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# OBFS NEWS

Volume 2005, No. 2.

*The Newsletter of the Organization of Biological Field Stations*

Issued December 2005

Editor: *David S. White, Hancock Biological Station*

## Table of Contents Volume 2005, No. 2

New Station Members	2
Photographs and Memories	2
Attendees at 2005 Annual Meeting	2
Improvements in Facilities, Communications, and Equipment for Research at Biological Field Stations and Marine Laboratories	3
International Committee	3
Minutes of the 2005 Annual Business Meeting	4
Executive Board Meeting	4
OBFS Business	4
Strategic Plan Review	5
Task Force Meetings	5
Investment Committee Report	6
Financial Report	6
AIBS Report	7
Task Force Reports	7
Operations Manual	10
NEPA	10
Animal Care and Use	10
Congressional Visits	11
FSML Report	12
Task Force and Committee Reports	13
NEON Update	14
Proposed 2006 Budget	17
Financial Report 2004-2005	18
<i>Ye Olde Official OBFS Ballotte, 2005</i>	
President	19
Vice President	19
Member at Large	20
2006 Annual Meeting – Flathead Lake	21
OBFS Notes, etc.	17

## Executive Board (Term of office, E-mail address)

<i>President</i>	<b>Sedra Shapiro</b> (2004-2006 – sshapiro@sciences.sdsu.edu)
<i>Vice President</i>	<b>Robert Wyatt</b> (2004-2006 – wyatt@wcu.edu))
<i>Secretary-Treasurer</i>	<b>Claudia Luke</b> (2005-2007 – cluke@sciences.sdsu.edu)
<i>Member at large</i>	<b>Amy Whipple</b> (2005-2007 – amy.whipple@nau.edu)
<i>Member at large</i>	<b>Larry Weider</b> (2004-2006 – ljweider@ou.edu))
<i>Past President</i>	<b>Eric Nagy</b> (2004-2006 – eric.nagy@virginia.edu)
<i>Editor</i>	<b>David White</b> (2005-2007 - david.white@murraystate.edu)
<i>Network Coordinator</i>	<b>Mark Stromberg</b> (2005-2007 - stromber@socrates.berkeley.edu)

OBFS News is available at the OBFS Web Site 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 e-mailed to all members in January 2006. The exception will be candidate biographies and the voting cards that will be sent out by hard copy each December.

**Check out the new and improved  
OBFS Web Site <http://www.OBFS.org/>**



*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](mailto: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.*

## OBFS WELCOMES NEW MEMBERS FOR 2005

Claytor Nature Study Center, Lynchburg VA – Jeffery Corney  
George L. Harp Environmental Field Station, Arkansas State University AR – Tom Risch  
Kessler Farm Field Laboratory, University of Oklahoma – Linda Wallace  
Upper Green River Biological Preserve – Western Kentucky University – Ouida Meier



## OBFS "PHOTOGRAPHS AND MEMORIES"

Check out the latest updates to the "Photo Gallery" on the OBFS website ([www.obfs.org](http://www.obfs.org)). Many photo images have been added from past meetings. I am trying to add about 8 to 10 "representative" photos from each meeting – leaving out any revealing "auction scene" images. Remember, if you have any photos or slides from past OBFS Meetings or events that you'd be willing to share, I'll try to get them uploaded to the webpage, or at least added to the OBFS historical archives.

Also, please consider sending me any relevant OBFS meeting highlights or exciting events during field trips (such as the grizzly bear Art McKee and others saw one year), or how/why your field

station originally joined OBFS. These stories can then be shared via our newsletter and/or website.

Thank You,

*David A. Larson, OBFS Historian*

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Washington University Tyson Research Center  
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Eureka, MO 63025  
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## ATTENDEES AT THE 2005 OBFS MEETING

### Coweeta Hydrologic Laboratory and Highlands Biological Station

Paul Aigner	UC Davis - McLaughlin Reserve	Isabelle Kay	UC Natural Reserves San Diego
Robert Anderson	University of Nebraska, Cedar Point Biological Station	John Kim	SDSU Field Station Programs
Kristy Anderson	University of Nebraska, Cedar Point Biological Station	Brian Kloeppel	Coweeta Hydrologic Laboratory
James Anderson	University of Mississippi Field Station	Cathy Koehler	UC Davis - McLaughlin Reserve
Tom Arsuffi	Texas Tech Field Station	David Larson	Tyson Research Center
Ian Billick	Rocky Mountain Biological Station	Lyndal Laughrin	Santa Cruz Island Reserve
Bonnie Bowen	Iowa Lakeside Laboratory	Ron Lawrenz	Science Museum of Minnesota
Jeff Brown	Sagehen Creek Field Station	Claudia Luke	Bodega Marine Laboratory
Renee Brown	Sevilleta Field Station	David Mahan	Au Sable Institute
Geoffrey Carter	Student Conservation Association	Lane McDonald	Vermilian Sea Field Station
Laura Carter	E.N. Huyck Preserve & Biological Station	Janet McDonald	Bahia de los Angeles
Keith Clay	Indiana Research and Teaching Preserve	Art McKee	Vermilian Sea Field Station
Elizabeth Cline	Woodlake Environmental Field Station	Ouida Meier	Bahia de los Angeles
Philippe Cohen	Jasper Ridge Biological Preserve	William Michener	Flathead Lake Biological Station
Peter Connors	Bodega Marine Laboratory	Allan Muth	Upper Green River Biological Preserve
Nina Consolatti	Kellogg Biological Station	Eric Nagy	ILTER Network Office
James Costa	Highlands Biological Station	Violet Nakayama	UC NRS Deep Canyon Research Center
Bohdan Dziadyk	Green Wing Laboratory	Don Natvig	UVA Mountain Lake Biological Station
Lisa Renee English	Merry Lea Ecological Field Station of Goshen College	Kari O'Connell	UC Systemwide NRS
Chris Halle	Bodega Marine Laboratory	Michael Palmer	Sevilleta Field Station
Ian Halm	Hubbard Brook Experimental Forest	Matt Rahn	HJ Andrews Experimental Forest
Mike Hamilton	UC James Reserve	Christine Relyea	Tallgrass Prairie Ecological Research Station
Steve Harper	Pinellas County Biological Field Station	Richard Rothaus	SDSU Field Station Programs
Tom Hayes	University of Wisconsin-Stevens Point, Treehaven Center	Jeff Savino	Pymatuning Laboratory
Ray Highsmith	University of Mississippi Field Station	William Schuster	Mille Lacs Kathio, St. Cloud State University
Janet Hodder	Oregon Institute of Marine Biology	Gerald Selzer	University of Toledo, Lake Erie Center
Mary Hufty	Archbold Biological Station	Sedra Shapiro	Black Rock Forest Consortium
Matthew Julius	Mille Lacs Kathio, St. Cloud State University	Leonard Smock	NSF / Division of Biological Infrastructure
		Mark Stromberg	SDSU Field Station Programs
			Rice Center
			UC Hastings Reserve

Hilary Swain	Archbold Biological Station	Marshall White	LTER Network Office
Linda Wallace	Kessler Farm Field Lab	Dawn Wilson	Southwestern Research Station
Eugene Wallensky	Australian National University	Robert Wyatt	Highlands Biological Station
Larry Weider	University of Oklahoma Biological Station	Richard Wyman	E.N. Huyck Preserve & Biological Station
Amy Whipple	Merriam Powell Center	Marilyn Wyman	E.N. Huyck Preserve & Biological Station
David White	Hancock Biological Station		



Attendees at the 2005 OBFS meeting at Coweeta Hydrologic Laboratory and Highlands Biological Station

## 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, and marine ecosystems. FSMLs support biological 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-to-date equipment, appropriate personal accommodations for visiting scientists and students, 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](mailto:gselzer@nsf.gov)
- Kandace S. Binkley, Directorate for Geosciences, Division of Ocean Sciences, 725 N, telephone: (703) 292-8583, fax: (703) 292-9085, email: [kbinkley@nsf.gov](mailto:kbinkley@nsf.gov)

Deadline: March 3, 2006

Program Guidelines: NSF 05-550

<http://www.nsf.gov>

## INTERNATIONAL COMMITTEE

Five OBFSs attended the IOBFS meeting. A brief history was presented. The IOBFS now has a membership directory (paper), a web site (IOBFS.org), and a listserv. Our next goal is to hold a series of regional (e.g., SA, CA, subSahara Africa, Mediterranean, near east, far east etc.) meetings annually around the Earth. Funding, however, would be required to accomplish this. Art McKee and Rick Wyman have sent letters of enquiry to five foundations (MacArthur, Ford Brothers, Ford, Heintz, and Moore) seeking roughly \$90K per year to support a post doc and to hold meetings. In addition we sent letters as open solicitations to another group of 16 people in influential positions asking for advice. We have not heard from these people yet.

In order to begin the process of establishing relations in other regions on Earth, we propose to add \$2000 to our 2006 budget so that we may invite significant movers and shakers from these regions to our next annual OBFS meeting. We would establish a process to select these individuals and arrange for the travel. Perhaps they also could visit a field station or two while they are here.

We plan to draft a message to the IOBFS membership about our plans to hold regional meetings and to support travel of regional representatives. In addition we will be working on updating our web page.

*Rick Wyman*



# Minutes of the 2004 Annual Business Meeting of the Organization of Biological Field Stations, Co-hosted at Coweeta Hydrologic Laboratory and Highlands Biological Station, North Carolina

**Thursday, September 22, 8:00 pm - 8:30 pm**

*Welcome Address – Sedra Shapiro*

President Sedra Shapiro called the meeting to order with the Tom Callahan Memorial Big-Assed Gavel, and introduced the members of the Executive Board: Past-President Eric Nagy, Vice President Robert Wyatt, Secretary Treasurer Claudia Luke, Editor Dave White, Network Coordinator Mark Stromberg, and Members-at-Large Larry Weider and Amy Whipple. She thanked our hosts, Robert Wyatt and Brian Klooppel for jointly hosting the meeting and commented on new advances for OBFS – particularly the newly adopted Strategic Plan.

**Thursday, September 22, 8:30 pm - 10:30 pm**

*Executive Board Meeting*

All members of the Executive Board were present. Discussion focused on the types of information that should be clearly presented at the beginning of the meeting to encourage active participation in strategic planning from the membership. The Executive Board discussed its new role in summarizing and tracking the accomplishments of the Task Forces to achieve strategic plan goals. In particular the Executive Board recommended

- Modifying the meeting schedule so that they could meet with the Task Force Chairs after the Task Force meetings had adjourned (2:30 pm Saturday). At that time they could review how the various committee activities were integrated with each other and obtain estimates of budgets requested for various activities.
- A budget item request to be presented to the membership for regular conferencing during the year. The Executive Board felt that phone conference calls would be adequate and would keep the budget needs low. The first conference call was recommended for the beginning of December. The idea to include Task Force and Committee Chairs in these conference calls to maintain momentum on the plan was also promoted by President Shapiro.
- Reformatting the budget format to include a line item for each of the Task Forces to accomplish their goals. Projects previously identified as a priority by the Organization would be undertaken if proposed by the Task Force (e.g., integration of outreach materials, brochure and display development would now appear as line items in the Outreach Task Force's budget).

The Executive Board also discussed a few specific proposals regarding OBFS projects. The Board agreed that these ideas should be considered by the Task Forces rather than the Board. Possible projects included

- Developing a consortium that would apply for grants to support travel costs for minority or economically challenged students. Grant money could be made available to eligible students participating in any summer course at a member field station. This idea was recommended for consideration by the Diversity Task Force.
- Advertising to attract new field station members in the journal "Conservation In Practice." Mark Stromberg had been approached by the Society for Conservation Biology's who are interested in running the ad in exchange for our membership's contact list. The Board reaffirmed its commitment to keeping the list private and tasked Mark Stromberg with finding out the cost of placing an ad in the magazine. Alternative recruitment ideas were also discussed, such as developing a list of past field station members to ask them to rejoin. (These addresses are contained in old

newsletters). These ideas would need to be considered for proposal by the Business Task Force.

Sedra Shapiro mentioned that OBFS had been approached by an NSF-funded project, the Research Ambassador Program that provides training for researchers to be "ambassadors" for research to their local communities. OBFS participation could range from being a project supporter (i.e., providing our logo) to just advertising the program to field stations should they want to participate. She circulated a brochure and the Board agreed that they would bring up the association for the membership to consider.

Claudia Luke noted that Peter Connors, Past Secretary-Treasurer and Chief Auctioneer for OBFS, had retired from his position as Reserve Manager at Bodega Marine Laboratory this year and no longer had travel funds available from his previous home institution at UC Davis. The Board agreed that Peter's activities as Chief Auctioneer (which have included recruiting other talented auctioneers, serving as point-person to coordinate the event, and coordinating with the unofficial "Libations Committee") significantly contribute to fund-raising for the OBFS Restricted Fund (now regularly nearing \$6,000 for each event). The Board agreed that paying for Peter Connors travel to the meetings would be a wise investment by the Organization and approved reimbursement of Peter Connors travel funds for this year from the Executive Boards Travel funds. The Board decided that approval for future travel reimbursements would be voted on by the membership.

Next year's 2006 OBFS meeting is at Flathead Lake Biological Station in Poson Montana. We need to find a site for the 2007 meetings. These meetings will be the 40<sup>th</sup> anniversary of OBFS. Dawn Wilson had informally expressed interest in hosting the meeting at the Southwest Research Station and Eric Nagy mentioned that Rocky Mountain Biological Lab had a standing offer to host the meeting. The Board specifically noted that we would prefer a site in the southwestern US since there had been no meetings in this region recently and would talk to members with field stations in this region during the meeting.

**Friday, September 23, 9:00 am – 10:15 am**

*OBFS Business – Sedra Shapiro*

Sedra Shapiro began the business meeting by

- putting out the call for field station proposals to host the 2007 meetings
- providing information for the membership to consider the Researcher Ambassador Program, and
- noting that the Task Force Chairs identified in the agenda were only temporarily assigned and that each Task Force will be looking for members to volunteer for these positions

She also noted OBFS accomplishments for this year: an adopted strategic plan and updates to our class poster. She also noted that some proposed projects had not been accomplished: updates to the OBFS traveling display and the design of a new OBFS brochure. These tasks could now be conducted relative to the goals of the Strategic Plan and taken on by the appropriate Task Force. Sedra also quoted from one of the first OBFS newsletters that noted a primary benefit of OBFS was the informal communication that was available to members at the meetings. She reaffirmed OBFS's commitment to this value.

