

**Organization of
Biological Field Stations**

**Newsletter
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OBFS NEWS

The Newsletter of the Organization of Biological Field Stations #
 Volume 2000, No. 1. Issued May 2000
 Editor: David S. White, Hancock Biological Station

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(Term of office, E-mail address))

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OBFS Home Page Address
<http://www.OBFS.org/>

A LETTER FROM OUR NEW PRESIDENT, HILARY SWAIN

I am taking on the President's job buoyed by the title of a paper Tom Eisner wrote in 1982 about biological field stations entitled "For love of nature: exploration and discovery at biological field stations". I have been nurtured by many field stations, most recently at Archbold Biological Station in the unique world of the Florida scrub with its "almost Dr. Seuss-like" collection of endemic plants and animals. Hopefully I will be able to convey the OBFS enthusiasm for the urge to explore, and the ability to discover at our many sites to the broader scientific community and beyond.



The unique value of field stations is that they provide a most direct linkage among research, education, outreach, land management, conservation, and data management activities. I would like to work with all members to promote this special role of field stations to funding agencies and the legislature, and build linkages with other research networks,

government agencies, and non-profit organizations. We need funding, support, and partnerships to realize our full potential. Our message should be - whether large scale LTER sites or modest teaching-oriented field stations - that the collective OBFS membership forms an established network of sites with the ability to detect, understand, and interpret ecological change at regional, national and international levels. (The recent analysis I conducted with Mark Stromberg shows that OBFS stations represent data collection points in ecoregional provinces that encompass over 72% of the U.S.). Furthermore, the viability of field stations (research, education, land, and finances) depends on recognition and awareness of their collective role and contributions.

Some of the priorities I would like to achieve in conjunction with OBFS and IOBFS members during my two year term are listed below but if there are other pressing issues please get back to me to put them on the radar screen:

- Work with the Long-term Ecological Research network staff, with previous OBFS Presidents Jack Stanford and Art McKee, and Web Master Mark Stromberg, to ensure successful establishment of OBFS personnel and offices within the LTER Network office to promote data management activities within and among OBFS member field stations, with links to the wider ecological community.
- Work with NSF to ensure continued support for the Field Station and Marine Labs program.
- Build on an initial meeting we had with the Executive Board of NAML in February, 2000 (see page 5 in the Newsletter for NAML meeting results) to explore regular OBFS/NAML exchanges, with a focus on integrating our efforts to interact with the legislature, congress, and funding agencies.
- Support the initiatives by Susan Lohr for compiling standard OBFS field station operational policies.
- Support J. Hodder and D. Ebert May in their initiatives to expand the undergraduate faculty enhancement program started under NSF FIRST designed to use field stations to

enhance the teaching of ecology by undergraduate faculty.

- Work with host sites to ensure we will have great 33rd and 34th annual meetings at Andrews in 2000 and Pymatuning in 2001. We are looking for agendas with both hard work and, also, enough fun for a continuing catalogue of compromising photos. (How can the rumor from last year's meeting about a decline in the rate of embarrassing photos possibly be true - there are several compromising photos of ME floating around - this is a data management issue, which I am going to make no effort to resolve).

The reason biologists fall in love with field stations is not only because they are wonderful places for research and teaching. Through exploration and discovery we also fall in love with the land, and the sea - and with this

knowledge comes the sense of stewardship and place. So I will measure my term as President of OBFS not just in terms of papers produced, students taught, presentations given, datasets on the web, GPS points on the ground, and dollars raised, but also as acres saved, watersheds protected, management techniques successfully implemented, citizens that believe in what we do, and measurable improvements in the ecological integrity of the natural communities we represent.

