives in Washington. For the past two years, OBFS has participated and found the event hugely valuable. This year Sedra Shapiro, Eric Nagy, Philippe Cohen, Beth Cline, and Ian Billick attended. Discussion from the membership in response to Eric's report centered around whether we should just focus on the Congressional visits day or if we should also work towards another congressional briefing such as the one we hosted with NAML 3 years ago. The visits day was valued for the ability to convey a one-on-one message to representatives, determine the interests of the representatives, training of OBFS members, and ability to reach about 25 to 30 representatives. The Briefing was valued because it created a bigger splash with large numbers of attendees. Hilary Swain recommended that we start thinking about another congressional briefing since it takes time to prepare. In addition, we need to consider the advantages and disadvantages of working with NAML.

Adrienne Froehlich from AIBS recommended an additional possibility for an event – a local congressional visits day where congressional representatives are invited to tour field stations. August is a good time since congress is in recess and many representatives are touring. AIBS will support this effort by providing a template for contacting and advertising the tour. Hilary Swain also recommended that OBFS develop 5 main talking points about OBFS for field stations to make during the tour. Gerald Selzer (NSF) recommended that one of these talking points be that field stations are a good source of information. If they know that the field station is source of information, you will stay on their radar.

#### Saturday, September 18, 10:30 - 12:30 pm

NSF Report – Muriel Poston and Gerald Selzer

Muriel Poston presented a review of NSF programs that may be pertinent to field stations. These programs are described on the NSF website at www.nsf.gov. For research support, she specifically recommended CAREER, IGERT, MBE, Biological Research Collections, FSML, Frontiers in Integrative Biological Research, Biocomplexity in the Environment, Research Coordination Networks in Postdoctoral Biological Sciences, Fellowship Programs, Research Opportunity Award, Research Experience for Teachers, Research Experience for Undergraduates (REU), Undergraduate Mentoring in Environmental Biology (UMEB), Cross-disciplinary Research at Undergraduate Institutions (C-RUI), Research Assistantships for Minority High School Students, and the Dissertation support program. For education support (Education Directorate), she recommended informal science education (ISE), Advanced Technological Education (ATE); Division of Undergraduate Education also has a list of programs: Advanced Technological Education (ATE), Curriculum, Laboratory and Instructional Development (CCLI, NSDL, DTS), and RET sites. Biological Sciences Directorate has developed a biology education strategic plan called Nurturing Discovery: Biology Education for the 21st Century. Use this as resource for combining programs. It has not been publicly released yet, but should be up this fall

Gerald Selzer reported that FSML was not issued last year. Bio had flat budget but pressure to spend in new areas. As a consequence FSML was short changed and the applications submitted in April have not been funded yet. Fiscal year 05 money will be available Oct 1 and will be used for funding the April 04 proposals. The expectation is that the program will catch up with additional funding later. Recent changes include that this year the grant will pay indirect costs; cost sharing is waived up to \$175,000 for applicants not receiving awards in the last 5 years, and one proposal per station (rather than one per institution). The maximum allowed for the request has risen but the total budget for the program has not. Keep in mind that if you ask for \$200,000 that's 10% or more of the total FSML budget. The most important thing we can do to support the program is to write good proposals and send them in. Demand (i.e., number of proposals submitted) can be used by Gerald and Muriel to generate money. There are other funding sources within NSF to apply for research equipment funds (e.g., major research instrumentation program). Please do consider these other program since they usually have more funding. The success rate for FSML is between 35 and 40%.

FSML also still offers planning grants for \$25,000 to support strategic planning to run planning effort to identify strengths and weaknesses, what programs we want, cure weaknesses, and identify strengths. Money gets used for people to visit the field station and workshops. In your FSML proposals, remember to place the request in the context of your station's strategic plan. Review criteria for planning grants are same as those for FSML (i.e., establish need based upon ongoing research activities; demonstrate use by a diverse researcher community (multiple institutions); grant is for improving existing station rather than starting new ones). If you are interested in being in the review community for NSF proposals, send an email to Muriel or Gerald with your resume. This is good way to get experience writing grants.

#### Saturday, September 18, 1:30 - 2:30 pm

OBFS Strategic Planning - Susan Lohr

provided a summary Susan responsibilities required by the OBFS committees to carry out the strategic plan. Discussion from the floor ensued. Members comments included: the list of goals for the committees is not measurable; unclear how certain tasks map onto the research committee; recommendation for an appendix of all the gathered information so that people could see how the ideas were generated; committees should be encouraged to provide feedback on strategic plan tasks; some tasks associated with the committees are problematic; discussion regarding level of specificity needed for strategic planning effort; do we show committees how to carry out the plan?; how can we assess whether we need to hire an employee, if we don't make an attempt at a list of tasks?; recommend that we keep committees as small groups, less than 10, so that they can make decisions. Beth Cline expressed concern that the small field stations committee was not identified in the plan. Susan and Eric Nagy replied that the strategic plan attempts to cover the needs of small stations but does not pull them out as a committee. Hilary Swain recommended having them as a permanent subset of the operations committee.

Specific discussion on how to carry out the plan included discussions of how much time the membership could devote to committee activities and whether the level of activity would require that OBFS hire a part-time person. The majority of the membership voted that they would be able to contribute 5 hours per month for committee membership. This amount of effort would allow for participation in a web conference each month with the Vice President. Hilary Swain recommended that we use OBFS field stations to find foundation funding for a 5-year initiative with a staff member since this

person will need at least several years to achieve OBFS goals.

General comments on the strategic plan included: the introduction, historical overall perspective, and vision are missing from this document; the plan needs to lead from the vision which then justifies reasons for the committees; the logic of plan should flow from beginning to end so that we can see how goals flow from the vision; need more preamble; we can't assume we are the only ones who are going to read this document; may need different versions - long version for some groups and short version for our use; we need separate vision statements for research, education, etc.; the plan must distinctly reflect the organization and the goals must reflect that distinctiveness (e.g., perhaps move the goals in the plan that are not distinctive, such as transparency, into other categories). Susan requested that members please email suggestions for how to change the vision statement.

The next steps are that Eric Nagy will take feedback, incorporate it into this structure. He reported that the Executive Board had requested that they get a change to review the document with intent of reviewing the direction of the strategic plan. The plan would then be adopted or not at the end the calendar year. A show of hands from the membership supported not hiring someone to carry out OBFS objectives next month.

Saturday, September 18, 2:30 – 6:00 pm Tour of Appledore Island and Surrounding Islands

## Sunday, September 19 9:15-11:07 OBFS Business

Report from Nominations Committee - Art McKee, Jan Hodder, Rick Wyman

The committee proposed that the following OBFS members be nominated to 3 positions: for Secretary—Treasurer, Claudia Luke; for Editor David White; and for Member-at-Large, Amy Whipple, Jeff Savino, and Brian Kloeppel. No nominations were received from the floor. Art McKee asked for requests for nominations for Congressional visits day and encouraged all members to attend this event.