## *Strategic Plan Review and Next Steps- Eric Nagy and Sedra Shapiro*

And the activities of the Organization are driven by four Core Values:

- Diversity
- Inclusiveness
- Sustainability
- Transparency

The Strategic Plan identifies 7 main goals:

- Goal One: Conduct the business of OBFS to ensure responsible and transparent management.
- Goal Two: Provide opportunities for informal networking, mentoring and problem-solving within OBFS.
- Goal Three: Provide services and resources that will improve field stations and marine laboratories.
- Goal Four: Strive to increase diversity within the OBFS membership and at member stations.
- Goal Five: Promote cooperation and collaboration among OBFS members, and with broader education and research initiatives.
- Goal Six: Strive to increase financial resources for field facilities and for field-based science, education and outreach.
- Goal Seven: Strive to create a broad-based constituency with a vested interest in the success of OBFS and member stations.

Goal implementation is the responsibility of 7 Task Forces that address each goal: Business, Internal Relations, Member Support, Diversity, Networking, Development, and Outreach. Sedra Shapiro noted that we are looking to the Task Forces to provide edits, modifications to ensure that the overall goals of the Society are achieved. Other characteristics of the Task Forces include

- Task Forces need not conduct the tasks themselves.
- Each Task Force will determine how it wishes to go about addressing tasks.
- Task Forces will report in writing and at Annual Meetings.
- Task Force Chairs will serve one-year terms.
- The Executive Board will appoint Chairs after public discussion.
- Chairs have no expectation of automatic reappointment.
- Executive Board can make the appointments via email.
- The tasks are prioritized. Task Forces might well want to consider grouping these tasks into short-term, mid-term and long-term efforts.
- Task Forces should assess and update the priorities over time.

The Strategic Plan has an impact on our current working structure.

Committees that will remain unchanged are

- Executive Board (defined by Bylaws)
- Nominating Committee (defined by Bylaws)
- Program Committee (defined by Bylaws)
- Investment Committee (defined by Bylaws; Chair Philippe Cohen)
- Small Field Stations Committee (created by membership; Chair: Beth Cline)
- International (created by membership; Chair: Rick Wyman)

Our representation to other organizations will remain unchanged:

- IOBFS (Rick Wyman)
- NSF (Art McKee)
- AIBS Council (Eric Nagy)
- AIBS Public Policy (OBFS President)
- LTER Network Office (Bill Michener)

These committees and representatives will be joined by the 7 new Task Forces (names noted are temporary appointments):

- Business (Cohen)

- Internal Relations (Shapiro)
- Member Support (Nagy)
- Diversity (Swain)
- Networking (Stromberg)
- Development (McKee)
- Outreach (Hodder)

The following committees will be abandoned:

- Administration and Facilities (Chair: Philippe Cohen)
- Education (Chair: Jan Hodder)
- Public Relations (Chair: Sedra Shapiro)
- Research (Chair: Hilary Swain)
- NSF Relations (Chair: Art McKee)
- Data Management/Networking (Chair: Mark Stromberg)

And of course, the Strategic Plan is still subject to, and guided by, two higher principals:

1. OBFS Constitution and Bylaws and
2. Four Maxim's of Tom Callahan's *School for Interpersonal Sensitivity and Political Correctness*
  - 1) Treat everyone decently.
  - 2) Laugh at yourself.
  - 3) Know that everyone makes mistakes, so **Get Over It!**
  - 4) Don't call the authorities unless there is either fire or blood.

### **Friday, September 23, 10:30 am – 11:30 am**

#### *Concurrent Task Force and Committee Meetings*

The Business meeting ended and attendees dispersed to work in Task Forces and Committees. Members were also encouraged to meet on their own with the Nominations Committee (Ron Lawrenz, Hilary Swain, and Nina Consolatti) to nominate candidates for the 3 eligible positions this year: President, Vice President, and Member-at-Large.

Networking Task Force (Interim Chair: Mark Stromberg)

Outreach Task Force (Interim Chair: Jan Hodder)

Development Task Force (Interim Chair: Art McKee)

### **Friday, September 23, 11:30 am – 12:30 pm**

#### *Concurrent Task Force and Committee Meetings*

During the second hour, members had the opportunity to join one of 3 Task Forces:

Business Task Force (Interim Chair: Philippe Cohen)

Internal Relations Task Force (Interim Chair: Sedra Shapiro)

Member Support Task Force (Interim Chair Eric Nagy)

### **Friday, September 23, 2:00 pm – 3:00 pm**

#### *Concurrent Task Force and Committee Meetings*

Attendees joined discussions in Committees and Task Forces:

International Committee (Chair: Rick Wyman)

Diversity Task Force (Interim Chair Hilary Swain)

Small Field Stations Committee (Chair Beth Cline)

### **Friday, September 23, 3:00 pm – 4:20 pm**

#### *OBFS Business*

#### *Historian Report and Group Photo-David Larson*

Attending members assembled outside the Coweeta Conference Center for a group photograph.

#### *Report of the Secretary Treasurer – Claudia Luke*

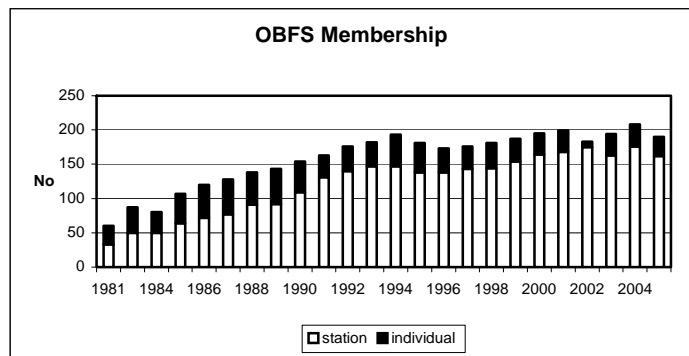
2004 Meeting Minutes: Two edits to 2004 meeting minutes were noted by the attendees: (1) On September 16 in the Welcome Address section, Member-at-Large in attendance should have noted as Beth

Cline (rather than Nina Consolatti); (2) On September 17 in the Financial Report section, one of two green funds should have been described as the Citizens Core Growth (rather than the Citizens Index Fund). A MOTION was made to accept the 2004 meeting minutes with the publication of the above 2 errata. Philippe Cohen seconded and the motion passed by voice vote.

**Old Newsletters:** Mark Stromberg found Jim Griffin's copies of early OBFS minutes and newsletters at Hastings Natural History Reservation. These included the first 4 issues which have been missing. Copies will be sent to the four archive locations for the Society: Archbold Biological Station, Bodega Marine Laboratory, OBFS Historian Dave Larson, and one copy to the Network Coordinator Mark Stromberg. It is possible that we now have a complete set of the newsletters but we still have to check.

**Membership:** As of September 2005, total membership was 190 members with 162 stations and 28 individual members.

OBFS has maintained about 200 members for several years. Since 2004, 36 stations and 12 individual memberships have lapsed. New and returning members included 13 stations and 3 individuals. Four of the stations are new members to OBFS: Claytor Nature Study Center (Virginia), George L Harp Environmental Field Station (Arkansas), Kessler Farm Field Laboratory (Oklahoma), and Upper Green River Biological Preserve (Kentucky).



The current administrative contact information for members was circulated for editing by the attendees.

**Investment Committee Report – Philippe Cohen**

The following investment report was submitted by Philippe Cohen and Peter Connors and is significantly revised from the one presented at the annual meeting that contained several errors.

**Price As Of 08/31/2004**

	Fund	Shares	NAV Value
CITIZENS CORE GROWTH	1,523.777	\$17.16	\$26,148.01
CITIZENS EMERGING GROWTH	1,013.981	\$11.99	\$12,157.63
<b>TOTAL VALUE</b>			<b>\$38,305.64</b>

**Price As Of 08/31/2005**

	Fund	Shares	NAV Value
CITIZENS CORE GROWTH	1,637.829	\$20.44	\$33,477.22
CITIZENS EMERGING GROWTH...	1,082.936	\$14.40	\$15,594.27
<b>TOTAL VALUE</b>			<b>\$49,071.49</b>

Amount invested in Citizens Core Growth September 1, 2004—August 31, 2005: \$2,800 (5 payments @ \$560)

Amount invested in Citizens Emerging Growth September 1, 2004—August 31, 2005: \$1,200 (5 payments @ \$240)

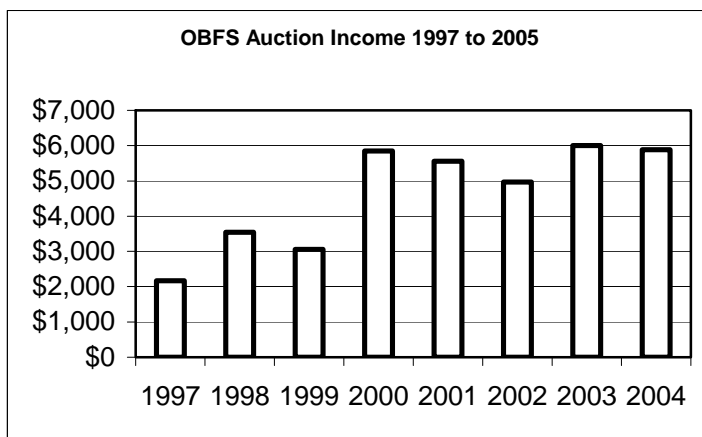
	1 year, 8/31/05	3 year, 9/30/05	10 year 9/30/05
S&P 500 Index	12.56	16.72	9.50
KLD Domini Social 400 Index	10.10	15.76	9.97
Citizens Core Growth Fund	19.11	14.16	7.81
Russell 3000 Index	15.32	18.13	9.84
KLD Broad Market Social Index	14.96	18.26	N/A
Citizens Emerging Growth Fund	20.10	13.81	9.46

The table at the top of the next column presents comparisons of total annual returns (%) for periods ending 8/31/05 and 9/30/05. The KLD indices are meant to serve as benchmarks for socially responsible funds. KLD Domini 400 Social Index and the S&P 500 Index are reasonable benchmarks for the Citizens Core Growth Fund; KLD Broad Market Social Index and the Russell 3000 Index are reasonable benchmarks for the Citizens Emerging Growth Fund.

After a few years of underperformance by Citizen's Funds relative to the benchmarks, in 2004-05 both Citizens Funds have clearly outperformed the benchmarks. We propose to continue our investments in Citizens Funds with annual review of performance relative to these benchmarks. We will continue to discuss further diversification.

**Financial Report – Claudia Luke**

The financial report (August 31, 2005) for Operating and Restricted Funds follows these minutes. Operating Fund: The balance as of August 31, 2004 was \$37,449.41 up from \$34,435.50 last year. Several budgeted funds were not spent: Congressional Visits Day (Sedra encouraged more members to take advantage of this program) and the brochure was not completed (This will now be taken up as the responsibility of the Outreach Task Force).



**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 Core Growth and Citizens Emerging Growth Funds). The balance in the Restricted Fund as of August 31, 2005 was \$57,192.51, up from \$42,945.14 on August 31, 2004 after earnings and capital gains/losses, auction proceeds and member donations. The

auction is the main source of contributions to 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.

MOTION made by Peter Connors to accept the Operations and Restricted Budget reports were seconded by Philippe Cohen and approved by voice vote.

### **Friday, September 23, 4:20 pm – 5:00 pm**

#### *OBFS Business*

#### *AIBS Report – Eric Nagy*

Currently OBFS pays for both a Member Society and Organization (MSO) and a Public Policy Initiative membership in the American Institute of Biological Sciences (AIBS). The Public Policy Initiative liaison position is the responsibility of the OBFS President and involves such activities as NEON planning and Congressional Visits Day (Our current AIBS contact from the Public Policy Office is Dr. Robert Gropp). As the AIBS representative, Eric provided information on the MSO Membership. OBFS is one of 95 MSO's with membership in AIBS. We send a representative to the AIBS Council that advises the Board and provides leadership regarding MSO priorities. The Council also elects several Board members from its own ranks.

Eric selected information from the May 7-8 Council meeting that was relevant to OBFS membership.

- AIBS has expanded its MSO membership eligibility and is expecting a 2-fold increase in membership. They are now accepting memberships from academic entities (e.g., departments, schools, centers), corporate businesses, and others. This new structuring means that that individual field stations can join as full members if they are interested. The advantage is that field stations can now benefit from the support provided to full members. See AIBS webpage for benefits for members.
- AIBS has a 5-year contract to conduct education services through the education office for the new National Evolution Synthesis Center (NESEC), a 10-year \$15M NSF-funded project. Susan Musante in their office has created a new on-line journal that promotes bioscience literacy and education. They send out an email report on national issues and events about education in biology, such as recent controversies surrounding teaching evolution and intelligent design in schools. The AIBS education report is sent to the OBFS Secretary-Treasurer who forwards these reports to our membership.
- AIBS is undertaking some new initiatives regarding diversity recruitment and support. Mary McKenna, an active AIBS Board member, is looking for success stories of minority groups. OBFS has an opportunity to forge a connection with their programs. Eric recommends that the Diversity Task Force should get involved.
- ActionBioscience.org, owned and staffed by AIBS, is a non-commercial, educational website created in January 2004 to promote bioscience literacy. The web site provides articles by scientists, science educators, and science students on issues related to bioscience challenges. The intended audience is the concerned public, educators, students, and science professionals. The website has won awards from Eisenhower National Clearinghouse and Scientific American. This website could be of use to the Member Support and Outreach Task Forces.

Eric is happy to continue to serve as the OBFS AIBS representative, but if you are interested in the position, please contact Sedra Shapiro.

#### *ILTER Representative Report – Larry Weider*

The Long-Term Ecological Research (ILTER) Network received a planning grant from NSF and asked for OBFS representation for the effort. Sedra Shapiro appointed Member-at-Large Larry Weider to provide OBFS input. The first meeting was held in Ann Arbor, Michigan at the end of April 2005. During this meeting, the working group developed a report of current governance. Their charge was to look at how LTER could be restructured for cross-site integrated work and to make broader connections to other organizations. This included possible funding and governing structures for ecological research. The report was submitted to the LTER strategic task force for implementation. More information will be available next year as the planning process develops.