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OBFS NEW MEMBERS LIST 2000

OBFS WELCOMES THE FOLLOWING NEW STATION AND INDIVIDUAL MEMBERS



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

Bernard Biological Field Station
Dr. Catherine McFadden
Dept of Biology
Harvey Mudd College
301 E. Twelfth Street
Claremont, CA 91711-5990

Cedar Mountain Science Center
Harold Ornes
Southern Utah University
SB 310A351 West Center Street
Cedar City, UT 84720

Disney Wilderness Preserve

Monica Folk
The Nature Conservancy
2700 Scrub Jay Trail
Kissimmee, FL 34759

Hopkins Memorial Forest
Andrew Jones
CES / Williams College
Kellogg House
P.O. Box 632
Williamstown, MA 01267

Inst. for Tropical Marine Ecology ITME
Dr. Sascha C C Steiner
Dominica, West Indies
c/o ITME
Worcester, NY 12197-0430

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

La Laguna del Lagarto Lodge
Vinzenc A. Schmack
PO Box 995 / 1007
San Jose, COSTA RICA

Northwest Watershed Research Center
Charles W. Slaughter
USDA-ARS
800 Park Blvd, Suite 105
Boise, ID 83712-7716

Selman Living Laboratory
William Caire
Biology Department
100 N. University Drive
University of Central Oklahoma
Edmond, OK 73034

UC Davis Reserves
Shorty Boucher
DESP
University of California
Davis, CA 95616

Upper Rio Grande Valley Biological Station
Jack Clinton Eitniear
Center for the Study of Tropical Birds
211 Trevino Street, PO Box 298
San Ygnacio, TX 78209-1716

Volcano Bay Field Station
Dr. Bruce Carter
Pasadena City College
1570 East Colorado Blvd
Pasadena, CA 91106

Domaine Gault
422, chemin des Moulins
Mont-Saint-Hilaire
Quebec J3G 4S6 CANADA

ILTER NETWORK OFFICE SEARCHES FOR OBFS LIAISON

The National Science Foundation recently made a supplemental award to the Long Term Ecological Research (LTER) Network Office to provide support and training to the member institutions of the Organization of Biological Field Stations. The ultimate goal of this



endeavor is to prepare these member institutions for full participation in upcoming NSF initiatives such as the National Ecological Observatory Network (NEON). The LTER Network Office proposes to assist field stations, marine laboratories and associated research collections to improve their expertise in information management by providing advice and guidance through a full-time staff position. In addition, we

will encourage the development of common database structures and networking among OBFS stations. Field stations and marine laboratories and their associated research collections are the primary repositories of information on the composition, structure, and dynamics of the nation's ecosystems. Broad geographical coverage and long temporal records are unique characteristics of the information contained in these repositories.

There are four basic goals for this effort:

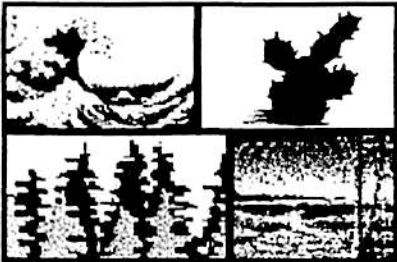
1. to initiate the design of a system for coordinated management of field and collections data;
2. to begin to develop the capability to rapidly share information and data among field stations, marine labs, and research collections;
3. to identify a rich set of databases that would permit scientists to address research questions at a national scale; and
4. to provide enhanced educational opportunities for field station, marine lab, and research collections personnel.

The Network Office has identified a group of candidates for the staff position and is evaluating

these candidates in cooperation with OBFS. We anticipate making an announcement regarding our search within the next month. The successful candidate will act as a liaison between OBFS, the LTER Network, and its collaborators such as the Museum of Southwestern Biology (MSB), the

informatics group at the University of Kansas Natural History Museum, the National Biological Information Infrastructure (NBII), the National Center for Ecological Analysis and Synthesis (NCEAS), and the San Diego Super Computer Center (SDSC).

FIRST REPORT UPDATE



Faculty **I**nstitutes **R**eforming **S**cience **T**eaching

The FIRST project is an NSF sponsored professional development program that encourages faculty to implement active learning in field and classroom situations. Teams associated with five field stations - Archbold Biological Station, Hancock Biological Station, San Diego State University Biological Field Stations, Southwestern Research Station, and St. Croix Watershed Research Station - have worked with faculty in their regions to build a network to implement the FIRST project.