#### Closing Remarks - Sedra Shapiro

President Shapiro thanked Shoals Marine Lab, Christine Bogdanowicz and staff for a wonderful meeting. Thanks to previous executive committee members and especially to Eric Nagy and strategic planning committee. The Meeting was adjourned at 11:07 am.

Claudia Luke, Secretary-Treasurer

## **OBFS FINANCIAL REPORT 2003-2004**

I.	0	per	ati	na	Fι	ın	ds
	_	Pu.	~				

Previous Balance Aug 31,		Actual \$30,856.04	Budgeted
(\$26,621.52 in CDs;	\$4,234.52 in checking account)		
Income:			
Membership dues		\$18,682.00	\$18,000.00
Interest (CDs, checki	ng)	\$ 477.34	\$ 1,000.00
Total Income:		\$19,159.34	\$19,000.00
Expenses:			
AIBS dues and public	policy	\$ 2,600.00	\$ 2,670.00
Bank Charge		\$ 102.51	\$ 0.00
Missouri corporation		\$ 15.00	\$ 15.00
Travel OBFS commit		\$ 97.59	\$ 3,000.00
Congressional Visits		\$ 5,599.66	\$6,000.00
OBFS traveling exhib	oit	¢ 040.67	<b>Ф</b> БОО ОО
Shipping Materials and	labor	\$ 249.67 \$ 0.00	\$ 500.00 \$ 3,600.00
Field studies poster	Iduui	\$ 0.00	\$ 3,000.00
Office and website		φ 3,310.01	\$ 3,000.00
	nd database support	\$ 1,400.00	\$ 900.00
Supplies	a databass support	\$ 0.00	\$ 900.00
Website editir	ng charges	\$ 1,000.00	\$ 1,000.00
OBFS History		\$ 0.00	\$ 1,000.00
IOBFS			, ,
Office and we	bsite	\$ 1000.00	\$ 1,000.00
Newsletter		\$ 196.84	\$ 500.00
Total Expenses:		\$15,579.88	\$24,085.00
Transfer to Restricted Fun	d:	\$ 0.00	\$ 0.00
Balance August 31, 2004		\$34,435.50	
Fund Holdings Investments - CDs:		August-04	August-03
211125	1.49% (1.50% yield), 12 mos. due 11/01/04	\$6,848.20	\$6,734.48
211242	1.49% (1.50% yield), 12 mos due 1/28/05	\$3,997.85	\$3,924.15
211243	1.49% (1.50% yield), 12 mos due 2/02/05	\$5,986.00	\$5,875.65
212240	1.49% (1.50% yield), 12 mos, due 9/15/04	\$6,076.52	\$5,971.84
614444	1.24% (1.25% yield), 6 mos, due 9/25/04	\$4,169.40	\$4,115.40
Checking Account:		\$7,357.53	

#### **II. Restricted Funds**

Previous Restricted Fund Balance Aug 31, 2003:	\$38,219.47
--	-------------

#### **Contributions:**

Transfer from Operating Funds	\$ 0.00
Auction proceeds	\$ 6,001.50

Organization of Biological Field Sta	IUONS	
Donations	\$ 100.00	
Citizens mutual fund	(\$ 1,393.43)	
Interest (checking)	\$ 17.60	
Total Contributions:	\$ 4,725.67	
	Ψ 1,7 20101	
Expenses:	\$ 0.00	
Restricted Fund Balance Aug 31, 2004	\$42,945.14	
Fund Holdings		
Investments - Citizens Mutual Fund:		
Core Growth Fund (1491.667 shares @ \$16.84)	\$25,119.67	
Emerging Growth Fund (994.293 shares @ \$11.66)	\$11,593.46	
OBFS Checking Account:	\$ 6,232.01	
III. Adopted Operating Budget for 2004-05		
Income:		
Membership dues "	\$18,000.00	
Interest (CDs, checking)	\$ 1,000.00	
Total Income:	\$19,000.00	
Expenses:		
AIBS dues and public policy initiative	\$ 2,670.00	
Bank Charge	\$ 0.00.00	
Missouri corporation registration	\$ 15.00	
Travel OBFS committee	\$ 3,000.00	
Congressional Visits Day	\$ 6,000.00	
OBFS traveling exhibit		
Shipping	\$ 500.00	
Brochure	\$ 5,000.00	
Field studies poster	\$ 3,500.00	
Office and website		
Secretarial and database support	\$ 900.00	
Supplies	\$ 900.00	
Website editing charges	\$ 1,000.00	
IOBFS		
Office and website	\$ 1,000.00	
Newsletter	\$ 500.00	
Total Expenses:	\$24,985.00	Submitted by
Transfer to Restricted Fund:	\$ 0.00	Claudia Luke

#### **OBFS DISPLAY & DATA MANAGEMENT WORKSHOP REPORTS**

OBFS owns a portable, freestanding display booth with text and graphics explaining the importance of field stations. This display was initially created with NSF support in 1996, and is available for OBFS members to borrow for use at professional meetings, open houses, field days, fundraisers, etc. It is about 7'9" tall, 2' deep and 8' long, with its own internal lighting. Shipping costs for use of the display may

**Transfer to Restricted Fund:** 

**Balance** 

be reimbursed by the OBFS. Anyone interested in borrowing the display should contact Nina Consolatti, Kellogg Biological Station, 3700 East Gull Lake Drive, Hickory Corners, MI 49060. Phone: (269) 671-2228; Email: Nina.Consolatti@kbs.msu.edu.

Secretary-Treasurer

0.00

(\$5,985.00)

Also available for the asking from Nina Consolatti are hard copies of "Data Management at Biological Field Stations and Coastal Marine Laboratories, January 1992, Report of an Invitational Workshop, April 22-26, 1990, W.K. Kellogg

Biological Station, Michigan State University," (aka "the blue book").

# IMPROVEMENTS IN FACILITIES, COMMUNICATIONS, AND EQUIPMENT FOR RESEARCH AT BIOLOGICAL FIELD STATIONS AND MARINE LABORATORIES (FSML)

Biological Field Stations and Marine Laboratories (FSMLs) are off-campus facilities for research and education conducted in the natural habitats of terrestrial, freshwater. FSMLs support biological and marine ecosystems. research and education by preserving access to study areas and organisms, by providing facilities and equipment in close proximity to those study areas, and by fostering an atmosphere of mutual scientific interest and collaboration in research and education. To fulfill these roles, FSMLs must offer modern laboratories and educational spaces, up-todate equipment, appropriate personal accommodations for scientists and students. visitina and modern communications and data management systems for a broad array of users. In recognition of the importance of FSMLs in modern biology, NSF invites proposals that address these general goals of FSML improvement.