#### *Committee and Task Force Reports*

Business Task Force – Philippe Cohen: Attendees included Ian Billick (Rocky Mountain Biological Laboratory), Philippe Cohen, Chair (Jasper Ridge Biological Preserve), Peter Connors (Bodega Marine Reserve and Laboratory), Claudia Luke (Bodega Marine Reserve and Laboratory), Art McKee (Flathead Lake Biological Station), Matt Rahn (San Diego State University Field Station Programs), Hilary Swain (Archbold Biological Station), Robert Wyatt (Highlands Biological Station).

The Task Force felt that tasks listed pertained to governance of OBFS and recommended that the name be changed to Governance Task Force. In addition, the Task Force agreed that the tasks are such that this group should be able to sunset in 1-2 years. The following are the group's Task activities and recommendations:

Tasks 1 & 8 (Follow the norms of nonprofit operation and revise budget procedure):

- Claudia will make a flowchart of current financial procedures and decisions.
- Hilary and Claudia will submit descriptions of officers and committees for review.
- Philippe, Peter,, & Claudia will cast in writing the current investment policy and identify issues not addressed by the current investment policy, such as
  - 5-year goals
  - diversification
  - risk tolerance (acceptable loss in any given year)
  - benchmarks
  - investment goals (some amount above CPI, etc.)
- Turn the investment committee into the Finance Committee to support Treasurer.
- Formalize a process for soliciting budgets from task forces and adjust financial flow chart noted above to reflect this process.
- Recommend that the Executive Committee propose policies for eventual expenditure of income and/or corpus of investment once specified goals are reached.

Task 2 (Make the organization transparent):

- Recommend that minutes of annual meetings should be emailed to membership within a month of the conclusion of the meetings. All action and policy items should be highlighted.
- Recommend that minutes of Executive Committee meetings be emailed within month of the meetings.
- Recommended that a post-meeting evaluation be designed. Ian Billick agreed to do this, but later learned that Internal Relations Task Force intended to address this issue, and so we ceded responsibility to that Task Force.

Task 3 (Conduct OBFS business as publicly as possible):

- See Task 10 below.

Task 4 (Develop and implement business plan):

- This was viewed as the responsibility of the Executive Committee and the Finance Committee described above.

Task 5 (Develop and implement fundraising plan):

- Agreement that this task was the responsibility of the Development Task Force.

Task 6 (Periodically review strategic plan):

- Agreement this was a responsibility of the Executive Committee, and that they should provide an annual progress report to membership on strategic plan progress.
- Annual report by OBFS President on the 'state of the organization' that includes some agreed upon metrics such as
  - Historical trends in membership
  - Demographics of the organization
  - Meeting attendance
  - Data management — field stations adding data sets, etc.

Task 7 (Encourage Nominating Committee to consider leadership):

- Task Force duly encourages the Nominating Committee to consider diversity issues.

Task 8 (see Task 1 above).

Task 9 (OBFS website) — not addressed by Task Force.

Task 10 (OBFS responses and position statements to papers, reports, regulatory activities, etc.):

- While Hilary and Claudia review OBFS by-laws as noted in Task 1 above, they will check what if any language is present in the officer position descriptions and committee descriptions that addresses this issue.
- OBFS membership needs to be made aware that no individual can represent an OBFS position unless it has been formally adopted by the Executive Committee and affirmed by membership.
- Need to encourage a more formal culture with regard to voting on issues and actions within organization. This includes reviewing by-laws for needed changes to encourage a more formal process with regard to voting on issues and action items.
- If Executive Committee takes a position between annual meetings, they still should go back to the membership for affirmation.

Task 11 (Increase OBFS membership):

- Viewed as the responsibility of the Member Support Task Force.

Task 12 (Standardized report forms) — not address by Task Force.

Discussion - Peter Connors pointed out that currently the Bylaws state that the "duties of the officers should be those usually devolving on those offices." There are also descriptions to begin working with on the website.

Internal Relations Task Force – Sedra Shapiro: The Task Force found that all tasks were related to planning and content for the annual meeting and recommended that the Internal Relations Task Force be combined with the Program Committee. The group recommended that the Chair of the Program Committee continue to be the Vice President of OBFS and that other participants include Past-Year Annual Meeting Host, Current Annual Meeting Host, Member-at-Large, and Other Interested Members. Program Committee defined members are, The committee has five members: the Vice President (chair), both Members-at-large, the hosts of both the past and upcoming Annual Meeting.

The following vision statement was recommended by the TF: The OBFS Annual Meeting represents a phenomenal networking and learning forum for OBFS members. The Meeting should remain a vibrant and relevant resource and not become burdensome responsibility for members. The following are the group's Task activities and recommendations:

- TF thought the first 4 tasks (1. Brainstorm how to sustain value of Annual Meeting 2. Reduce the amount of time spent on business

during the meeting, 3. Maintain and formalize importance of personal interactions at the annual meeting, 4. Increase informational content at the annual meeting) should be incorporated into an Annual Meeting Guideline document that outlines the necessary components and activities for an annual meeting agenda.

- Task 6 (Provide recommendations regarding the annual meeting to the Program Committee) should be deleted since the Task Force will merge with the Program Committee.
- Task 7 (Create an informal interactive web forum) is better generated by Task Forces with content-oriented goals.
- Add Task 8 (Gather information from each Task Force and Committee at each annual meeting for the purposes of planning out subsequent annual meetings).
- Add Task 9 (Keep track of geographic location and recruits new hosting sites to submit annual meeting proposals to the Executive Board).
- Add Task 10 (Provide information on the website for members that are interested in hosting annual OBFS meeting (e.g., how to submit proposals, issues to consider, etc.))
- Add Task 11 (Create and update Annual Meeting Guidelines that facilitate and ensure that annual meetings meet needs of society).

The Proposed Action Steps (Priorities) for 2005 are

- Merge Internal Relations Task Force with Program Committee
- Draft written guidelines that provide direction for annual meeting planning. The guidelines will address Tasks 1-4 and 7.
- Gather information from attending members in a post-meeting assessment to help structure subsequent annual meeting.
- Use information from the above actions to help prepare agenda for the 2006 Annual Meetings
- Draft and post website information for members interested in hosting annual meetings.
- Review annual meeting schedule and determine if timing (e.g., weekend vs. weekday) and duration of the meetings needs modifications to meet business and annual planning needs. Another specific recommendation was to have an annual retreat outside of the annual meeting for the Executive Board and Task Force and Committee Chairs to ensure that adequate time is available to conduct OBFS business (Task 2).

Discussion: Art McKee – Six or seven years ago, we reached out to the National Association of Marine Laboratories (NAML) and put together a congressional briefing. This was a very positive association and an institutionalized association between OBFS and NAML would be welcomed by NAML. Hilary Swain – What is role of Member Support compared to Internal Relations? Rick Wyman – There is overlap between the Internal Relations and Member Support Task Forces. I got through the entire Internal Relations Meeting looking at the Member Support action item list.

Member Support Task Force – Eric Nagy

Eric Nagy served as Interim Chair. Geoff Carter and Lisa Renee English have tentatively offered to serve as co-Chairs for this Task Force. Recorded members attending the TF meeting: Paul Aigner, Bonnie Bowen, Renee Brown, Geoff Carter, Laura Carter, Beth Cline, Bohdan Dziadyk, Lisa Renee English, Steve Harper, Tom Hayes, Ray Highsmith, Isabelle Kay, John Kim, Lyndal Laughrin, Al Muth, Eric Nagy, Mike Palmer, Bill Schuster, Mark Stromberg, Linda Wallace, Larry Weider Amy Whipple, Marshall White, Dawn Wilson

The goal of the Task Force meeting was to review the 9 tasks outlined in the new organization strategy plan and to identify several priorities to act on right away. It was agreed that all 9 tasks were reasonably identified as TF responsibilities. A-D action items below



were identified that include some, but not all, of the defined tasks in various combinations:

- A. (Tasks included: #1) Operations Manual (OM) – Mark Stromberg will lead a discussion at this meeting in an effort to keep the OM up to date, relevant and visible to the membership. He will also work to keep the OM updated and current on the OBFS web site mostly by collecting sample material to add to the document.
- B. We will also work with the Network TF to optimize the web site and make sure relevant and useful material remains prominent.
- C. We will continue working with the LTER Network Office to maintain the “methods” database, and will improve visibility and relevance on the web site as per “B.”
- D. Most of the time was spent discussing the need to better assess membership needs. We propose building and maintaining a professionally designed needs-assessment system. This will take the form of a standing web based survey by which members will be periodically asked to indicate current needs and struggles they face at their field station. We will track need levels, follow up with solutions (workshops, other support), and then conduct follow-up assessments to measure effectiveness of solutions. Topics of special concern include fundraising, legislative outreach, business planning, non-technical training, administrative issues, student recruitment. Training solutions will take the form of special workshops, Annual Meeting sessions and panels, print or web material. Several sources of pro bono or inexpensive sources of support for developing the system were suggested (Yale Grad. School, Tuck School of Business, UC Berkeley Survey Research Center). Four members will follow up on this effort: Geoff Carter, LisaRenee English, John Kim, and Eric Nagy. This may cost some money. The TF requests \$2,000 from the 2005-2006 OBFS operations budget. Part of the project will be obtaining funds to set up and/or maintain the effort.

#### Diversity Task Force – Sedra Shapiro/Brian Kloeppe

These notes were taken by Sedra Shapiro as a stand-in for Hilary Swain. Brian Kloeppe volunteered to serve as Chair of the Diversity Committee. The Diversity Task force addressed Goal 4: “Strive to increase diversity to reflect at member stations regional and national diversity of this country.” There was some discussion as to whether this is an appropriate goal for OBFS. We discussed increasing diversity in education programs and supporting the recruitment of more diverse users at field stations but the way the above is worded was further questioned. Scholarships to benefit minority students, partnerships and training to enhance understanding on how to recruit minority users seemed laudable goals and an appropriate pre-cursor to “increasing diversity within OBFS membership.” OBFS does not control who becomes a manager of station director among member stations, but we can and should strive to increase training for stations in recruiting more diverse users and offering education programs with a more diverse student body as a targeted goal.

We provide the following notes from discussions on each of the strategic plan tasks:

#### Tasks:

1. Promote recruitment of underrepresented minorities at member stations – Particularly in education programs.
2. This group felt this goal was not appropriate for OBFS and that we were somewhat limited to “what we have”.
3. Develop partnerships and collaborations with minority scientific organizations such as, American Indian Scientists and Engineers; Society for Advancement of Chicanos and Native Americans in Science; Beta Kappa Chi; and with all minority-serving institutions including those listed as Historically Black Colleges and Universities, Hispanic Association of Colleges and Universities, and Tribal Colleges. Question as to “why” e.g. what is the goal. Our discussion focused on partnerships to enhance

training on developing education programs that attract minority students and users. Also partnerships in program development where a “ready population of potential users” was identified by partner organization and OBFS “consortia?” developed the education and site-based program.

4. Explore ways to assist minority-serving colleges and universities establish field stations. Group was ambivalent about this goal and felt it may be out of scope for OBFS – rather this group thought we should focus on training of OBFS members, recruitment of minority users and partnership development to do those two things.

In summary, we recommend re-identifying the Diversity Task Force Goals as

1. Promote recruitment of underrepresented minorities at member stations
2. Identify training opportunities and panel discussion for OBFS members at annual meeting
3. Promote recruitment of diverse student body in education programs
4. Develop partnerships and collaborations with minority scientific organizations
  - a. For training opportunities of OBFS members on creating supportive and appropriate environments (goal 2)
  - b. For shared resource program development (for goal 3)
5. Keep Task 5 only if there is a home for this as a project. Most in the task force felt this was not an appropriate goal/project for OBFS.

#### Discussion Notes

- How can we bring more community college users to field stations? Community College students are traditionally under-represented (Selzer)
- We discussed why “diversity” candidates are not going into field sciences and ecology (discussion of money, traditions, prestige of field etc.). We identified that that OBFS is not the only group struggling with this. Some of the goals drafted in the strategic plan are probably not appropriate for this group to tackle.
- There are people and groups who are good at diversity recruitment and they have long-term, mid-term and short-term strategies the help them focus attention and money. The best strategy would be for us to partner with such groups and do what we do best.
- Specifically we identified we have the “places” but not the “people” and in partnership we could develop mutually beneficial programs. We could harness the power of the membership (consortia – like the FIRST idea) and we could offer training for the membership. We also discussed a potential partnership between OBFS and the Student Conservation Association (SCA). They have the student body and tracking system; we have sites and programs. So the tentative idea is that the visiting SCA representative and Jeff Brown would pursue some sort of consortia program where OBFS would offer scholarship support to minority students to have field experiences/ work / education program support at field stations over the summer months. The Organization of Tropical Field Stations has successfully done something like this.
- We identified that diversity recruitment is station or organization-specific and not easily “replicable.” We should first look to NAML as an analogous organization to see their hurdles and successes.

The Task Force provided a series of short, mid, and long-term goals. Short-term goals:

- Training: Organize a panel discussion for annual meeting. Invite an outside expert. (Logistics here... what, how, who, goals or

outcomes? Brian Kloppel volunteered to work on this in his capacity as Chair of the Diversity Task Force)

- Communication: Develop success stories for the website. Possible stories are
  - Amy Whipple re: NAU working with tribal colleges
  - Jeff Brown re: partnership at Sagehen Field Station
  - Move Brian B?? Documents to a success area or dedicated area on website to this topic (ASLO person?)
    - Consortia and partnership: Partner with “ethnically linked” organization to develop education programs placing students at field stations (with financial support)

#### Mid-term goals:

- Focus on need for NSF funds to help aid these endeavors
- Work with IOBFS to map international field stations and recruit users.
- Pay kids to come to field stations. Work with the Development Task Force to develop OBFS as a source of diversity scholarship funds. Jeff Brown volunteered to work on this. Many funders are interested.
  - There are a lot of logistic and social barriers to deal with (e.g., students should be working in the summer, parents and traditions don’t support field work because “poor people work in the field.”). For these reasons, diversity programs may need a lot of upfront investment.
  - Recommend pursuing a paid six-week program over the summer so other work can still be part of summer plan for students.

#### Long-term goals:

- Work with minority students when they are young by increasing K-12 program support at field stations for minorities. OBFS should consider working with other successful groups like the Boys and Girls Club. Also might look to School Yard LTER as a model and assess their success in this area.