During the past academic year the five institutional teams associated with each of the field stations have been implementing the active learning activities they have developed in their courses. Field station teams have been assisting in the evaluation of the faculty efforts, and planning for the next phase of the project. A proposal has been submitted to NSF's Division of Undergraduate Education's Course, Curriculum, and Laboratory Improvement program's National Dissemination Track to continue professional development for faculty. We propose to work with the original field station teams to sustain and enhance the network they have developed, and to add four new field station teams who will be mentored by the original field station teams.

Information on the FIRST project can be found at <http://darkwing.uoregon.edu/~jhodder>

Jan Hodder
Oregon Institute of Marine Biology

OBFS REPRESENTATIVES MEET WITH THE EXECUTIVE COMMITTEE OF THE NATIONAL ASSOCIATION OF MARINE LABS (NAML) TO DISCUSS TOPICS OF COMMON INTEREST. WASHINGTON DC FEBRUARY 27 - 29TH 2000.

NAML is a sister organization to OBFS:
The National Association of Marine Laboratories (NAML), organized in the late 1980's, is a nonprofit organization of over 120 members employing more than 10,000 scientists, engineers, and professionals and representing marine and Great Lakes laboratories stretching from Guam to Bermuda and Alaska to Puerto Rico. NAML member laboratories provide a

variety of academic, research, and public service programs.

<http://www.mbl.edu/html/NAML/NAML.html>.

Several marine labs are members of both OBFS and NAML.

NAML is composed of three regional associations: **Northeastern Association of Marine & Great Lakes Laboratories (NEAMGLL)** includes

institutions on the Great Lakes and marine laboratories from the eastern seaboard north of Maryland.

Southern Association of Marine Laboratories (SAML), includes marine laboratories from Maryland to Texas including Bermuda and the U.S. Virgin Islands.

Western Association of Marine Laboratories (WAML) includes marine laboratories on the West Coast of the United States including Hawaii and Guam.

They have regular meetings for the three regional associations and then every other year the whole membership meets at a marine lab. The broad membership meeting at the marine lab follows a format somewhat like the annual OBFS meetings. The Executive Board meets in Washington D.C. every year at which the general membership are also welcome. The Washington meeting has traditionally included meetings with congressional staffers and, every other meeting, a NAML reception for representatives, senators and staffers.

Background to attending the NAML meeting

At last year's OBFS annual meeting at Mountain Lake, participants discussed the benefits of Executive Board representatives attending the winter meeting of NAML. NAML was

responsive to the OBFS request to attend and below follows a report of the meeting.

Highlights of events:

OBFS representatives Art McKee (Past-president), Hilary Swain (President), and Sedra Shapiro (SDSU OBFS member) initially met with the NAML Executive Committee (notes say Lavern Weber (President) Alan Kuzirian (Secretary/Treasurer), Tom Malone, Art Brooks (Past President), Linda Shapiro, Tom Michaels, and Tim Nelson) and then also made presentations to the larger NAML group attending, with representatives from many labs. The objective was to look for areas of common interest and explore future joint activities to capitalize on our collective OBFS/NAML value.

Some of the programs highlighted by NAML on their agenda were:

- LABNET
<http://www.mbl.edu/html/NAML/brochure/LABNET.brochure.html> – NAML's excellent interactive 3 year old project (original NSF, EPA NOAA funding) which is a network system (set of tools) to allow data retrieval, viewing and manipulation for different member sites at a variety of scales. NAML's LABNET has targeted distributed databases (hosted on ftp sites at home institutions) of interest to state and federal agencies (e.g. tracking algal blooms).
- CBATS – www.cbats.org, an innovative interactive K-12 program to allow students and teachers to access the Bermuda Biological Station for research data and to promote inquiry-based learning.