- Gerald B. Selzer, Directorate for Biological Sciences, Division of Biological Infrastructure, 615 N, telephone: (703) 292-8470, fax: (703) 292-9063, email: gselzer@nsf.gov
- Muriel E. Poston, Directorate for Biological Sciences, Division of Biological Infrastructure, 615 N, telephone: (703) 292-8470, fax: (703) 292-9063, email: <a href="mailto:mposton@nsf.gov">mposton@nsf.gov</a>
- Kandace S. Binkley, Directorate for Geosciences, Division of Ocean Sciences, 725 N, telephone: (703) 292-8583, fax: (703) 292-9085, email: <u>kbinkley@nsf.gov</u>

Deadline: First Friday in March Annually Program Guidelines: NSF 04-543 http://www.nsf.gov/pubs/2004/nsf04543/nsf04543.htm

#### **HAIKUS**

Haikus are 17 syllable Japanese poems often describing moments of transient beauty. Is there transient beauty in an OBFS meeting? Perhaps. The following are some haikus from the Kananaskis and Appledore OBFS meetings by John Kim

#### Kananaskis 2003

Gentle but rugged Canadians avoid wars. Cheap pharmaceuticals.

Dial-up Internet, Agitated ecologists. Soon, fiberoptics.

Short pants on glacier--Hair on Jeff's legs shake like quills. Katabatic winds.

"Trees in av'lanche chutes," Lectures Ed. I feel sleepy. Sheep! Binoculars!

Spruce, fir, pine... whate-Ver. They're just all green and tall. I'm from San Diego.

#### Appledore 2004

Arrr! Arrr! Rugged
Ecologists coming 'board!
Got any dramamine?

Even tent cater-Pillars writhe and war -- then go. Why can't Bush and Dick?

What th'hell's this clear cold Liquid falling from the sky? I'm from San Diego.

Cold Atlantic winds

Jeff's leg hairs don't shake like quills

He's got zip-off pants

Five thou for graphic Artists. Grad student -- thirty! Ecol'gists -- priceless.

On Appledore, bird
Colony, beaut'ful black birds
Swarm and draw my blood.

John Kim

#### YE OLDE OFFICIAL OBFS BALLOTTE, 2004

This year's ballotte is for election of Member at Large: *Amy Whipple, Brian Kloeppel, Jeff Savino*Secretary-Treasurer: *Claudia Luke*Editor: *David White* 

Ballotte cards were mailed to for station members in December and must be returned by January 24, 2005. The biographies given below were designed to assist voters in making <u>wise</u> choices – separating the pirates from the swabbies, so to speak

#### MEMBER AT LARGE

**Amy Whipple** I believe in the potential of the people, the mission, and the Organization of Biological Field Station to make a positive difference for people and for the environment. This belief comes from my experience in the past two-plus years seeing what OBFS accomplishes with limited resources. This effectiveness is due to the commitment and generosity of OBFS members to OBFS and to helping each other. As a relatively new member involved in two



young field stations I have been a major beneficiary of mentoring assistance. I see the upcoming implementation of the strategic plan, and potentially, serving as a member-at-large as opportunities to give back to OBFS and its members through my active, year-round engagement in helping the organization to become stronger and accomplish more.

I would contribute to the overall goals and activities of the executive committee. I see the member-at-large positions as being especially appropriate to facilitating regular communication between the membership and the executive committee to achieve greater transparency. My talents and interests would be suited to helping to get grant funding for appropriate OBFS staffing or high priority projects. I am also interested in developing programming for

OBFS meetings. For instance, Larry Wieder and I are both at universities with large Native American enrollments and have discussed the possibility of a focus at an upcoming OBFS meeting on involvement of Native Americans and Tribal Colleges in field station education and research activities. As project director for an interdisciplinary environmental research center which emphasizes networking across disciplines and across our region I also feel a strong affinity for executive committee tasks that are currently on the 5-10 year goals list including coalition, integrative, and interdisciplinary activities. Currently I am participating in the research committee's effort to help more field stations become engaged in the NEON planning process. With the education committee, I would like to help field stations capitalize on NSF's growing interest in community college education and the report "The Role of Biological Field Stations in the Education and Recruitment into the Biological Sciences" by Klug, Hodder, and Swain.

While I have had field station duties in my professional position only for a bit over two years, I have been preparing for a field station career since I was an undergraduate. As a graduate student at UC Davis' Bodega Marine Lab and Reserve I was an active participant in the field station community. My current position is with the Merriam-Powell Center for Environmental Research at Northern Arizona University. I work to develop both campus-based and field station facilities and programs. Field station facilities development focuses on the Merriam-Powell Research Station and the Walnut Creek Center for Education and Research: a partnership of a community college, a private college, a state university, a museum, and a national forest. I am a co-PI on a NSF Major Research Instrumentation grant funding an on campus ecological genetics and genomics facility that will complement field station facilities in northern Arizona.

**Brian Kloeppel** I am the Site Director at Coweeta Hydrologic Laboratory near Otto, North Carolina, and Assistant Research Scientist in the Institute of Ecology at the University of Georgia. My under-graduate and graduate degrees

included projects at several field stations that had a positive influence on me as an ecol-gist and person. At field stations, the scientific training, the education and outreach to public and scientific audiences, and the research productivity complement each other well and foster enjoyable and highly productive work environments.

Here at Coweeta, we have thoroughly enjoyed all OBFS projects and activities and especially enjoy working with the positive and energetic OBFS members! The knowledge and insight that we have gained as a result of interactions with OBFS members include revisions to proposals that have led to successful FSML grants and to establishing a structure to more efficiently manage facilities and site research use. In September 2005, Coweeta will be co-hosting the OBFS Annual Meeting with nearby Highlands Biological Station. Robert Wyatt, Director of Highlands Biological Station, and I have worked together on numerous projects for several years and our close

proximity facilitates these interactions. Our field stations look forward to cohosting the 2005 OBFS Annual Meeting.

If elected, my duties as a Member-at-Large would be to serve on the annual meeting program committee that is chaired by the Vice President, to lead special projects as set forth by the President or the Executive Board, and to work with other Executive Board Members to participate on regular and special projects, duties, and initiatives. I would happily fulfill these duties if elected. One of the most important aspects of our organization is to promote field stations and where possible to increase funding available from multiple sources for field station programs and facilities. This increase in funding is important to all field stations and especially to small field station budgets that are highly dynamic as a result of changes in state, academic, and private funding.



I would appreciate your vote to serve OBFS as a Member-at-Large, and I look forward to seeing you at the 2005 OBFS Annual Meeting.

#### **Jeff Savino** I am here to report for duty!

I believe that my opponents are capable of making monumental blunders if they become YOUR member-at-large. I have a 14-part plan that will insure that the necessary work be done and to return accountability to this high office.

My opponent from North Carolina has been known to practice matriculation and has a sister that is an avowed thespian.