In summary, the task force proposed a series of activities for this year:

- Identify potential speakers and panel members for the next annual meeting. This person could perhaps be from one of the local community colleges which have the highest percentage of minorities. This is a short-term goal that we could undertake immediately.
- Post success stories from member stations to the website. This is a mid-term goal that we could start working on. This could be labor intensive and we need ways to identify how to proceed successfully.
- Link the Student Conservation Associations website to the OBFS website and see if we can jointly develop funding to pay stipends for minority students. This is a long-term goal. Jeff Brown will work with Development Task Force to go after monies to get money for SCA interns that meet diversity criteria

Discussion from Membership: Hilary Swain noted that they have some money left over from the NSF-funded educational workshop. These funds might be used to sponsor the travel of invitees to OBFS annual meetings. Gerald Selzer recommended that the group undertake a self-survey of OBFS members to find out how much diversity there already is, and to focus on urban community colleges where the students are the most diverse. Hilary Swain: we track diversity of our school groups.

**Friday, September 23, 5:15 pm –6:30 pm**

#### *Field Stations Operations Manual – Panel of Experts: Mark Stromberg, Eric Nagy, Hilary Swain, Art McKee*

Mark Stromberg introduced this session on updating the Operations Manual. The Operations Manual is a guide to operational policies and procedures for field stations and marine laboratories (FSMLs). The initial project was funded by NSF and the goal was to provide information about standard operating procedures at FSMLs across the country. At least 40 FSML directors were involved in the initial elaboration of coverage for the operations manual. The document is now available on-line at [www.obfs.org](http://www.obfs.org) (click on Operations Manual in the left toolbar). The document is now updated digitally by the membership.

In the past few years, very little has been submitted to update the manual and Mark recommends that we reinvigorate this process. Today’s panel will address federal permitting (both NEPA and Animal Care) for projects at field stations and provide materials for the OM.

#### *National Environmental Protection Act (NEPA)*

Gerald Selzer, Director of the FSML Program at NSF, began the discussion. If federally-listed species are likely to be impacted by a facilities or land management project, a US Fish and Wildlife Service permit will be required. This usually begins as an informal consultation if there is no “take” of those species proposed. (“Take” has a specific legal definition and in some cases can include damage to habitat.) These permitting processes can take significant amounts of time. Additional permitting or documentation may be required if NSF money is used for the project. Amy Whipple is dealing with NEPA issues (including Historic and T&E species) for their new facilities in Arizona.

Al Muth – The permitting process (specifically the National Historic Preservation Act process) for my facilities delayed his project for 2 years. Claudia Luke – An informal consultation regarding installation of sensors took 1.5 years. Gerald Selzer: NSF can extend a grant award for 5-6 years only.

The group and panel then discussed the importance of agency relationships in permitting. It is important for field stations to build relationships with nearby agencies to support field station and researcher projects more quickly. Amy Whipple agreed that relationships were easier with local agencies since she had already established personal contact. The State Historic Preservation Office (SHPO) office was very difficult to work with because she had never worked with these people before. A list of agency-relations needs and issues to consider is needed for the website OM Manual.

#### *Animal Care and Use Permitting Requirements*

Does your field station have its own animal care committee or is that the responsibility of researchers coming in? Eric Nagy – University of Virginia was reprimanded by the Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC is a private, nonprofit organization that promotes the humane treatment of animals in science through voluntary accreditation and assessment programs). UVA was put on probation for violation in medical school and other areas of campus. As a consequence, the 3 field stations (including Mountain Lake Biological Station) were “noticed” by the local Institutional Animal Care Use Council (IACUC), who decided that field stations lay within its area of responsibility and that they decided they wanted to oversee activity by non-UVA researchers as well as UVA affiliates. The 3 field stations got together and put together a policy on UVA field stations (posted in the OBFS Operations Manual). Now the Mountain Lake Biological Station requires that field stations provide copies of approved protocols to IACUC. The field station has the responsibility to ensure that the protocol is approved by the IACUC before the researcher starts.

Bonnie Bowen – Course instructors are not used to being asked about vertebrate activities. Eric Nagy - UVA approved an omnibus teaching protocol for the Mountain Lake. The field station developed a protocol with anything that a course might do and provided an overestimate of maximum numbers that all classes usually need. The omnibus protocol is approved by the IACUC every year. Instructors must agree that they understand the protocol and agree to its terms. Gerald Selzer - I am also responsible for vertebrate safety at NSF. If you receive NSF funding, you need a permit anytime you do anything to a vertebrate (break skin, held for longer than 24 hours, etc.). The institution (i.e. IACUC) is responsible (prior to receiving grant) for facilities and handling permits. Iacocca have been set up by institution and approved by NIH. (NIH have standing committees that can approve series of projects; NSF can only approve one project at a time.) To be legally recognized by the federal government as an IACUC, the committee must submit an “Assurance Document” that describes the institutional committee. The document is approved by Public Health Service and receives a registration number. Without this Assurance, the IACUC is not legal. NSF only has box that you check that says you have IACUC committee. Groups without Assurance should not check the box.

Peter – I would like to stress the point that students carry out research that triggers IACUC oversight. Also, examples of omnibus permits are common with Institutional Review Boards (IRB) for human subjects research. Gerald Selzer – IACUC are not very savvy with field stations. They are more familiar with campus research. More focus is being placed on fieldwork, and field scenarios are now supposed to become part of the IACUC training programs. Comment from Membership - Most of the major organismal societies have IACUC type documents for recommended research techniques. Hilary Swain – If you are treating students as human subjects (i.e., you use your students to test the effectiveness of a teaching tool) you need an IRB protocol. Jan Hodder – If you use student to gather information in a grant or publication, you need to run the survey through the Human Subjects Committee. An example would be an end of term survey (e.g., how has your term affected your attitudes?). If you use the information from this survey to compile information for grant proposals, you may need a permit. Philippe Cohen – We needed to get approvals for a project that used students to test some habitat restoration protocols. Comment from Membership – We have made a strong argument at our institution that anything educational does not have to go through IRB. This is heinous evil and detrimental to science....Len Smock – Virginia Department of Game and Inland Fisheries now requires collecting permits for aquatic invertebrates. Mollusks and crayfish protection was the intent, but now a permit is required for all invertebrates. Lyndal Laughrin – At UC Santa Barbara they make a distinction between whether the project is for research or management. If the project involves research then the committee needs to address it, but if it's for the benefit of animals and is land management, then they don't need to address it.

### **Friday, September 23 8:30-10:00**

#### *New Facilities Slide Show and Next Year's Host Station Flathead Lake Biological Station – Art McKee*

Next year's meeting will be hosted at Flathead Lake Biological Station in Polson, Montana. Premeeting field trips will include trips to Glacier National Park on Glacier Lake and the Flathead River. Facilities include cafeteria dining and two-person cabins and an 18-person dormitory.

Please visit the following new stations members at the OBFS website ([www.obfs.org](http://www.obfs.org)).

*OSU/TNC Tallgrass Prairie Preserve – Michael Palmer*

*Mary Lea Environmental Learning Center - LisaRenee English*

#### *Upper Green River Biological Preserve Western Kentucky University – Ouida Meier*

The following station members provided updates on projects at their field stations:

*Huyck Preserve - Rick Wyman*

Public TV made a video on the preserve this year.

*Andrews Experimental Forest – Kari O'Connell*

New parking lot and an educational wing named for Art

McKee

*James San Jacinto Mountain Reserve - Mike Hamilton*

Embedded sensor networks.

### **Saturday, September 24 9:00 am –9:30**

#### *Congressional Visits Day Panel – Sedra Shapiro and Panel Members Eric Nagy, Beth Cline, Ian Billick, Robert Wyatt, Matt Rahn*

Sedra passed out a report prepared for OBFS by AIBS (written by Robert Gropp) that describes how congressional funding works and how field stations are affected. A copy is available at [www.obfs.org](http://www.obfs.org).

Sedra provided a PowerPoint presentation on Congressional Visits Day (CVD), an annual event where OBFS member station representatives join AIBS on “The Hill” in Washington D.C. to talk to their congressmen. AIBS provides training for interaction with state representatives and then schedules one-on-one meetings between OBFS members and their representatives. She also saw opportunities for the strategic planning task forces to support and take advantage of CVD. Outreach Task Force (TF): communication and information exchange from OBFS as an organization to other organizations, Member Support TF: training opportunity for OBFS members and communication and information exchange opportunity about your station as a members of a large network, Networking TF: AIBS Hosts CVD, Development TF: scientific community must make it known to members of Congress that researcher funding is not an appropriate offset when funding gets tight.

In the morning of the CVD, participants receive tips on conducting congressional visits day. The remainder of the day is dedicated to small group visits to members of Congress. AIBS provides a package of support material (available at [www.obfs.org](http://www.obfs.org)), topics to frame the meeting discussion, and training. AIBS can also serve as a Mentor to participate in small group meetings. CVD communicates the scale and importance of OBFS and our member stations and is open to participation from all station members who have expressed interest. In general we try to provide broad representation across the US and develop strategic representation for national issues identified by AIBS. OBFS alumni who have participated in CVD are David Shaw, Eric Nagy, Sedra Shapiro, Ian Billick, Beth Cline, Philippe Cohen, Robert Wyatt, and Matt Rahn.

- Eric Nagy: I had never been to Capitol Hill before and found it enjoyable and eye-opening. It was scary but I received a lot of handholding from AIBS about how to behave. In many case, I ended up most often end with a staff person in the Senator's or Representative's office. They want to hear what you want from them. So you need to go in ready with a gee-whiz story about your field station and the network of field stations. But be ready to also say what field biology needs (e.g., support NSF). I'd recommend a 2-pronged message, the importance of field biology and OBFS and something about your field station. Congressional Visits Day includes all sorts of organizations both from academic institutions and from industry.
- Beth Cline: This was an extraordinary experience and I encourage everyone to take advantage of this opportunity. A couple things surprised me. I only met with staff which required that I slightly shifted my spiel. They were not familiar with my university even, but they were open to everything. They do want to know what you want. The key issue we were asking for was recognition that money going to NIH never reaches field biology. We wanted them to make sure that money reaches NSF. Also a cautionary

statement: I had to go through channels at my university to get permission to go. I was not allowed to imply that I wanted to increase funding for my individual station or college.

- Philippe Cohen: I found it was better to talk to the staff since they were more responsive. AIBS was very helpful because they helped to provide specific information about each of the people I was going to see.
- Gerald Selzer: I want to underline what Philippe said about staff. Congressmen or senator will turn to staff for information. Staff may remember your name and card and ask you for information. If you can be a resource for them, you will have gained as much as you could possibly hope to gain from these meetings. So be prepared and find out what the office is interested in, invasive species, fishing etc. and leave them your card.
- Ian Billick: I had a specific project regarding preserving open space. Trust for Public Land was working on managing a project and I was the local presence for this project. So I went in with specific things in mind. Part of what I needed to know was how a bill moves through congress and the relationships among politicians. I got into the office of a ranking democrat on the Appropriations Committee because I had relationships with various people at my reserve.
- Robert Wyatt: I had never been to Washington. Only 1 of the 3 people I went to see actually sat down and participated, but I found that all of their staff were very knowledgeable. All of them knew about NEON. The staff took a lot of notes and AIBS had given me very good information. It was incredible how smooth the process was because the groundwork had already been laid with information and appointments.
- Matt Rahn: I had a very similar experience to these other participants. I would add that the time you have with people must be very focused and is very intense. With Susan Davis, she told me that I was preaching to the choir and wanted to know what else I wanted to talk to her about. So you need to be prepared. Also you need to forge relationships with local representatives.
- Eric Nagy: It is important to follow up from these meetings. Leave your contact information and use the meeting to open a relationship. Invite them to come visit your station.
- Gerald Selzer: You don't have to go on the AIBS CVD day. If you're in Washington, you have an opportunity to go visit your senator and congressperson.

#### Questions -

- Hilary Swain: What would you have liked to have had to put in that package that you didn't have? Robert Wyatt: The new OBFS brochure. Sedra Shapiro: An economic impact analysis for OBFS member stations. Gerald Selzer: Yes, they are always interested in the number of people, total budget, the number of students, etc. It would be good to have these numbers for all members in OBFS. Matt Rahn: We also need to include the diversity of students in field stations. Attending Member: There was an analysis in Texas that showed that for every \$ of research conducted it leads to \$3 to \$10 of economic gain.
- Question from Attending Member: What about unsupportive senators and representatives? Ian Billick: I found that my Senator, who was opposed to the Sierra Club, ended up being the most helpful.
- Issabelle Kay: What about restrictions from your home institution? Gerald Selzer: The president of your university is showing up 1-3 times per year with a list of projects that they want to get inserted into someone's budget. They don't want a faculty member to provide mixed messages so it is important to get approval before you go.

#### **Saturday, September 24 9:30 am -10:15 am**

*New Wireless system for streaming LTER data at the Sevilleta Field Research Station – Renee Brown and Don Natvig*  
Sevilleta is a Research Station with wide array of research projects from

- LTER: met stations, water manipulation studies (drought indication/irrigation), NASA JPL Sensor Webs
- USFWS: wildlife monitoring
- UNM: ET/CO2 flux towers, soil moisture monitoring
- UVA: creosote volatile compound studies

They are facing common technical constraints of ecological research sites:

- Majority of our sites use Campbell Scientific data loggers
- Researcher rarely live near the site and come from around the world
- Don't know when there are problems until one visits the site
- Storage modules can overflow

#### Wireless Internet Networks

- Radio devices extend communication to areas lacking network infrastructure
- Advantages of off-the-shelf technology is that it's cheap, many resources are available, and a license is not required
- Challenges include power limitations, line-of-site requirements, and only three non-overlapping channels

A map shows the existing network. One connection extends 16 miles to Los Pinos Mountains. The original installation required a helicopter and access for maintenance is very rugged. It has now been running almost one year without a problem. Solar panels provide the power source. It uses 5.8 GHz and proprietary technology.

From the Los Pinos Station, we used 802.11b technology for the other links to "client" sites that included meteorological stations and cameras. To locate these client sites, we used a line-of-site analysis. It is sometimes hard to tell if you will have line-of-site if distances are very large so we used GIS elevation maps to make a determination. In some cases, we needed to establish a relay to get around a hilltop.

A typical client site setup includes a client radio, datalogger, solar panel and battery bank.

To keep other folks off your internet connection, it's fairly easy to encrypt. (Many members in the audience indicated they had adequately addressed this on their systems). A special set up at one site included a pan-tilt-and-zoom camera and a sensor pod from NASA JPL.