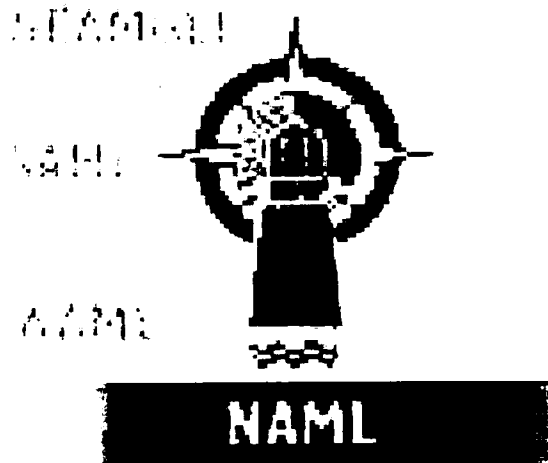
OBFS representative presentations focused on

- An overview of OBFS including a slide presentation of the GIS analysis by Hilary Swain, Mark Stromberg and Roberta Pickert demonstrating the broad geographical and thematic coverage of OBFS member sites within 25/33 of the US biogeographical ecoregions in the lower 48 states.

- Sedra Shapiro presented the goals and status of the NSF Project First, a case study on power of the collective – in which five OBFS member stations have undertaken workshops for undergraduate teaching faculty enhancement and to promote the inclusion of inquiry-based learning and collaborative learning techniques into undergraduate programs.

- Art McKee presented future possibilities including an early outline of an initiative to recommend that NSF establish a special competition for funding K-12 education programs at field stations and marine labs (analogous to the FSML program).

The Executive Board and the OBFS delegates met in a closed session and decided that there



was significant synergy with the two organizations. The consensus from the meeting was the timing is very good for collaborative OBFS-NAML initiatives. (The Teaming with Life PCAST Report, the report of the National Science Board Task Force on the Environment, and OSTP initiatives for a national scorecard of environmental conditions all support the role and contributions of sites such as OBFS and NAML members).

1. Consider holding joint NAML-OBFS Executive Board meetings in Washington, DC on a regular basis with the intent of making OBFS and NAML more visible on federal radar screens.
2. Define a joint federal agenda. Possible topics include the power of the collective (network of environmental monitoring), some theme to support the NSF FSML program directorate, support of NEON initiatives, and Education programs from K-gray at field stations and marine labs. Will require joint NAML-OBFS Executive Board preparation
3. Provide member field stations and marine labs with this federal agenda and develop a strategy to coordinate action at the site level with local congressional representatives. This could also act as a pipeline for encouraging participation in item 4.
4. NAML-OBFS agreed to consider hosting a joint Washington reception in subsequent years. Hilary Swain and Lavern Weber as Presidents of the respective organizations would work to establish the partnership and

identify details regarding a jointly hosted event. There was concern that this has to be well organized and well advertised to be cost-effective. Fiscal impact to OBFS is unknown but reception is likely to be as much as \$5k per sponsor or less given past event costs. The agenda and details are yet to be worked out but the thought was to include an awards ceremony (to encourage congressional representation).

5. Another approach would be for OBFS and NAML to use AIBS or a similar umbrella organization to help set up other types of congressional interface such as a Roundtable (often held in the National Press Club) to promote a hot topic of interest to both OBFS and NAML, such as invasive exotics.
6. Work together to develop a new K-12 initiative to present to NSF.
7. Improve cross-referencing of web sites – e.g. consider annual class listings at both OBFS and NAML sites.
8. Consider including NAML sites in the second phase of Project First if it gets NSF award.

This September we will extend invitations for member(s) of the NAML Executive Board to attend the OBFS annual meeting at Andrews Forest to continue this encouraging conversation.

Hilary Swain
Art Mckee
Sedra Shapiro



OBFS DISPLAY & BROCHURES



In 1996 funding from NSF allowed OBFS to create a brochure and build a portable, free-standing display booth with text and graphics to explain the importance of biological field stations and marine laboratories to the public. The display is available for OBFS members to borrow for use at professional meetings, open houses, field days, fundraisers, etc. It is about 7'9" tall, 2 feet deep and 8 feet long with its own

internal lighting. Shipping costs may be reimbursable by OBFS. The text of the display is also available in brochure form. Anyone interested in obtaining brochures or borrowing the display should contact Nina Consolatti, Kellogg Biological Station, 3700 East Gull Lake Drive, Hickory Corners, MI 49060. Phone: 616/671-2228; E-mail: Consolatti@kbs.msu.edu.