Is this the sort of person you want as YOUR member-at-large? A flip-flopper? I didn't think so.

My other opponent, from Arizona & well, she's too nice, I d be an idiot to attack her. Makes me think that she s hiding something. Do you want someone TOO NICE as your member-at-large? I didn't think so.



#### SECRETARY-TREASURER

Claudia Luke I would be pleased to continue to serve as Secretary Treasurer for OBFS. In addition to tracking



operating budgets for 10 years as a field station director at two California reserves, I have served as principal investigator for grants and contracts that support field station activities.

Most recently these projects have included a Field Station Marine Lab grant to establish a wireless network at the Santa Margarita Ecological Reserve, a monitoring contract for our state Fish and Game to employ graduate students in regional monitoring projects, and a Technology Opportunities Grant to install an early warning fire sensor network and educational outreach project in collaboration with 8 regional partners. My writing and summary skills include drafting regional habitat conservation management plans, status summaries of endangered species, fire management planning publications, and outreach materials. I am currently Adjunct Professor in Biology at San Diego State University and serve on the Board of Directors for the South Coast Wildlands Project, on the Advisory Commission to the Mojave National Preserve, and in a variety of watershed planning groups. In the last

3 years as Secretary Treasurer, I have worked with Network Coordinator Mark Stromberg to establish an online administrative database to enhance information exchange among administrators in the organization. In this coming term, I see great opportunities for using the new database to catalogue existing field stations throughout the United States and elsewhere that may be interested in joining our organization. During my tenure, I also spearheaded an effort to gather, copy and archive OBFS newsletters. I have begun working with OBFS Historian David Larsen to summarize and "recapture" our history of activities for posting on the website. This is an exciting time for OBFS and I am looking forward to incorporating the new projects and goals outlined in our new strategic plan.

#### **EDITOR**



David White: As a student, I had no knowledge of biological field stations. My first position, however, was as research biologist at the University of Oklahoma Biological Station where I learned the tremendous value of field stations in teaching and research. Following three years at Oklahoma, I was on the faculty of the University of Michigan Biological Station at Douglas Lake for ten years, taught one summer at Camp Filbert Roth, and have served as Director the Hancock Biological Station on Kentucky Lake and Coordinator for the Center for Reservoir Research (Murray State University) since 1988. I have been an associate editor for the Southwestern Naturalist and the Journal of Freshwater Ecology and am a past Chair of the North American Benthological Society Editorial Committee. Our Station/Center has a full-time staff of five and all the hardware and software needed to produce the Newsletter. We also have the services of a full-time editor/illustrator who assists in the production and publication of bulletins, flyers, newsletters, and posters. We produce an annual bulletin and poster that are distributed nationally, and the station has had its own web site since 1995. Newsletter duties are a way to repay part of

what OBFS has given me in inspiration and ideas over the years – and besides, it is one of the fun things I get to do!

#### **2005 ANNUAL MEETING**

## Co-Hosted by Coweeta Hydrologic Laboratory and Highlands Biological Station, both located in Macon County, North Carolina

Coweeta Hydrologic Laboratory (CHL) and Highlands Biological Station (HBS) will be co-hosting the 2005 Organization of Biological Field Stations (OBFS) annual meeting 22-25 September 2005 in western North Carolina. Coweeta and Highlands are both located in Macon County, NC and are approximately 30 minutes apart by car. Coweeta is a research and education center and is a US Forest Service and University of Coweeta Georgia institution. established in 1934 for research and training in the management of forests and streams in the biologically diverse southern Appalachian Mountains. Highlands Biological Station is a yearround biological field station whose principal mission is to promote research and education in biodiversity studies (ecology, systematics, evolution, and



conservation) with special emphasis on the diverse

flora and fauna of the region. Founded in 1927, HBS became an inter-institutional center of the University of North Carolina in 1976. Both CHL and HBS have onsite research labs, teaching and classroom labs, year-round housing, and extensive access to public and private research sites containing forests, streams, riparian areas, and manipulated land areas. Both Coweeta and Highlands have a long history of student training at the graduate and undergraduate level and have trained more than 300 graduate students over the last 70 years in a variety of terrestrial and aquatic disciplines.

#### **ANNUAL MEETING**

The 2005 OBFS Annual Meeting will officially begin after a reception and dinner on Thursday, 22 September. Participants should plan to arrive at Coweeta for dinner and the reception no later than 5:00 PM EDT. For all meeting details, registration forms, and travel arrangements please see <a href="http://www.obfs.org/annual meetings/2005/">http://www.obfs.org/annual meetings/2005/</a>.

#### **ACCOMMODATIONS**

Participants will be housed at either Coweeta Hydrologic Laboratory in the recently renovated Coweeta Residence or at Highlands Biological Station in one of six modern dorms or cottages. Meals during the meeting will be catered and served at Coweeta Hydrologic Laboratory or at Highlands Biological Station for the fundraising auction. Breakfasts will be served at both Coweeta and Highlands since participants will be housed at both locations. A special mountain barbecue dinner is scheduled for Saturday evening.

There will be two organized pre-meeting field trips on Thursday, 22 September 2005. One will be an interpretive hike of Whiteside Mountain and area waterfalls led by Dr. Robert Wyatt. The other will be a white water rafting trip on the Chattooga River by the Nantahala Outdoor Center. operated Participants for the field trips should plan to travel to the meeting location by Wednesday evening, 21 September 2004. All travel information will be posted on the annual meeting link on the OBFS web page (http://www.obfs.org/annual meetings/2005/) after all field trip arrangements have been completed. Other options for travel and recreation in the area will be provided. While at the meeting site, all meeting participants will be able to participate in short field trips to view education, research, and biodiversity projects during a break in the OBFS meeting agenda.

For more information:
Brian Kloeppel, Ph.D., LTER Site Director
Coweeta Hydrologic Laboratory
3160 Coweeta Lab Road
Otto, NC 28763 USA
828-524-2128 extension 127
kloeppel@uga.edu
http://coweeta.ecology.uga.edu

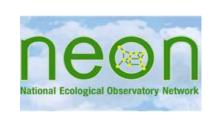
#### OR

Robert Wyatt, Ph.D., Executive Director Highlands Biological Station 265 6<sup>th</sup> Street, P.O. Box 580 Highlands, NC 28741 USA 828-526-2602 wyatt@email.wcu.edu http://www.wcu.edu/hbs

### **OBFS NOTES, ETC.**

#### **NEON**

As noted in the minutes from the 2004 OBFS meeting, the National Ecological Observatory Network (NEON) is entering the design phase. The design committee has been selected and its first of three meetings will be in Los Angeles, January 4-6, 2005. The design committee will address continental and regional scale questions pertaining to many environmental grand challenges as they relate to (1) biodiversity and ecosystem functioning; (2) biogeochemical cycling, (3) climate change, (4) hydroecology, (5) infectious disease, (6) invasive species, (7) land use, and (8) other emerging issues. To follow the progress of NEON, go to <a href="https://www.neoninc.org">https://www.neoninc.org</a>.