#### **Saturday, September 24 10:30 am - 12:30 am**

*NSF Field Station Marine Laboratory (FSML) Report - Gerald Selzer*

Gerald Selzer, Program Director for the FSML program at NSF, provided an update on NSF funding opportunities and the status of the FSML program. He brought CDs to summarize the variety of funding types that are pertinent to field station activities. (Secretary-Treasurer note: This file is available at [www.obfs.org](http://www.obfs.org). Click on NFS Support-FSML in the left hand tool bar and select "[Funding Ops Summary Guide NSF 2005-09-12](#)" from text line). This file contains funding opportunities, program announcements, and other relevant information.

Gerald Selzer has been running the FSML program since Tom Callahan, the previous Director, died in 2000. He gives a brief historical account of the number of proposal submitted to the FSML grant competition:



1998: 61 proposals  
 2001: 75 proposals  
 2003: 53 proposals  
 2005: 99 proposals (as usual, about 20% were planning grants).

The average request amount went up this year by about \$25K-\$50K. Gerald felt that the large number of proposals this year is because cost sharing is no longer a requirement. He is still unsure at this time who is going to be awarded money this year.

In contrast, the amount of money allocated to the FMSL program has not changed to keep pace with demand:

1998: \$1.6 M was allocated. This money came from two “pots” of money: biology (\$1.1 M) and ocean sciences (\$0.5M). The ocean sciences money typically is used to fund instrumentation at Marine Labs.

1999: allocations peaked at \$2.5M and averaged about \$2.05M since then.

2003: due to budget shortages, only 1 or 2 proposals were funded and the rest were deferred for consideration until 2004. Similarly 2004 proposals were deferred for funding consideration to 2005.

Gerald expects that future allocations will stay around \$2.05M and doesn't anticipate an increase since the entire NSF budget has been under tremendous pressure. It's worth noting, however, that since 2001, the NSF budget has risen by 125%, but FSML allocations have stayed the same.

Success Rates: In 1998, 34% of the proposals submitted were funded. Success rates have bounded around a bit but have typically been around 30%, both for planning and facility grants. Planning grant success rate will almost be twice the facility grant success rate this year.

Previous FSML Director, Tom Callahan, encouraged people to write proposals so that the need for increasing program allocations could be identified. Gerald hopes this will work but given NSF budget situation is less confident. In addition, the hurricane relief aid will likely have an impact on the NSF appropriation but he isn't sure yet.

Gerald provided a general summary of how the NSF budget works. NSF first sends a request to OMB for x dollars – usually with an increase over the previous year's appropriation. OMB responds by requesting NSF to prepare a document that identifies what the program would do if the sky were the limit, if there were no change, if there were a 5% increase, etc. After consideration, OMB responds by saying, “the President wants you to spend money on X.” A final package is then submitted and goes to the Appropriations Committees in the House and Senate. At this point, Senators can make special requests to be inserted (e.g., requests from OBFS members attending Congressional Visits Day). These inserted projects can lead to specific project funding that comes out of the NFS budget, but this isn't very common, in part because Senators are dealing with money at a higher level of allocation than the FSML grant. It would be hard for them to tie Ian Billick's need for a new toilet facility to the NSF budget where money might be available. However, if there is a topic that has high visibility, they will have more sense of where sits in budget and what is being done (e.g., NEON, intelligent design). Once final appropriations clear both House and Senate, NSF receives an appropriation and then prepares a document showing how they will accomplish their goals with the amount allocated.

#### Discussion

Rick Wyman heard a rumor that 1/3 of the proposals awarded were outside country. Gerald: There were more proposals outside the country than usual but he thinks it was roughly proportional to the total increase. The proposals must come from university institution. Have funded La Selva, stations in US Territory, in Caribbean. Looked harder at distribution regarding geography, station size, etc.

Hilary Swain: We are not keeping pace with NSF increases in funding. Can we ask for these data in a more formal way? And what can we do to convince NSF that we should stay on par? Gerald: Decisions to reallocate among programs are typically made by the NFS Director. The Director usually sets aside a small reserve for special programs or needs and Gerald is hoping that this year some dollars will be set aside for Gulf Coast programs (post Hurricane funding) for which field stations in that region would be eligible. Typically that's the decision point at which an additional allocation could be made from one program to another. (Exceptions: nanoscience initiative and other initiatives that are cross-cutting through agencies). Gerald can provide the data. That's no problem.

Ray - What about small field stations? They can't show a lot of existing NSF research support and so are not as competitive for FSML funds as the large stations. However they are important training centers for students. Gerald: We are not just counting up the number of publications when evaluating proposals. We are very aware of small stations and know that most people get undergraduate degrees from small institutions. However, it is also true that the more information you have, the easier it is to make decision. So the burden is on the small field station to provide and descriptive statistics regarding the importance of activities at the site.

Philippe Cohen: Is there anything as an organization that we can do to improve our standing with NSF? Gerald: The short answer is yes. Do note that you could spend the rest of your life talking to your Senator and get nowhere. The impact of those activities so far has not resulted in additions to the FMSL budget. In addition, it will do no good to talk to Gerald.

Art McKee: So it would be better to approach people at the highest level of the hierarchy? Gerald: I wouldn't necessarily look at it as a choice.

Comment from Attending Member - Large field stations are going to get a first look at NEON. Down the line we need to figure out how to bring in smaller field stations to that program as well.

Michael Palmer: The long-term value of funding planning proposals is a good way to justify program expenditures as well. Gerald: that's why we try to keep this up

Ian Billick: We need to think more broadly about funding sources. Private foundations can make a very large impact. OBFS should leverage NSF funding with funding from other sources. Gerald: There are other funding sources at NSF that can support field stations as well and some of these may have more funding available. The Research Collections budget has grown over last few years.

#### OBFS Business

##### Task Force and Committee Reports Part II

##### Networking Task Force - Mark Stromberg:

##### Regional Consortium Building -

- The Task Force urged people to look for other regional or national effort to cooperate with.
- The Task Force talked about the possibility of member stations meeting or coordinating somehow on a regional basis. For instance, people talked about coordinating the courses that are offered so that students could take courses early in the spring at one station, work all summer, and take another useful course in the fall.
- The other topic discussed under regional coordination was with regard to sharing what works. Ian Billick sent around a sheet that was to describe what education programs were doing well.

##### Data Sharing for Networking with Researchers and Government Agencies -

- We discussed the reasons why we should make an effort to help others discover our data sets, or to let others know what we are doing at field stations to address critical environmental issues. I



have a draft of a brochure I wrote up for the shared KNB effort to develop support for the metadata collection effort. There is a universal need for field station staff to spend time entering metadata forms that both describe the data sets available at field stations and share the information via MetaCat and Morpho, BUT there is no source of funds to pay people to enter their metadata. This may change as ESA is requiring data registration for publication. I think our members are convinced, but overwhelmed by other priorities pressing each day.

- I asked people if they would like to work with the OBFS website and no one stepped forward. As much as it is a good networking tool, the OBFS website should be only a part of the OBFS networking effort.

#### Development Needs -

- We talked about the concept of going to a foundation to ask for funds for not only the scholarship for the summer courses, but for the funds the students would have earned if they did not give up the summer for coursework at field stations. This drifted off to a discussion of what the needs really were; some field stations were having a great success with courses. Others can't give scholarships away and have declining enrollments.
- This prompted the discussion of what is needed to get more enrollment of college students at field stations so that they could directly experience the natural world.

#### International Committee – Rick Wyman

Five OBFS members attended the IOBFS meeting. A brief history was presented. At the 1991 OBFS Meeting in Costa Rica, the concept of an international field station organization was discussed. Field stations were represented as regional jewels and to connect these sites into an organization would make a necklace of jewels around the globe. At this meeting we established the International Committee to look at worthiness of establishing a larger network. We sent a survey to all the field stations we could find and found that ½ of them could not be contacted. Those that did respond responded favorably. Survey results were unanimously in favor of improving communications.

The IOBFS is now a membership directory (paper), a web site (IOBFS.org), and a listserv. Our next goal is to hold a series of regional (e.g. SA, CA, sub-Saharan Africa, Mediterranean, near east, far east etc.) meetings annually around the Earth. However funding would be required to accomplish this. Art McKee and Rick Wyman have sent letters of enquiry to five foundations (MacArthur, Ford Brothers, Ford, Heintz, and Moore) seeking roughly \$90K per year to support a post doc and to hold meetings. In addition we sent a letter as an open solicitations to another group of 16 people in influential positions asking for advice. We have not heard from these people yet.

In order to begin the process of establishing relations in other regions on Earth, we request an additional \$2,000 for our 2006 budget so that we may invite significant movers and shakers from these regions to our next annual OBFS meeting. We would establish a process to select these individuals and arrange for the travel. Perhaps they could also visit a field station or two while they are here.

We plan to draft a message to the IOBFS membership about our plans to hold regional meetings and to support travel of regional representatives. In addition, we will be working on updating our web page.

#### Small Field Stations Committee – Beth Cline

Twenty-eight members attended the meeting. Bo Dziadyk has agreed to serve as the chair of this committee. Unlike the Task Forces which discussed specific goals and tasks of the OBFS Strategic Plan, the Small Field Stations Committee first identified some of the issues of importance to the small stations and then matched those issues to the

Goals/Tasks identified in the Strategic Plan. Unfortunately, we had insufficient time to complete this task.

The issues or needs that were identified for small field stations are

- Identify educational and research opportunities
- Course advertisement and promotion
- Insurance issues, liability
- Permits – international issues
- Collaboration with large stations
- Involvement of minority students
- Revenue generating programs
- Connecting with main campus
- Networking with local community (e.g., ranchers)
- Outreach – Research Programs Curriculum Workshops
- “How to” workshops on running field stations
- Operating a station on a shoestring
- How to finance and build new facilities and increase use
- Support for understanding and facing external threats to resources
- Find funds for research – undergraduates
- Thematic roundtable discussions, e.g., funding, logistics, liability, etc.
- Short-term and long-term planning templates (questions/decisions/directions) needed before seeking funding
- Research
- Facilities
- Outreach

The general conclusions of the group were

1. Because both new stations and small stations tend to attend the Small Station Committee meetings each year, it is recommended that the needs of new stations be addressed each year, perhaps by having a welcome sessions and/or packet for new members or new stations.
2. The small stations are encouraged to contribute specific topics for sessions at future annual meetings that would be of particular interest to the small stations, but of general interest to all.

#### *National Ecological Observatory Network Planning Update – William Michener*

At last years meeting, Bill Michener and Jeff Goldman announced that their 2-year NEON planning project was funded for \$2 M by NSF. This year, Bill Michener provided a PowerPoint presentation update on this planning process.

Proposed funding for NEON would come from NSF's MREFC (Major Research Equipment and Facilities Construction) program. The account was originally set up for massive capital investments that involve large teams of scientists and are expected to transform our understanding of science. Examples of these kinds of projects include LIGO, a research platform used to search for gravitational waves, and VLA (Very Large Array), a radio telescope complex located in New Mexico.

To be competitive, the NEON program must identify a set of questions that are national in scope and address important ecological questions that, if addressed, could transform our understanding of the environment. The key questions that the NEON planning effort has identified that are best addressed at regional to national scale are the continued impacts of urbanization, disease, exotic species, and drought.

NEON first asked NRC to evaluate the existing program structure of the NEON planning effort to determine whether the existing efforts were appropriate for addressing grand challenges. The report recommended that the planning effort be redesigned after the models of other successful big science projects which used a systems engineering approach. These approaches broke the planning effort into a series of workshops to address science requirements (science

missions, observational programs, observational requirements and constraints) and engineering requirements (derived system requirements, subsystem requirements).

The NEON program planning based on this approach started in January 2005 with a national meeting in Los Angeles to identify the thematic focus of NEON. The 120 attendees were chosen from over 700 nominations made from the community. At this meeting, the workgroups focused on identifying what issues they felt were most convincing. At the March meeting in Boston, workgroups focused on instruments and facilities. And at the June meeting in Estes Park, Colorado, workgroups addressed integration focus, footprint/deployment, and writing. This process has been very transparent. All committee reports are available on the web ([www.neoninc.org](http://www.neoninc.org)).

Based on these workshops, 3 fundamental questions have been identified to be addressed by NEON:

1. How are ecological systems affected by changes in land use, climate, and biogeochemistry across a range of spatiotemporal scales?
2. How do changes in the availability and distribution of the Nation's water affect ecological systems?
3. How do the patterns and movement of genes and organisms across the continent affect biodiversity, ecosystem function and the spread of infectious diseases and invasive species?

These questions will be addressed by a suite of sensors and infrastructure across the United States. The NEON Observatory Implementation Model will consist of 20 nodes representing the nation's climatic domains (85% of all people looking at NEON focused on climate and land use)

- Each node = will consist of 3 fixed and one mobile observing platforms
- The platform's placement on the landscape will span the gradient from wild to urbanized systems
- Within each platform the transition from terrestrial to aquatic will be a focus.

Note that NEON has been told to be careful not to duplicate CLEANER or other Hydrological Observatory Networks (such as CUAHSI).

To define climatic domains, NEON planners took a quantitative approach:

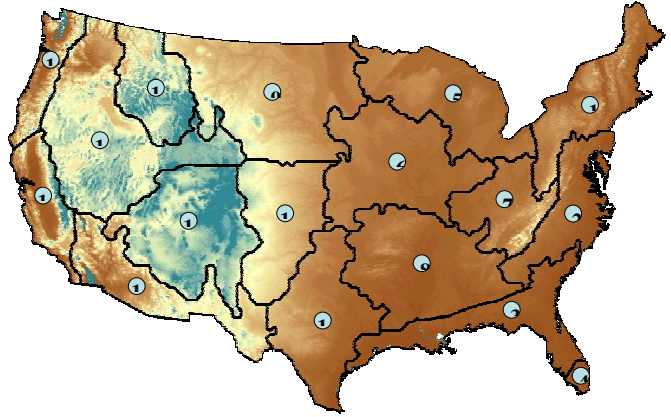
1. Used cluster analysis of climate state variables. These were
  - Number of days above 90°F during the local growing season
  - Number of days below 32°F during the local non-growing season
  - Precipitation sum during the local growing season
  - Precipitation sum during the local non-growing season
  - Number of days with measurable precipitation during the local growing season
  - Number of days with measurable precipitation during the local non-growing season
  - Soil plant-available water holding capacity to 1.5 m
  - Total solar insolation during the local growing season, including clouds, aerosols, slope and aspect physiography
  - Total solar insolation during the local non-growing season, including clouds, aerosols, slope, and aspect physiography
2. Used resultant wind vectors to delineate climatic regions based on the seasonality of air masses.