#### **CUAHSI**

The Consortium of Universities for the Advancement of Hydroliogic Science, Inc (CUAHSI) is moving forward. Among a host of other activities that can be seen on the web site (<a href="http://cuahsi.org">http://cuahsi.org</a>), CUAHSI members are now in the process of designing Hydrological Observatories (HOs). HOs will be LTER-like facilities that will span the realm of hydrology – including the relationships of hydrology to ecology. Proposals are due to NSF in late winter 2005, which eventually will create at least 5 HOs.



#### **MEMBERSHIP DIRECTORY 2004 – STATION MEMBERS**

Adirondack Ecological Center William Porter Huntington Wildlife Forest, 6312 State Route 28N Newcomb NY 12852 Center of Ecology and Environmental Technology Susan Mopper University of Louisiana Lafayette LA 70504-2787

Archbold Tropical Research Center Hilary Swain PO Box 2057 Lake Placid FL 33862 Au Sable Institute, Great Lakes Campus David C Mahan 7526 Sunset Trail NE Mancelona MI 49659

Au Sable Institute, Pacific Rim Campus David C Mahan 7526 Sunset Trail NE Coupeville WA 49659 Bamfield Marine Station General Delivery Bamfield BC VOR 1BO CANADA

Bard College Field Station William Maple Annandale NY 12504 Baruch Institute for Marine and Coastal Sciences Madilyn Fletcher Univ of South Carolina Columbia SC 29208

Bath Nature Preserve and Field Station Randall J. Mitchell Dept of Biology, University of Akron Akron OH 44325-3908 Bermuda Biological Station for Research, Inc Anthony Knap Ferry Reach 1-15 BERMUDA

Black Rock Forest William Schuster 129 Continental Road Cornwall NY 12518

Blackwater Ecologic Preserve Lytton John Musselman Dept. of Biological Sciences, Old Dominion Unv Norfolk VA 23529-0266

Blakely Island Field Station Timothy A. Nelson T B Crowley Laboratory, Seattle Pacific University Seattle WA 98119-1950

Blandy Experimental Farm Michael A Bowers Univ of Virginia, 400 Blandy Farm Lane Boyce VA 22620

Blodgett Forest Research Station Bob Heald and John Battles 151 Hilgard Hall, University of California Berkeley CA 94703 Bodega Marine Laboratory and Reserve Peter G Connors University of California, PO Box 247 Bodega Bay CA 94923 Bowdoin Scientific Station Nathaniel T Wheelwright

Biology: Bowdoin College, 6500 College Station

Brunswick ME 04011-8465

Brackenridge Field Laboratory Lawrence Gilbert Integrative Biology, 1 Univ. Stn. C0930, University of Texas Austin TX 78712-0253

Cascade Head Experimental Forest Sarah E Greene Forestry Sciences Laboratory 3200 Jefferson Way Corvallis OR 97331

Cedar Point Biological Station Robert M. Anderson 348 Manter Hall – Biology University of Nebraska Lincoln NE 68588-0118

Churchill Northern Studies Centre Michael Goodyear Box 610 Churchill Manitoba R0B 0E0 CANADA

CMU Biological Station
James C Gillingham
Dept of Biology
Central Michigan University
Mt Pleasant MI 48859

Conard (Henry S.) Environmental Research Area Jonathan Brown Grinnell College, Dept. of Biology Grinnell IA 50112

Coweeta Hydrologic Laboratory Brian D. Kloeppel Institute of Ecology, University of Georgia 3160 Coweeta Lab Road Otto NC 28763-9218 Boyd Deep Canyon Desert Research Center Allan Muth PO Box 1738 Palm Desert CA 92261

Bull Shoals Field Station
Janice Greene
Biology Dept
Southwest Missouri State University
Springfield MO 65804-0095

Cedar Mountain Science Center Harold Ornes Southern Utah University, SB 310A 351 West Center Street Cedar City UT 84720

Chapala Ecology Station Laura Davalos-Lind One Bear Place #97388, Biology Department Baylor University Waco TX 76798

Cloquet Forestry Center Robert A Stine Univ of Minnesota 175 University Road Cloquet MN 55720-9594

Columbia-Greene Community College Biological Field Station at the Cohotate Preserve Jon Powell, Direction 4400 Route 23 Hudson NY 12534

Cornell Biological Field Station Edward L. Mills 900 Shackelton Point Road Bridgeport NY 13030

Desert Research Institute Harold Klieforth 2215 Raggio Pkwy Reno NV 89512-1095 Desert Station Robert L Smith Univ of Arizona, Fo

Univ of Arizona, Forbes Bldg - Rm 410

Tucson AZ 85721

Disney Wilderness Preserve Monica Folk The Nature Conservancy 700 Scrub Jay Trail Kissimmee FL 34759

Ecology Research Center Ryan Stander Dept. of Zoology, Miami University Oxford OH 45056-1400

El Verde Field Station Alonso Ramirez PO Box 1690 Luquillo PR 773

EN Huyck Preserve and Biological Research Station Richard L Wyman P O Box 189 Rensselaerville NY 12147

Estacion del Mar Cortez Jose A. Mercade Glendale Community College 1500 N. Vergudo Glendale CA 91208

Field Research Station Amanda Camp and Kent Rylander P.O. Box 186 Junction TX 76849

Field Station and Environmental Educ Center John Taylor Ball State University Muncie IN 47306-0440 Desert Studies Center William Presch California St Univ – Biology PO Box 6850 Fullerton CA 92834-6850

Eagle Lake Biological Field Station Raymond J Bogiatto, Director Dept of Biological Sciences California State Univ – Chico Chico CA 95929-0515

EJ Meeman Biological Station Jack Grubaugh Dept. of Biology The University of Memphis Memphis TN 38152

Gregory Smith
Dept. Biological Sciences
Campus Box 4050
Emporia St. Univ
Emporia KS 66801-5087

ES George Reserve Ronald A Nussbaum Museum of Zoology University of Michigan Ann Arbor MI 48109-1079

Fernow Experimental Forest Mary Beth Adams P. O. Box 404 Parsons WV 26287

Field Station and Environmental Center Kemuel Badger Ball State University Muncie IN 47306-0440

Flathead Lake Biological Station Jack A Stanford 311 Bio Station Lane Polson MT 59860-9659 Forbes Biological Station Stephen P. Havera PO Box 590 Havana IL 62644

Forfar Field Station Walter B Bohl International Field Studies PO Box 428, 30 Public Square Nelsonville OH 45764

Friedman Field Station Carl Merrill RR 1 Box 102 Edmunds ME 4628

Galapagos Academic Inst for the Arts & Sciences Susan Carey Universidad San Francisco de Quito P.O. Box 17-12-841, GAIAS Office San Cristobal, Galapagos ECUADOR