Planning resulted in 20 climate domains that are similar to the COREO group boundaries but are based on objective definitions.

A node will be placed in each of these climate domains and will be positioned along an urban to natural gradient: urban can range from villages to major cities, managed areas can be farms, grazing etc., and wildland areas must have some level of natural ecosystem processes. (Bill presented a diagram of a landscape with examples of sensor types at each of these noted (e.g., remote sensing to sensor arrays)).

Organization: Neon Inc. will have

- NEON Center Facility with administration, education and data archiving functions.
- Labs and Biocollections Facilities
- Multi-Scale Remote Sensing with satellite agreements and airborne agreements
- Partnerships with Other Programs
- And 20 Nodes



NEON Hardware will be instruments, modules, crane, radar, facilities, and nodes. Nodes will include 3 fixed instrument unit sites that include hardware to track organisms, biomesonet towers with atmospheric and biological sensors that include sensor micronets (micro climatic, soil, acoustic, canopy, aquatic). In addition to the 3 fixed instrument unit sites, there will be a mobile unit with same functionality plus a sentinel unit to capture biodiversity and disease issues.

NEON will address not just the sensors in the field, but provide end-to-end solutions: replicated sensors, data storage, curation, data analysis, integration and modeling, access via customized user interfaces, and collaborations.

NEON's next steps: Presently the proposed budget for NEON is spiraling upward out of control. There would likely be about \$ 300-600 M available for this project and the current scope projects to about \$6 Billion. NEON needs to bring program scope in line with available funding.

#### March 2005

- Establish NCC/NPO

#### October 2005

- Integrated Science and Education Plan
  - Networking and Informatics Baseline Design
- (note: these will be made public via the website)

#### November 2005

- High-level Cost Estimate

(note: there will be 3 independent reviews of the 2 documents by the Congress of Regional Observatories (COREO), federal agencies, and one other.)

#### January 2006

- Incorporation of NEON, Inc.

#### June 2006

- Preliminary Project Execution Plan
- Request for Prospectuses (this document would address where nodes are placed and will probably be put together by an NSF panel that will choose those sites)
- Panel and Independent Reviews
- Project Execution Plan

Time line – After planning is completed and funded, it will probably take about 5 years for implementing the 20 nodes. Project duration is

anticipated to be around 50 years. Because it will be built as a national platform simultaneously, NEON will be transformational and provide novel infrastructure that allows scientists to observe the previously unobservable at unprecedented scales of space, time and biological organization. To stay abreast of planning, visit [www.neoninc.org](http://www.neoninc.org)

#### *Discussion*

From Attending Member: Where do field station facilities fit into this? Is the current feeling that nodes would be at field stations or would they be on a campus or other locations? Bill: I would venture a guess that most nodes would be at field stations. Some capacity will be associated with universities (e.g., museums and cold storage facilities). In addition one of the key criteria is that lands would need to be available for at least 50 years, a feature common to most field stations.

From Attending Member: How would a field station manager continue to undertake necessary land management activities with such expensive equipment installed? Bill: It depends on the scale of the management issue. NEON is interested in phenomena occurring at a national scale. There will be mobile capability to go to sites of intense disturbance. Whether local management is part of these national questions is an open question.

From Attending Member: How will biodiversity measurements be incorporated? Bill: Presently the proposal is for Bio PDA's and collecting for documentation. A lot of the sensor development is not yet ready – e.g. DNA data sequencing on a chip.

From Attending Member: How does hypothesis testing fit into this? Bill: Hypothesis testing has driven NEON planning from the very beginning. A large portion of NEON's capacity will go to national experiments. However, a large portion will also be used by the local research community. And in addition, there will be advantages from NEON equipment development to other sites since these technologies will be more readily available.

From Attending Member: Will the truly be publicly available? Yes. Published subscription mechanism can be sent directly to you or with higher summary data. Open source architecture will be developed as well.

#### **Saturday, September 24, 1:30-3:30 pm**

*Tour of Coweeta Hydrologic Laboratory, highlighting LTER and Forest Service Research at the site.*

*Task Force and Committee Chairs met with the Executive Board from 2:30-3:30.*

#### **Saturday, September 24, 4:00-5:30 pm**

*Tour of Highlands Biological Station Highlighting the Biological Laboratory, Nature Center, and Botanical Gardens.*

#### **Sunday, September 25, 9:00–11:00 (Amy Whipple)**

*OBFS Business*

*Nominating Committee – Hilary Swain, Ron Lawrenz, Nina Consolatti*

The Nominating Committee presented the following individuals for consideration for OBFS offices:

President: Brian Kloeppe and Jan Hodder

Vice President: Larry Weider and Ian Billick

Member-at-Large: John Kim and Dawn Wilson

Each of these are 2-year terms. Voting will be conducted in December 2005. Terms begin April 1, 2006. As stipulated in the Bylaws, current President Sedra Shapiro will automatically continue on the Executive Board as Past-President.

MOTION to accept the candidates for the offices specified was moved by Eric Nagy, seconded, and accepted by voice vote.

#### *Task Force and Committee Reports Part III*

##### Outreach Task Force – Jan Hodder

Attendees included Hilary Swain, Dave Mahon, Ron Lawrenz, Larry Weider, Philippe Cohen, Laura Carter, Bonnie Bowen, Jeff Brown, Christine Relyea, Geoff Carter, Nina Consolatti, Jan Hodder, Jeff Savino, Rob Anderson, Cathy Koehler, and Kristy Anderson. No leader was identified. Philippe Cohen will initiate a list serve of the OTF members.

An overall theme for the tasks of the OTF is to develop tools and mechanisms to serve the OBFS membership. To that end five action items were agreed upon.

- Task 3 (Carefully coordinate publicity materials) should be the first priority (pg 12 of strategic plan). This task will be outsourced and thus will require funds from the OBFS budget. The task will be overseen by Sedra Shapiro and Philippe Cohen and all members of the OTF will comment on the drafts of the products.
- Task 2 (Create an archive of success stories that can be used to promote the value of field stations). Development of an archive of FSML success stories to provide tools for promotion is a longer-term strategy and will be overseen by Laura Carter and Dave Mahon.
- Best practices at FSMLs need to be documented and for all tasks we need to know how well we are doing. This calls for common evaluation tools that allow for cross-site syntheses and compilations and integration of information. Other organizations are dealing with this issue and we can probably learn much from them. The museum community was identified as one such group. It was decided to invite someone from the museum community to our next meeting. Ron Lawrenz and Hilary Swain are in charge of this task. This will require OBFS funds.
- 4. Outreach to a variety of constituencies was discussed. Once the new products from Task 1 (Identify separate constituencies and develop strategies to win their support for OBFS) are available, a plan for their use should be developed. To help with that plan we are asking members to let us know which other professional meetings they attend that may be suitable for OBFS outreach. This information will be collected in the end of meeting evaluation which will be given out after lunch on Saturday.
- Continue the Congressional Visits Day. Sedra will coordinate this.

##### Development Task Force – Art McKee

The Goal of the Development Task Force is to increase financial resources for field stations and field-based research, education and outreach. The four tasks listed in the strategic plan were reviewed and felt to be sufficiently inclusive of the foreseeable tasks of this group.

The following discussion included mention of possible sources of funding that Field Stations and Marine Labs (FSMLs) overlook such as local economic development councils, local EPA programs, and USDA's Agriculture Research Service's Agricultural Experiment Stations. This led to a suggestion to develop a list or menu of possible funding options to be posted on the OBFS web page that would include examples of successes.

It was strongly felt that there were two areas of great interest to OBFS members that needed special attention to ensure continued relevance and benefit to OBFS member stations: NSF's special competition for FSMLs; and the developing National Ecological Observatory Network (NEON). While all OBFS members who intersect with these programs can promote OBFS interests, it was felt that one person should be assigned to lead these efforts. Names were suggested who were well positioned to represent OBFS interests in these programs.

The issue of collaborating with similar organizations to increase funding was discussed, and it was proposed to develop Memoranda of Understanding (MOUs) that would institutionalize such efforts. Other organizations or associations that seem like logical partners to approach in the short term are the Museum Curator Association and the National Association of Marine Labs. It was felt that such partnerships or consortia could draft position papers or promotional literature that would aid fund raising efforts.

Tangential to the efforts of the Development Task Force, but worthy of mention is the need to make OBFS member stations aware of the National Research Councils Bio 2010 report, "Transforming Undergraduate Education for Future Research Biologists" ([http://www.nap.edu/catalog/10497.html?onpi\\_newsdoc09102002](http://www.nap.edu/catalog/10497.html?onpi_newsdoc09102002)) and aligning with it.

The model of NAML's lobbying efforts was presented as something to watch and perhaps copy.

The meeting concluded with a discussion of finding a chair for this Task Force. Committees are being formed and leads assigned to accomplish the following tasks for the immediate future:

- 1) Draft letter to upper levels in the hierarchy of NSF that argues for increasing funding for the special FSML competition. Have a delegation repeat the argument by meeting with NSF movers and shakers in association with Congressional Visits Day.
- 2) Develop a menu of funding options for web (with examples of successes).
- 3) Designate leads to represent OBFS interests in NEON (Mike Hamilton) and NSF (Eric Nagy).
- 4) Examine possible funding options for summer scholarships to field stations, including collaborating with the Student Conservation Association (latter via Jeff Brown).
- 5) Find new chair for Development Task Force.

#### *Adoption of Proposed 2006 Budget – Robert Wyatt and Sedra Shapiro*

Due to travel restrictions, Secretary-Treasurer Claudia Luke was not able to attend the morning session and arranged for Sedra Shapiro and Robert Wyatt to present and discuss the proposed budget. The proposed budget was stored on a memory stick and was unfortunately not delivered to the meeting. The budget was generally discussed but its adoption by the membership was deferred until the details could be reviewed. The Executive Board agreed to distribute for review to the membership after the meetings via email. The following topics and items were discussed:

- The proposed budget now contains line-items from each of the Task Forces. Each of the Task Forces were asked to provide the Executive Board with a list of proposed projects for the year and their costs. These costs are listed in the proposed budget to be distributed. In general, the total costs for regular operations and the additional projects proposed by the Task Forces totaled around \$37,000. Income for the year was projected at \$18,000.
- The Outreach Task Force is going to take on the design of the OBFS brochure and other material revisions. This project is proposed for outsourcing and will cost approximately \$12,000 over two years.
- The Member Support Task Force is proposing to develop new-member materials and welcoming activities.

- The International Committee is requesting travel funds to bring international members to the annual meeting. Hilary asked how international members will be selected and requested an explicit strategy for the IOBS proposal. In addition, the idea that Conservation International may be interested in collaborating was proposed.

Proposed Budget Discussion: The attending members discussed to what extent these costs would be one-time charges since the initial cost outlay was not sustainable. While the brochure would be a one-time cost, the other project leaders were less certain what proportions of their costs would ongoing. Additional income could be generated by raising fees but some noted that we should undertake such changes slowly. The Financial, Development, and Member Support Task Forces were charged with looking at the dues structure and regular and one-time costs. The deficit spending should have justification for transformation or revenue to support it. Members discussed that hiring staff may be more transformational for the organization than by undertaking these one-time costs.

The Executive Board noted that Peter Connors had served as Chief Auctioneer for OBFS since its inception 7 years ago. Due to Peter's retirement, Bodega Marine Reserve would no longer be paying for his travel to the meetings and his attendance is uncertain. To ensure Peter's continued organization and input to these financially successful events, the Executive Board recommended to the membership that paying for Peter Connors travel to the meetings would be a wise investment by the Organization. While the Board had approved reimbursement of Peter Connors travel funds for this year from the Executive Boards Travel funds, the Board sought approval from the membership for future travel reimbursements. The membership approved the recommendation.

The next annual meeting will be held at Flathead Lake Biological Station around Sept 14-17 to avoid conflict with LTER scientists.

Sedra Shapiro thanked members and especially our international travelers from Australia for attending.

#### *Summary of Motions Made During 2005 Annual Meeting:*

A MOTION was made to accept the 2004 meeting minutes with the publication of the above 2 errata. Philippe Cohen seconded and the motion passed by voice vote.

A MOTION was made by Peter Connors to accept the Operations and Restricted Budget reports were seconded by Philippe Cohen and approved by voice vote.

A MOTION to accept the candidates for the offices specified was made by Eric Nagy, seconded, and accepted by voice vote.

President: Brian Kloeppe and Jan Hodder

Vice President: Larry Weider and Ian Billick

Member-at-Large: John Kim and Dawn Wilson

Key recommendations for edits to the OBFS Strategic Plan were made by each of the Task Forces and Committees. The detailed notes submitted by each of the Chairs are included in full in these meeting notes.