Gerace Research Center Vincent J. Voegeli c/o Twin Air, 1100 Lee Wagener Blvd: Suite 113 Ft Lauderdale FL 33315

Gobabeb Training and Research Centre Joh R. Henschel Desert Research Foundation of Namibia P.O. Box 953 Walvis Bay NAMIBIA

Hancock Biological Station David S White Murray State University 561 Emma Drive Murray KY 42071

Hatfield Marine Science Center George Boehlert Oregon State University 2030 SE Marine Science Drive Newport OR 97365 Ford Forestry Center Glenn Mroz and Jim Schmierer, SFRES HCR 2, Box 736 L'Anse MI 49946

Fortuna Mountain Research Reserve Sedra Shapiro San Diego State University, College of Sciences 5500 Campanile Dr San Diego CA 92182-4614

FT Stone Laboratory
Jeffrey M Reutter
Research Center: Ohio State University
1314 Kinnear Rd
Columbus OH 43212

Gault Nature Reserve
Martin Lechowicz
422, chemin des Moulins Mont-Saint-Hilaire
Quebec J3G 4S6
CANADA

Glen Helen Ecology Institute Robert Whyte 405 Corry Street Yellow Springs OH 45387

Green Wing Environmental Laboratory Bohdan Dziadyk Augustana College 639 38<sup>th</sup> Street Rock Island IL 61201

Hastings Natural History Reservation Mark R Stromberg 38601 E Carmel Valley Rd Carmel Valley CA 93924

Hawk Mountain Sanctuary Keith Bildstein Acopian Center 410 Summer Valley Road Orwigsburg PA 17961 Highlands Biological Station Robert Wyatt P O Box 580 Highlands NC 28741 HJ Andrews Experimental Forest Kari O'Connell PO Box 300 Blue River OR 97413

Holt Research Forest Jack Witham 508 Old Stage Road Arrowsic ME 4530

Hopkins Marine Station Stanford University Pacific Grove CA 93950

Hopkins Memorial Forest Andrew Jones Williams College P.O. Box 632 Williamstown MA 1267

Humboldt Field Research Institute Joerg-Henner Lotze PO Box 9, (59 Eagle Hill Rd) Steuben ME 04680-0009

Huntsman Marine Science Centre 1 Lower Campus Road St Andrews NB E5B 2L7 CANADA Huron Mt. Wildlife Foundation Ives Lake Field Station Kerry Woods Director of Research Bennington College Bennington VT 5201

Indiana University Research & Teaching Preserve Keith Clay Department of Biology Indiana University Bloomington IN 47405 Indio Mountains Research Station Jerry D Johnson Biological Sciences University of Texas at El Paso El Paso TX 79968

Inger and Walter Rice Center for Environmental Life Sciences Leonard Smock Dept of Biology Virginia Commonwealth Univ Richmond VA 23284-2012

Institute for Tropical Ecology and Conservation Peter N Lahanas 1023 SW 2<sup>nd</sup> Ave Gainesville FL 32601

Institute of Ecosystem Studies Alan R Berkowitz Box R Millbrook NY 12545 Intercultural Center for Study of Deserts and Oceans Richard E Boyer PO Box 44208 Tucson AZ 85733-4208

Iowa Lakeside Laboratory Arnold van der Valk 131 Bessey Hall Iowa State University Ames IA 50011-1020 Iracambi Rainforest Research Centre Robin Le Breton Fazenda Iracambi, Rosario da Limeira Minas Gerais 36887-000 BRASIL Jaguar Creek Karen E. McReynolds PO Box 446 Belmopan BELIZE

Jepson Prairie Virginia Boucher DESP University of California Davis CA 95616

Kananaskis Field Stations E A Johnson, Biosciences 186 Univ of Calgary 2500 University Drive NW Calgary, Alberta T2N 1N4 CANADA

Kemp Natural Resources Station Thomas W. Steele 8031 Kemp Woods Road Woodruff WI 54568-9643

Kino Bay Center for Cultural & Ecological Studies Ed Boyer; Lorayne Meltzer Prescott College 301 Grove Avenue Prescott AZ 86301

Koffler Scientific Reserve at Jokers Hill Ann Zimmerman Rm 2005 Sidney Smith Hall, University of Toronto 100 St. George St. Toronto, Ontario L7B 1K5 CANADA

La Suerte and Ometepe Biological Field stations Alvaro Molina PO Box 55-7519 Miami FL 33255-7519

Lake Louise Field Station c/o D Bechler Valdosta State University 1500 North Patterson St Valdosta GA 31698 Jasper Ridge Biological Preserve Philippe S Cohen Stanford University Stanford CA 94305-5020

JH Barrow Field Station Samuel D. Marshall Biology Department Hiram College Hiram OH 44234

Katharine Ordway Pres-Swisher Mem Sanctuary Mel Sunquist and Stephen Coates Department of Wildlife Ecology and Conservation P.O. Box 110430 Gainesville FL 32611-0643

Kibbe Life Sciences Field Station Sean E Jenkins Dept of Biological Sciences Western Illinois University Macomb IL 61455

 Coastal Campus - Edith & Joy London Fndt Eugene Wallensky
 Australian National University, Building 48A
 Canberra, ACT 200
 AUSTRALIA

Konza Prairie Biological Station Division of Biology Ackert Hall Kansas State University Manhattan KS 66506-4901

Lake Erie Center Stephen Goldman, Director 6200 Bayshore Road Oregon OH 43618

Long Marine Laboratory/Ano Nuevo Reserve Stephen L Davenport Univ of California 100 Shaffer Rd Santa Cruz CA 95060 Louis Calder Center - Biological Station John D Wehr Fordham University PO Box 887 Armonk NY 10504

MacArthur Agro-Ecology Research Station Hilary Swain PO Box 2057 Lake Placid FL 33852-2057

Mata de Platano Field Station Armando Rodriguez-Duran Inter American University Bayamon Campus, Road 830 No. 500 Bayamon PR 957

Merriam-Powel Center for Environmental Research Amy Whipple PO Box 5765 Flagstaff AZ 86011-5765

Mohonk Preserve Inc Paul C Huth Daniel Smiley Research Center 1000 Mountain Rest Rd, Mohonk Lake New Paltz NY 12561

Mountain Lake Biological Station Eric S. Nagy University of Virginia PO Box 400327 Charlottesville VA 22904-4327

Mountain Studies Institute Ellen Stein P.O. Box 426 1315 Snowden Street Silverton CO 81433

Nantucket Field Station Sarah Oktay 180 Polpis Rd Nantucket MA 2554 LUMCON Marine Center Nicole Cotten 8124 Highway 56 Chauvin LA 70344-2110