*Thanks to Amy Whipple for providing meeting minutes on Friday evening and Sunday morning sessions.*

# OBFS FINANCIAL REPORT 2004-2005

## I. Operating Funds

	<b>Actual</b>	<b>Budgeted</b>
<b>Previous Balance Aug 31, 2004:</b>	<b>\$34,435.50</b>	
(\$27,077.97 in CDs; \$7,357.53 in checking account)		
<b>Income:</b>		
Membership dues	\$17,225.00	\$18,000.00
Interest (CDs, checking)	\$ 617.69	\$ 1,000.00
<b>Total Income:</b>	<b>\$17,842.69</b>	<b>\$19,000.00</b>
<b>Expenses:</b>		
AIBS dues and public policy	\$ 2,695.00	\$ 2,670.00
Bank Charge	\$ 43.44	\$ 0.00
Missouri corporation registration	\$ 15.00	\$ 15.00
Travel OBFS committee	\$ 887.53	\$ 3,000.00
Congressional Visits Day	\$ 1,779.83	\$6,000.00
OBFS traveling exhibit		
Shipping	\$ 741.11	\$ 500.00
Materials and labor	\$ 0.00	\$ 5,000.00
Field studies poster	\$ 4,367.00	\$ 3,000.00
Office and website		
Secretarial and database support	\$ 1,350.00	\$ 900.00
Supplies	\$ 48.83	\$ 900.00
Website editing charges	\$ 1,500.00	\$ 1,000.00
IOBFS		
Office and website	\$ 1,000.00	\$ 1,000.00
Strategic Planning	\$ 199.03	\$ 0.00
Newsletter	\$ 201.02	\$ 500.00
<b>Total Expenses:</b>	<b>\$14,826.78</b>	<b>\$24,985.00</b>
<b>Transfer to Restricted Fund:</b>	<b>\$ 0.00</b>	<b>\$ 0.00</b>
<b>Balance August 31, 2004</b>	<b>\$37,449.41</b>	
<b>Fund Holdings</b>	<b>August-05</b>	<b>August-04</b>
Investments - CDs:		
211125 2.23% (2.25% yield), 12 mos. due 11/01/05	\$6,989.15	\$6,848.20
211242 2.48% (2.50% yield), 12 mos. due 1/28/06	\$4,077.55	\$3,997.85
211243 2.48% (2.50% yield), 12 mos. due 2/02/06	\$6,105.35	\$5,986.00
212240 2.23% (2.25% yield), 12 mos. due 9/15/05	\$6,201.57	\$6,976.52
614444 2.23% (2.25% yield), 6 mos. due 3/25/06	\$4,237.07	\$4,169.40
Checking Account:	\$9,838.72	

## II. Restricted Funds

<b>Previous Restricted Fund Balance Aug 31, 2004:</b>	<b>\$ 42,945.14</b>
<b>Contributions:</b>	
Transfer from Operating Funds	\$ 0.00
Auction proceeds	\$ 5,889.00
Donations	\$ 0
Citizens mutual fund	\$ 8,358.37
Interest (checking)	\$ 17.60
<b>Total Contributions:</b>	<b>\$ 14,247.37</b>
<b>Expenses:</b>	<b>\$ 0.00</b>
<b>Restricted Fund Balance Aug 31, 2005</b>	<b>\$ 57,192.51</b>
<b>Fund Holdings</b>	
Investments - Citizens Mutual Fund*:	
Core Growth Fund (1637.829 shares @ \$20.44)	\$ 33,477.22
Emerging Growth Fund (1082.936 shares @ \$14.40)	\$ 15,594.28
OBFS Checking Account:	\$ 8,121.01



## YE OLDE **OFFICIAL** OBFS BALLOTTE, 2005

This year's ballotte is for election of  
**President: Jan Hodder and Brian Kloeppe**  
**Vice President: Ian Billick and Larry Weider**  
**Member at Large: John Kim and Dawn Wilson**

*Ballotte cards will be mailed to for station members in December and must be returned by January 24, 2006. The biographies given below were designed to assist voters in making choices amongst the cowpokes.....heading to Montana.*

### **PRESIDENT** **Jan Hodder**



At the age of 15 I took the night train to Liverpool, boarded a ferry, and disembarked on the shores of the Isle of Man in the Irish Sea, where I spent a week studying marine biology. I have been hooked on field stations ever since. With the exception of a three-year stint as an undergraduate in the then grimy city of Liverpool I have never left the marine station environment. Since 1986 I have been the academic coordinator at the University of Oregon's Institute of Marine Biology (OIMB), occasional serving as acting director when required by circumstance. In this position I teach, administer OIMB's

educational programs including an undergraduate marine biology major and a summer program for ~70 students, and conduct research on marine birds and mammals. I have experience with successful grant writing and administration both for facilities and programmatic development. As co PI of the NSF funded Faculty Institutes for Reforming Science Teaching project I direct a multi institutional program that provides professional development opportunities to faculty who teach undergraduates. I coauthored the report of the NSF funded workshop on the Role of Biological Field Stations in Education and Recruitment into the Biological Sciences.

Although my focus is on education I have experience with facility design and construction, marine station management, and how to keep animals alive when the seawater fails. I have participated in a number of NSF funded field station planning teams and been a partially active participant in the development of the OBFS strategic plan. OBFS has undertaken a leap of organizational change with the adoption of the strategic plan, I see the next two years as instrumental in laying the foundation for implementing that plan. I would be honored to work with the executive committee and the membership to help that happen.

### **Brian Kloeppe**

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 undergraduate and graduate degrees included projects at several field stations that had a positive influence on me as an ecologist 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 Field Station and Marine Laboratory (FSML) grants and to establishing a structure to more efficiently manage facilities and site research use.

In September 2005, Coweeta enjoyed co-hosting the OBFS Annual Meeting with nearby Highlands Biological Station. Robert Wyatt, Director Emeritus of Highlands Biological Station, and I have worked together on numerous projects for several years and our close proximity facilitated these interactions.

If elected, one of my primary duties as President of OBFS would be to continue implementing the OBFS Strategic Plan that was developed and approved prior to our 2005 Annual Meeting. This plan was developed with a bottom-up approach consistent with the structure and membership of OBFS. The tasks that were discussed and the task forces that were assembled at our recent annual meeting began this implementation process. In addition, if elected as President, the Executive Board and I would continue 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 President and I look forward to hopefully seeing you at the 2006 OBFS Annual Meeting at Flathead Lake Biological Station in Montana.



### **VICE PRESIDENT** **Ian Billick**

I have worked at the Rocky Mountain Biological Laboratory (of RMBL) for close to 20 years. During this time I have served on the Lab's Board of Trustees, conducted my PhD work (through UC-San Diego) at the Lab, established several different research programs, and taught courses. Consequently I have a deep appreciation of how field stations can transform individual lives and serve as international resources for understanding

our environment.

In my six years as Director of the RMBL I have received NSF funding from the FSML, REU, Instrumentation, and Collections panels for the Lab. Additionally, I have served a number of different NSF panels. I have overseen a capital campaign that has renovated four of the Lab's historical buildings, constructed three new buildings, and established an endowment for the maintenance of the Lab's physical plant. We accomplished this campaign by tapping into resources from private donors, state foundations, and government resources. I've also collaborated with local and national land organizations to preserve approximately 1000 acres in the vicinity of the RMBL.

The OBFS has just finished developing a strategic plan and the next few years may be a period of change. However, the OBFS faces a number of challenges as it looks to implement its strategic plan. The organization is made up of volunteers and has limited resources. Because the group meets once a year there is only a limited amount of time in which to build consensus and develop institutional objectives. Given these challenges change will come slowly to OBFS. In establishing a foundation from which OBFS can grow, it will be necessary to take things one step at a time and not expect too much.

In the next several years I see the role of the OBFS VP to work to ensure that the annual meetings meet the diverse needs of the participants. It is important that the meetings provide useful information to all field stations, large and small, old and new. Additionally, I think the OBFS VP will need to work with the committees to help them develop well-defined, prioritized tasks and to establish ways of working that allow the committees to achieve some real accomplishments without putting too much of a burden on committee members.

I have experience developing and implementing strategic plans. During my tenure on the local county's Planning Commission we have adopted a comprehensive plan for the county. Additionally, I was deeply involved in the development of the RMBL's current master plan and have been able to successfully implement many of the goals laid out in that plan. Just like the OBFS, the RMBL is a non-profit that relies upon the goodwill, active and voluntary participation of its members and collaborations with other, similar organizations in order to thrive. In my role as RMBL Director I have learned how to work within some very real constraints in order to achieve some wonderful goals. I will consider it a privilege to help OBFS in similar fashion in future years, either as the VP or simply as a participating member.

### Larry Weider



In January 2006, I will be starting my 8<sup>th</sup> year as Director of the University of Oklahoma Biological Station (UOBS), and I have attended every OBFS meeting since taking up my position here at UOBS beginning with Mt. Lake (1999). Also, I will be winding down my second year in office as a member-at-large on the OBFS Executive Board. I have learned a great deal during my time on the Executive Board. Most notably, I've learned that the folks who are elected to serve are true OBFS "junkies" and

want to help this organization reach its full potential. These are exciting times as OBFS begins to implement some of the tasks and objectives set forth in the recently ratified Strategic Plan. I would like to be a continuing part of this implementation and that is why I am running for the office of OBFS Vice President. If elected, I would continue to look out for the best interests of member stations and also continue to help OBFS evolve as a critically important scientific organization. Thanks for your time and I look forward to my continued involvement in OBFS activities.

### MEMBER AT LARGE

#### John Kim:

I am the Ecoinformatics Manager at San Diego State University Field Station Programs. I manage the ecological data that flows in and out of the four reserves that comprise the university's reserve system. I create databases and related programs to store, document, distribute, and facilitate the use of ecological data by researchers and educators. I also am a co-PI on a \$1.2M federally funded project to demonstrate and evaluate the use of

an automated sensor network to detect wildfire ignitions in remote backcountry.

I have a B.A. and an M.S. in Computer Science from UCSD and University of Massachusetts at Amherst, respectively, and a Ph.D. in



ecological modeling at University of Massachusetts at Amherst. I was a Visiting Instructor at Wheaton College, MA, during the 2001 - 2002 academic year. My interests are in ecological modeling of wildlife populations and forest growth, paleoecology, and watershed modeling.

I have been active in OBFS since 2003 and have attended three annual meetings. I have trained OBFS members from various field stations as an instructor at Ecological Informatics Training seminars at University of New Mexico. In my spare time, I daydream about cinematography, waves, and alternative forms of poetry.

### Dawn Wilson

I am the Director of the Southwestern Research Station (SWRS) near Portal, Arizona which is owned by the American Museum of Natural History in New York. The SWRS's vision is to add to the existing



diversity and strengths of the American Museum of Natural History by providing scientists and educators from the Museum and other institutions across the country and around the world the opportunity to participate in research, workshops, and classes in one of the most biologically rich environments in the United States. The Station seeks to face the challenges of the future by promoting knowledge and understanding of our ever changing world and by evolving to meet the current needs of individuals and groups that strive to conserve the

world's biodiversity – all through the benefits of an outdoor laboratory that enhances research and education.

I am a field ecologist and have spent the past 18 years working on ecological research projects in Florida, Nevada, California, and now Arizona. Because of my many years in the field, I fully understand the role that a biological field station plays in supporting science and education. I am interested in how field stations will be part of NEON initiative and attended the regional meeting of SWEON in April of 2005. Although I have only been affiliated with the SWRS for two years, I feel that I can make a significant contribution to the OBFS. For the past two years I have attended three OBFS meetings and heard many conversations centering on the need for additional sources of funding for member stations. I plan to continue my role as a field station representative to SWEON and would like to take a more active role in researching additional funding sources for facility grants. I would be honored to serve as a Member at Large for OBFS.

**Election quiz – which cowpoke is wearing a hat once worn by Ronald Reagan?**

**VOTE, VOTE, VOTE** 🗳️



# 2006 OBFS ANNUAL MEETING

## Flathead Lake Biological Station, University of Montana

### Montana 14 - 17 September, 2006

The Flathead Lake Biological Station near Polson, MT is looking forward to hosting the annual meeting of OBFS in 2006. *The OBFS meeting will begin the evening of Thursday, 14 September 2006 and end before noon Sunday, 17 September 2006.* These dates are a week earlier than the long-standing and highly revered meeting time established through tradition, but this avoids a conflict with the LTER Scientists Meeting scheduled for the following week. And, it prevents us of being guilty of a foolish consistency, which we all know is the hobgoblin of little minds.

Participants should plan to arrive by 5 PM on Thursday evening, 14 September for the mixer and supper which will be followed by welcoming remarks by the OBFS President and Director of the Host Station. *Those participating in the premeeting field trips should arrive on Wednesday, 13 September.*

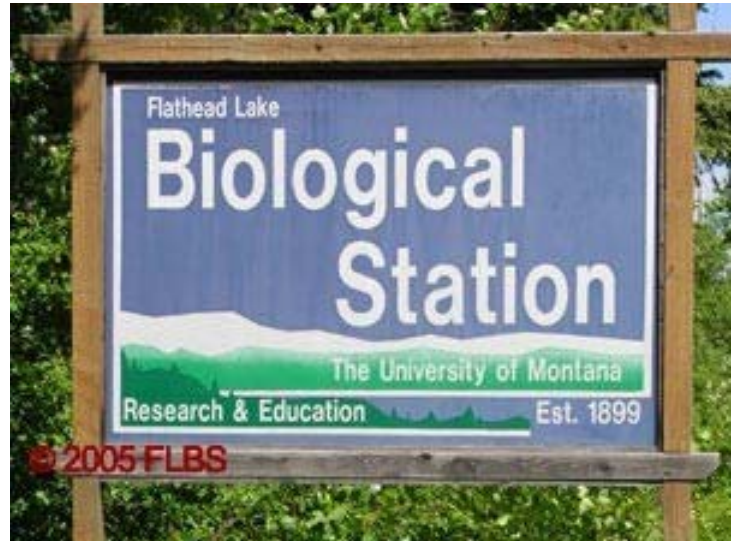


#### Premeeting Field Trips

The premeeting field trips, on **Thursday, 14 Sept**, are far from finalized, but we will probably offer a choice of a hike in Glacier National Park or a raft trip on the Flathead River. Weather permitting, the hike will be the same as in 1994: depart from Going-to-the-Sun Road a short distance east of Logan Pass, ascend through montane forests into subalpine forests and meadows and alpine tundra, cross over Siyeh Pass, and descend a spectacular trail to Sunrift Gorge. Along with the killer views expect to see mountain goats, bighorn sheep and mule deer -- and a strong possibility of spotting grizzlies.

Depending upon the rafting outfitters available (many shut down following Labor Day) the rafting trip will either be on the main Flathead River below Flathead Lake or on the Middle Fork of the Flathead River that defines the south boundary of Glacier Park.

#### Field Trips during the Meeting



We anticipate a field trip to the National Bison Range during the meeting and hope to have an evening cruise around Wildhorse Island – both well remembered favorites from the 1994 meeting.

#### Accommodations and Meals

Those participants that chose to be housed at the Bio Station will be in the cabins and dormitory described below. We will prepare a list of local hotels and motels for those so inclined. Meals will be in the Prescott Center, the Bio Station's cafeteria and meeting facility.

#### Description of Flathead Lake Biological Station





The Bio Station is one of the oldest active biological field research stations in the United States <<http://www.umt.edu/flbs/>>. It was established near Bigfork in 1899 and moved to the present site at Yellow Bay in 1908. Since opening in 1899, undergraduates and graduate students from around the country and the world have been coming to the station to learn field biology and ecology. By 1977, year-round research was being conducted at the Bio Station and the 1981 construction of the state-of-the-art Freshwater Research Laboratory made it one of the finest freshwater research facilities in the country.

The Bio Station is located about midway along the eastern shore of Flathead Lake on a peninsula that shelters Yellow Bay from the main body of the Lake. Scientists, graduate students, undergraduate students and technicians live, study and work together in an academic community located in an old growth stand of ponderosa pine, Douglas-fir, grand fir and larch. Housing for visiting students and researchers consists of small cabins along the lake shoreline with centralized showers and restrooms, a winterized dormitory, and apartments. Everyone dines together in the Prescott Center, a cafeteria and meeting complex.



The Elrod Biological Lab contains a large lecture hall that serves well for plenary sessions (cap. ~ 90) and there are 5 to 6 additional meeting rooms for concurrent sessions in nearby buildings that house laboratories and classrooms dedicated to different aspects of biology and ecology.

As at most field stations, students, faculty and research staff often meet for seminars and informal discussions. With Flathead Lake as the backdrop, the station provides a warm and relaxed academic atmosphere for the exchange of ideas and knowledge gathered through field trips to nearby lakes, streams, prairies and mountains.



The Bio Station lies within the Crown of the Continent Ecosystem, the northern Rockies region centered around Glacier National Park that includes the Great Bear and Bob Marshall Wilderness Areas. The clear, deep waters of Flathead Lake lie in a trench cut by Pleistocene glaciers which profoundly molded all of the montane landforms in the area. The mountains are characterized by banding patterns of Precambrian sediments and many of the ice-sculptured peaks rise more than 7,000 feet above the valley floors.

The topography creates a wide variety of habitats that are easily accessible from the Bio Station including: Palouse prairie grasslands; montane fir, cedar and pine forests; subalpine forests and meadows; and alpine tundra. Four national wildlife refuges are located near the station, as is an Experimental Forest. The area offers a relatively untouched and remote home to most of the northern Rocky Mountain fauna, including rare species such as the grizzly bear, bald eagle, and westslope cutthroat trout.

We will be working with the meeting committee to develop an agenda that includes a mix of plenary and concurrent sessions, and business meetings along with time to enjoy the Bio Station and its surroundings. Trust us! Gee, it's hard to type holding up two fingers of each hand in a V.

For more information contact

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## OBFS NOTES, ETC. STATION NEWS

### *The Sam Houston State*

The Sam Houston State University (SHSU) Department of Biological Sciences' Center for Biological Field Studies (CBFS) occupies the site of the old Huntsville Fish Hatchery (HFH) in Walker County, Texas. Located 5 kilometers northeast of Huntsville and 11 km from the SHSU campus, the 247 acre property was formerly owned and operated by the Texas Parks and Wildlife Department (TPWD). Constructed on Harmon Creek in 1932, the HFH continued in operation until 1986 when a flood breached the dam impounding the storage reservoir. This breach left the hatchery without a water supply and forced closure of the facility pending construction of a new dam.



In 1999, the CBFS was established through a lease agreement with TPWD; however, due to extensive budgetary restrictions, TPWD was unable to honor their side of the lease agreement. In 2001, a request was made and full ownership of the property was transferred to SHSU and the Department of Biological Sciences. With ownership, efforts to expand the use and functionality of the CBFS have been continuously expanding; however, funding limitations have thus far limited development to smaller projects.

### *Hatfield Marine Science Center*

The Oregon State University's Hatfield Marine Science Center (HMSC) is a research and teaching facility located in Newport, Oregon on the Yaquina Bay estuary, about one mile from the open waters of the Pacific Ocean. HMSC plays an integral role in programs of marine and estuarine research and instruction, as a laboratory



The CBFS is close to the SHSU campus and the community of Huntsville, accessible by a paved county road, and bordered to the east and south by U.S. National Forest. With a perimeter fence, the area is relatively secure, allowing studies and programs to be carried out with minimal opportunity for disturbance or vandalism. The site supports a diversity of habitats, including mixed pine-hardwood forest, open prairie inclusions, old-field succession, and riparian habitats along Harmon Creek with year-round flow and stream-side habitat. The 39 existing hatchery ponds, predominantly dry and in various stages of old-field succession because of the loss of the original lake, provide natural habitat for neotropical migrants, wintering birds, and populations of indigenous mammals.

Funding is being sought for several major construction projects, including an Education Center and small lake. An on-site Education Center, classroom and lab space would increase and improve usage of the property for a variety of educational and research functions. Levee systems between seven of the ponds will be removed to form a small lake with open mud flats providing habitat for wintering and migratory waterfowl and shorebirds. As overflow from the main pond becomes available, adjacent ponds would be allowed to flood periodically and function as amphibian breeding sites. Portions of the area will be left "natural" while others will be managed for specific program objectives, including construction of a permanent pond and associated wetland habitats, management for resident Red-cockaded Woodpeckers, and long-term habitat restoration demonstration plots using periodic applications of fire as a management tool. The diversity of habitat types and the associated wildlife would provide the opportunity for numerous educational programs and research projects for university, secondary, and elementary students, as well as the local community.

Information about the Center for Biological Field Studies may be obtained from our website at [www.shsu.edu/~bio/www/CBFS.html](http://www.shsu.edu/~bio/www/CBFS.html). Inquiries about use of the facilities should be directed to

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facility serving resident scientists, as a base for far-ranging oceanographic studies, and as a classroom for students. Our mission is to serve the people of Oregon, the nation and the world through research, education and service that promotes the wise use of the ocean and its resources.

The Hatfield Marine Science Center was established by Oregon State University with the cooperation of local, state and federal agencies. The Port of Newport furnished property and the Federal Economic Development Administration granted money for construction. The main building of the Center, a ship support service building, and a dock for oceanographic research vessels were completed in 1965. Additional construction provided modern teaching laboratories and research facilities and on-site housing. The Newport Aquaculture Laboratory and the Research Support Facility were built by the National Marine Fisheries Service in 1979 and 1981. In 1990, the Environmental Protection Agency completed a new laboratory. At the same time, federal funds were used to build a research library which is operated by OSU. The Oregon Department of Fish and Wildlife Regional Marine office is also located on the campus. The United



States Department of Fisheries and Wildlife completed an office and laboratory building for its Coastal Refuge Program in 1995.

The various marine habitats in close proximity to the Hatfield Marine Science Center are ideal sites for ecological studies and provide a rich flora and fauna for laboratory investigations. The Yaquina Bay estuary provides a gradient from marine to freshwater habitats with extensive intertidal sand and mud flats as well as salt marsh areas. On the open coast, headlands and rocky intertidal areas punctuate extensive sandy beaches. These areas support a biota typical of the Pacific Northwest intertidal. Research vessels operated by the Center provide access to the open ocean habitats.

The Hatfield Marine Science Center has research facilities that support investigations in marine fisheries, aquaculture, water quality, marine biology, botany, microbiology, zoology and oceanography. The Center is well equipped with appropriate specialized instruments, constant temperature rooms, computer equipment, etc. Wet laboratories are provided with running fresh and sea water. Meeting rooms and lecture rooms are located in close proximity to the laboratories.

The Center is both a downlink and an uplink facility for the Oregon Ed-Net system. The facility is used to send and receive classes and other programming from Oregon State University, other OSSHE institutions and outside providers for students and members of the local communities. The Center has an internal local area network and direct Internet connectivity.

Housing is available at the Hatfield Marine Science Center for students and visiting researchers, either in apartments or bunk rooms. All apartments come with completely furnished kitchens and can sleep up to four people. The bunkhouse units have access to self-service kitchen units in the separate Dining Room Building. Housing rates range from \$120 to \$500 per student per month, depending on the number of students per apartment. The Guin House is a small house located one mile from the Center. It is available for researchers with families or those staying longer at the Center.

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### *The Huron Mountain Wildlife Foundation*

HMWF, at its Ives Lake Field Station, promotes field-based, natural-science research in the Lake Superior region generally, and particularly in the Huron Mt. region. HMWF provides exclusive access to a dedicated private natural area of >8000 ha, including one of the largest remaining contiguous tracts (ca. 5000 ha) of old-growth hemlock-northern hardwood forest as well as extensive (for the upper midwest) gradients of topographic moisture and edaphic conditions. 'Special' terrestrial habitats include jack-pine stands on ancient sandy-beach-ridge systems, ridge-top 'granite barrens', and extensive undeveloped Lake Superior shoreline (including both beaches and cliffs).

Aquatic systems include all or part of twelve unusually pristine lakes up to 250 ha in surface area and 80 m depth, and a variety of small ponds, wetlands, and streams. Watersheds of several small streams are included entirely within the natural area and adjacent protected areas. The area is also geologically complex, and is particularly rich in glacial melt-water flood features. Throughout the research area, wheeled vehicles are permitted only on a few km of maintained roads, snowmobiles are used off main roads only for

emergency purposes, and motorized watercraft are not permitted on any of the interior lakes.

The natural area is at the heart of one of the largest (though perhaps least-known) undeveloped landscapes in the midwest. In addition to rugged hills (ca. 400 m total relief) of pre-Cambrian granite (the Huron Mts.), there are extensive sandy outwash plains (the Yellow-Dog Plains), a number of undeveloped small rivers, and hundreds of lakes. The region offers a diverse management history, including areas under current timber management, large areas in succession following early logging, and several other tracts of original forest.



Prior research at the HMWF, beginning over 50 years ago, has led to an unusually thorough documentation of biological diversity within the reserve area. For example, the known flora includes ca. 800 vascular species and nearly 400 bryophytes. Lichens, vertebrates, molluscs, and some groups of arthropods are also thoroughly documented, some in quantitative population studies. The biota of the area includes a variety of rare and endemic species and forms of plants, fish, and invertebrates, and biogeographical disjuncts. Base-line records, with the secure and protected nature of the area provide unusual opportunities for long-term projects and assessment of effects of environmental change.

HMWF offers small grants for a few projects each year, but particularly encourages projects drawing on other funding sources. The Ives Lake Field Station offers free and comfortable housing for researchers working with approved projects. The Station provides ample work space, and the HMWF is currently installing basic wet-lab facilities. Internet access is not currently available on-site. While the nature of the primary research area precludes large-scale manipulation, experimental studies are encouraged.

Catalogues of reports from prior research, working species lists, and guidelines for proposals to HMWF, can be found at our website, [www.hmwf.org](http://www.hmwf.org). Inquiries can also be addressed to me at [kwoods@bennington.edu](mailto:kwoods@bennington.edu).

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### Kessler Farm Field Laboratory

KFFL is a new member of OBFS as well as being a brand new field station. We are oriented primarily towards research, although classes are welcome and encouraged to visit. We simply do not offer any course listings ourselves; all field courses are offered through the University of Oklahoma Biological Station (<http://www.ou.edu/uobs/>).

We are located approximately 25 miles from the OU campus in the redbed hills of Central Oklahoma. KFFL covers 350 acres of mixed grass prairie with riparian woodlands. Finn Creek bisects the farm and is a major tributary to the Washita River, one of 20 gaged rivers in the state of Oklahoma. Current management is cattle grazing with some fire management and many experiments. The real strength of KFFL is its multidisciplinary research. There is a strong meteorological presence with one of the stations of the Oklahoma Mesonet located on the farm, as well as one of the southern stations of the world's largest climatological experiment (the Atmospheric Radiation Monitoring program or ARM) also located there. There is a site for the National Atmospheric Deposition program that monitors rainfall pH and nutrient content and a wind profiling radar (RASS). Another wind profiler is being built as is Piconet network of six weather stations across the farm itself. The Piconet will measure meteorological and biological processes in real time across the farm and will enable researchers to see how spatial and temporal variation in storms will result in temporal and spatial variation in soil CO<sub>2</sub> flux and plant productivity.



In addition, the only long-term global warming experiment located in a warm climate is located on the southern edge of the facility. From this experiment, we have found that the mixed grass prairie will show substantial changes in nutrient fluxes in response to warming, but that the plant species composition will change only moderately, with greater growth of warm season grasses. Additional student, class and faculty experiments include studies on small mammal effects on grassland ecosystems (cotton rats and armadillos), soil erosion, geomorphology, fish, amphipods, grassland and stream restoration, soil mercury emissions, and interannual climate variability effects on ecosystem processes.

KFFL is growing in terms of other facilities as well. Currently a multidisciplinary laboratory building is being planned. Future plans include a classroom/meeting building and a small bunkhouse.

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### Green Wing Environmental Laboratory, Collinson Ecological Preserve, Beling Ecological Preserve

I first met Bob Fisher, former historian, in a bar in San Jose, Costa Rica where OBFS was meeting in September, 1991. What are the odds of that? I was teaching Applied Ecology in our Augustana Foreign term in Latin America, which that year included stays in Mexico, Costa

Rica, Ecuador, Argentina and Chile. Well, I was at once interested in what Fisher told me about OBFS because at that time our Administration was negotiating to buy a 420 acre former Bible Camp in north-central Illinois, 80 miles east of campus, called the Green Wing Bible Camp. It was a mosaic of upland forests, wetlands and old fields perfect for a small college biological field station. I didn't know if the transaction was successful until I got back to campus later that fall.

The day after arriving back on campus I walked into the Dean's office and said, "Well did we get that old Bible Camp or not?" The Dean just smiled and said, "Congratulations, how does it feel to be the director of our new Field Station?" We changed the station name to Green Wing Environmental Laboratory and started fixing up the old buildings for teaching and research purposes. In fall of 1992 I had our grounds keeper plow up a 20 acre old field, and the next spring we seeded it with seeds of local ecotype tall grass prairie species. It is now a flourishing and beautiful prairie restoration. In 1995 I taught Local Flora, the first summer class at Green Wing Lab. About that time the Illinois office of The Nature Conservancy called me and asked if we were interested in buying a 70 acre upland forest plot complete with two small but high quality hill prairies. Salivating, I went to the college president and said, "Tom, for the price of a new Cadillac we can own an excellent local field station where we can take classes for an afternoon botany or ecology field trip." The upshot is we got the Collinson Ecological Preserve as our second station. And then a few years later we were given a 110 acre parcel on the Rock River, 20 minutes from campus that is mostly riparian and other wetland habitat. We called that unit after its donor, the Beling Ecological Preserve. So now we have three stations comprising 600 acres representing the major ecosystems of northern Illinois - grasslands, woodlands and wetlands.

That first year of operation in 1992 I took out an OBFS station membership and attended the annual meeting at the Malheur Biological Station in Oregon. The experience was a real eye-opener, and the Augustana College Field Stations have been an active member of OBFS ever since then. And to think it all started over a cold beer with Bob Fisher in San Jose!

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