Marine Science Institute Wayne S. Gardner University of Texas at Austin 750 Channelview Port Aransas TX 78373-5015

MeadWestvaco Wildlife and Ecosystem Research Forest Patrick Keyser P. O. Box 577 Rupert WV 25984

Merry Lea Envir Learning Center at Goshen College Luke Gascho P.O. Box 263 Wolf Lake IN 46796

Mount Desert Island Biological Laboratory Patricia Hand PO Box 35 Salisbury Cove ME 4672

Mountain Research Station William Bowman University of Colorado, CB 450 Boulder CO 80309

MSUM Regional Science Center George R Davis Minnesota State U Moorhead 1104 7<sup>th</sup> Ave South Moorhead MN 56563

Northern Arizona Univ Centennial Forest Michael R. Wagner School of Forestry PO Box 15018 Flagstaff AZ 86011

#### Volume 2004 No. 2

Notre Dame Environmental Research Center Gary E. Belovsky Dept of Bio Sciences Univ of Notre Dame PO Box 369 Notre Dame IN 46556-0369

Oregon Institute of Marine Biology Jan Hodder Univ of Oregon PO Box 5389 Charleston OR 97420

Palomarin Field Station Thomas Gardali Point Reyes Bird Observatory 4990 Shoreline Stinson Beach CA 94970-9701

Pierce Cedar Creek Institute Michelle Skedgell 701 W Colverdale Road Hastings MI 49058

Quail Ridge Reserve Shorty Boucher DESP, University of California Davis CA 95616

Quetzal Education Research Center Glenn Fell Southern Nazarene University 6729 NW 39<sup>th</sup> Bethany OK 73008

Reelfoot Lake Research and Teaching Center David Sammons Dept of Biological Sciences Univ of Tenn-Martin Martin TN 38238-5014

Rice Creek Field Station Andrew P Nelson SUNY Oswego Oswego NY 13126 Oak Lake Field Station Nels Troelstrup Box 2207B South Dakota State University Brookings SD 57007

Ouachita Mountains Biological Station Laurence M. Hardy Museum of Life Sciences, LSU in Shreveport One University Place Shreveport LA 71115-2399

Pan American Coastal Studies Laboratory Don Hockaday The University of Texas 100 Marine Lab Drive South Padre Island TX 78697

Pinelands Field Research Station John Dighton Rutgers University PO Box 206 501 Four Mile Rd New Lisbon NJ 8064

Quesnel River Research Centre Holmes Richard P. O. Box 28 Likely BC V0L 1N0 CANADA

Raystown Field Station Chuck Yohn Juniata College Huntingdon PA 16652

Reis Biological Station Nevin Aspinwall Biology Dept St Louis University 3507 Laclede St. Louis MO 63103-2010

Richard B Gump South Pacific Research Station George Roderick College of Natural Resources Univ of California Berkeley CA 94720-3112 Robert R. Smith Environmental Field Station

Stanley K. Sessions Biology Dept Hartwick College

Oneonta NY 13820

Sagehen Creek Field Station

Jeff Brown P.O. Box 939 11616 Sagehen Rd Truckee CA 96160

Santa Cruz Island Reserve

Lyndal Laughrin

Marine Science Institute

Univ of California

Santa Barbara CA 93106-6150

Santa Rita Experimental Range

Mark Heitlinger Campus Ag Center 4101 N Campbell University of Arizona Tucson AZ 85719

Seahorse Key Marine Laboratory

Harvey B Lillywhite

PO Box 118525, Dept of Zoology

U of Florida

Gainesville FL 32611-8525

Shannon Point Marine Center

Stephen D Sulkin

Western Washington University

1900 Shannon Point Rd Anacortes WA 98221

Shortgrass Steppe LTER Site

Sallie G. Sprague Dept of Forest Sciences Colorado State University

Fort Collins CO 80523-1470

Sky Oaks Field Station

Sedra Shapiro

San Diego State University

College of Sciences 5500 Campanile Dr

San Diego CA 92182-4614

Rocky Mountain Biological Laboratory

Ian Billick PO Box 519

Crested Butte CO 81224

Sanibel-Captiva Conservation Foundation

Marine Laboratory
Steve Bortone

900A Tarpon bay Road, 1401 South U.S. 421

Sanibel FL 33957

Santa Margarita Ecological Reserve

Claudia Luke

San Diego State University 2648 N. Stagecoach Lane

Fallbrook CA 92028

Savannah River Envir Sciences Field Station

Ambrose O. Anoruo

South Carolina State University

300 Orange Street

PO Box 7411

Orangeburg SC 29117

Sevilleta Field Station

Don Natvig

Dept of Biology

Univ of New Mexico

Albuquerque NM 87131

Shoals Marine Laboratory

G-14 Stimson Hall Cornell University

Ithaca NY 14853

Sierra Nevada Aquatic Research Lab

Daniel R Dawson Star Rt 1. Box 198

Mammoth Lakes CA 93546

Smithsonian Tropical Research Institute

Howard S. Barnes

Unit 0948

APO AA 34002-0948

USA REPUBLIC OF PANAMA

Sonoran Arthropod Studies Institute Steven J Prchal PO Box 5624 Tucson AZ 85703

St Catherine Island Royce Hayes PO Box 528 Midway GA 31320

Starr Ranch Sanctuary Sandy DeSimone National Audubon Society 100 Bell Canyon Road Trabuco Canyon CA 92679

Stengl Lost Pines Biological Station Phil Schappert 401 Old Anitock Road University of Texas Smithville TX 78957-5095

Stunt Ranch Santa Monica Mountains Reserve Carol Felixson UCLA Stunt Ranch Reserve 900 Veteran Ave.- Warren Hall Los Angeles CA 90024

Tall Timbers Research Station Ronald E. Masters 13093 Henry Beadel Drive Tallahassee FL 32312

Teakettle Experimental Forest Jim Innes 2121 2<sup>nd</sup> Street, Suite A101 Davis CA 95616

Thomas More College Biology Field Station Chris Lorentz Director Center for Ohio River Research and Education Biology Department Crestview Hill KY 41017 Southwestern Research Station Dawn Wilson American Museum of Natural History PO Box 16553 Portal AZ 85632

St Croix Watershed Research Station Daniel R. Engstrom Science Museum of Minnesota 16910 152<sup>nd</sup> Street N Marine on St Croix MN 55047

Stebbins Cold Canyon Reserve Shorty Boucher DESP University of California Davis CA 95616

Stroud Water Research Center Bernard Sweeney 970 Spencer Road Avondale PA 19311

Taiga Biological Station
W. O. Pruitt
Dept of Zoology
University of Manitoba
Winnipeg, Manitoba R3T 2N2
CANADA

Taylor Ranch Wilderness Field Station Holly and Jim Akenson University of Idaho Box 8070 Cascade ID 83611-8070

The Massachusetts Audubon Society Taber Allison 208 South Great Road Lincoln MA 1773

Tijuana River National Estuarine Research Reserve Sedra Shapiro College of Sciences San Diego State University 5500 Campanile Dr San Diego CA 92182-4614 Toolik Field Station
Michael A. Abels, Brian M. Barnes
Institute of Arctic Biology
University of Alaska
PO Box 757000
Fairbanks AK 99775-7000

Trinity College Field Station at Church Farm Scott Smedley Dept of Biology, Trinity College Hartford CT 06106-3100

Turtle Cove Environmental Research Station Robert Moreau, Manager SLU 10585 Southeastern Louisiana University Hammond LA 70402-0585

UCSB Sedgwick Reserve Michael Williams PO Box 848 Santa Ynez CA 93460-0848

Univ of Mississippi Field Station Mark Baker 15 CR 2078 Abbeville MS 38601

Univ of Wisconsin Field Station Jim Reinartz 3095 Blue Goose Road Saukville WI 53080

University of California, Natural Reserve System Univ of California 1111 Franklin St, 6<sup>th</sup> Floor Oakland CA 94607-5200

Vermilion Sea Field Station Lane McDonald (Bahia de Los Angeles, Baja California) 1319 Lake Drive Encinitas CA 92024 Treehaven Field Station Corky McReynolds W2540 Pickerel Creek Ave Tomahawk WI 54487

Trout Lake Station
Tim Kratz
10810 County Hwy N
Boulder Junction WI 54512-9733

Tyson Research Center David A. Larson Washington University PO Box 258 Eureka MO 63025

Univ Michigan Biological Station at Douglas Lake Bob Vande Kopple 2014 Natural Science Bldg 830 North University Ave Ann Arbor MI 48109-1048

Univ of Oklahoma Biological Station Lawrence J Weider University of Oklahoma HC 71, Box 205 Kingston OK 73439

Univeristy of Kansas
Field Station and Ecological Reserves
W. Dean Kettle; Edward A Martinko
Kansas Biological Survey
2041 Constant Avenue
Lawrence KS 66047

Valentine Eastern Sierra Reserve Daniel R Dawson UC Natural Reserve System Star Rt 1, Box 198 Mammoth Lakes CA 93546

W.K. Kellogg Biological Station Katherine Gross Michigan State University 3700 East Gull Lake Drive Hickory Corners MI 49060 Wheaton College Science Station Stephen O. Moshier Geology and Environmental Science Dept Wheaton College Wheaton IL 60187

Whittell Forest & Wildlife Area Steve Vander Wall Biology Dept, MS314 University of Nevada Reno NV 89557

Wind River Canopy Crane Research Facility, UW David Shaw 1262 Hemlock Road Carson WA 98610

Wyoming National Park Service Henry J Harlow University Station, PO Box 3166 Laramie WY 82071

PSU-Twin Valleys Outdoor Edu Center Tom Wolosz Plattsburg State University 10 Broad Street Plattsburg NY 12901 White Mountain Research Station John Smiley, Assoc. Director University of California, San Diego 3000 E. Line St Bishop CA 93514

William Beebe Tropical Research Station
Phil Schaeffer
Caligo Ventures
159 Bedford Road
Armonk NY 10504

Woodlake Environmental Field Station Elizabeth Whippo Cline Center for Env. Sci., Tech. and Policy Cleveland State U 1899 E. 22<sup>nd</sup> St, MC 219 Cleveland OH 44114-4434

Yellowstone Ecological Research Center Field Station Mitchel Hannon, Field Station Manager 2048 Analysis Drive Bozeman MT 59718

#### INDIVIDUAL MEMBERS

Chris Bedel Edge of Appalachia Preserve 19 Abner Hollow Road Lynx OH 45650

Richard W Coles Hoene Springs 220 Hickory Lane Eureka MO 630253137

Nina Consolatti Kellogg Biological Station 3700 East Gull Lake Drive Hickory Corners MI 49060

Robert C Dalgleish 10601-F Tierrasanta Blvd #110 San Diego CA 921242692 Laura S Carter 66 McKenna Road Norwich VT 05055

Robert K Colwell Ecology & Evolutionary Biology University of Connecticut Storrs CT 062693043

Diane Cowan The Lobster Conservancy PO Box 235 Friendship ME 04547

David DeGrotte
St Cloud State University
Dept of Biology, 720 Fourth Avenue South
St Cloud MN 563014498

William J Ehmann Sigurd Olson Envor Inst., Cloud State University 720 Fourth Avenue South St. Cloud MN 563014498

Robert L. Fisher 3728 Cold Springs Road Huntingdon PA 16652

Wright Gregory Yellowstone Association Institute PO Box 117 YNP WY 82190

George Lauff WK Kellogg Biological Station 3700 East Gull Lake Dr. Hickory Corners MI 49060

Tom Manley Middlebury College Geology Department Middlebury VT 05753

John Morrissey Hofstra University Marine Laboratory Dept of Biology Hempstead NY 11549

Alan P Romspert 605 N Pomona Avenue Fullerton CA 92832

Richard Rothaus Office of Sponsored Programs 720 Fourth Avenue South St. Cloud MN 563014498

Owen J Sexton Tyson Research Center PO Box 258 Eureka MO 63025

Merle Shepard Archbold Tropical Research & Education Center Clemson University, 2865 Savannah Highway Charleston SC 29414

Richard K Speairs Jr PO Box 52963 Shreveport LA 711352963 Sara Ellis The Lobster Conservancy PO Box 235 Friendship ME 04547

Craig L. Frank
Fordham University, Dept of Biological Science
PO Box 887, The Louis Calder Center
Armonk NY 10504

Willard N Harman SUNY at Oneonta Biological Field Station 5853 State Highway 80 Cooperstown NY 13326

Susan Lohr Lohr Associates 1141 3800 Lane Paonia CO 81428

Arthur McKee Flathead Biological Station 300 Bio Station Lane Polson MT 59860

Frank Powell 3000 East Line Street Bishop CA 93514

Jon Ross Lake Itasca Biological Station HC 05 Box 7 Lake Itasca MN 56470

Jerome Rozen Jr American Museum of Natural History Entomology Dept, Central Park West at 79th St New York NY 10024

Jennifer M. Shay
University of Manitoba
Winnipeg
Manitoba R3T 2N2
Canada

Paul Siri 123 Howard Street Petaluma CA 94952

Susan L. Swarbrick UCSB Natural Reserve System Marine Science Institute Santa Barbara CA 931066150 Michael C Swift 826 Goodrich Avenue St. Paul MN 55105

Pamela L Williams PO Box 1236 5442 Isabel Weldon CA 93283 John N. Wade Pescadero Conservation Alliance PO Box 873 Pescadero CA 94060

Geoff Wilson Hubbard Brook Research Foundation 25 Dobson Hill Road Thorton NH 03223