DATA MANAGEMENT WORKSHOP REPORTS

Also available for the asking from Nina Consolatti (see contact information on page 8) are hard copies of the NSF-sponsored workshop reports on data management at field stations: Data Management at Biological Field Stations. Report of a Workshop May 17-20, 1982. W.K.Kellogg Biological Station, Michigan State University (the "green" book), and Data

Management at Biological Field Stations and Coastal Marine Laboratories. January 1992, Report of an Invitational Workshop, April 22-26, 1990, W.K. Kellogg Biological Station, Michigan State University (the "blue" book). Note that the 1992 report contains the 1982 report as an appendix, and that both are available electronically (courtesy of John Porter) at www.LTERnet.edu/ecoinformatics.

ANNUAL MEETING -- 2000

H.J. ANDREWS EXPERIMENTAL FOREST
Blue River, Oregon
<www.fsl.orst.edu/lter>

14 to 17 September 2000

With pre-meeting field trips on Thursday, 14 September 2000

The following information and registration form can also be found on the OBFS web page www.obfs.org

The 2000 Annual Meeting of OBFS will be at the H.J. Andrews Experimental Forest from **Thursday, 14 September to Sunday, 17 September 2000**. Established in 1948, the Andrews Forest is located in the western Cascade Range, about 50 miles east of Eugene, Oregon, and is administered cooperatively by the US Forest Service Pacific Northwest Research Station, Oregon State University, and the Willamette National Forest.

The Andrews Forest occupies the 15,800-acre (6400 ha) drainage basin of Lookout Creek, and ranges from about 1,350 feet (410 m) to 5,340

feet (1,630 m). The maritime climate has wet, mild winters and dry, cool summers. Virgin forest when established, about 55 % remains cloaked in old-growth forests containing 400-plus year-old Douglas-firs. (See McKee, A. 1998. H.J. Andrews Experimental Forest. Bull. Ecol. Soc. Am. 79 (4): 241-246.)

Experimental Forests are dedicated to research and education, and the Andrews Forest has active and diverse programs in both areas. Please visit the Andrews Forest web page <www.fsl.orst.edu/lter> for more detailed information about the station including a complete bibliography of publications from the various programs.

ACCOMMODATIONS

Because we will still be in our field season, we will only be able to accommodate about 65 OBFS people at the Headquarters Site (HQ) for the meeting. Housing at the HQ consists of quadruplexes and a triplex. The 2- to 5-

bedroom apartments have bunk beds only, so housing for couples is a bit puritanical. Most bedrooms have one bunk bed (two berths), a few have two. All apartments have one or two baths, kitchen/dining areas, and living rooms.

Reservations for beds in the apartments will be processed on a first-come, first-serve basis. If you wish to room with a specific person, please give the name. For those in the apartments at the HQ, we will sort by couples and sex but people should plan on sharing an apartment with a few other souls.

For families and couples desiring more privacy, other options include

- 1) tenting on the site; there are good tent sites on our open lawns with easy access to bathrooms/showers ;
- 2) camping at our researchers' campground, Gypsy Camp, located about 2 miles (5 minutes) from the Headquarters; either tent out or bring mattress pads to place on cot-sized pallets in **very spartan** plywood shacks (with pit toilets at the Camp, but no showers, would need to use those at the HQ);
- 3) camping at a US Forest Service campground, there are 3 within about a 15-minute drive (no showers); and
- 4) checking into local motels, lodges, etc., a listing of local accommodations is included below, you will need to book these yourself.

Alternative Lodging in the McKenzie Valley for Sept. 13 – 17, 2000.

The accommodations at the Andrews Forest are not well designed for couples and folks with children, so you might want to explore the options below, and make reservations as early as possible. There are not many options available within a short drive, and these tend to be booked well in advance – especially this year. It seems there is a big wedding on the Saturday of our meeting and space is already tight. The per night prices shown below are late-April estimates and do not include the local rooms/meals tax.

Caddisfly Resort 541-822-3556
About a 10-mile, 15-minute drive from the Andrews Forest.
Quaint cottages on the McKenzie River, approx \$65 for 2 people, \$79 for 4.

Cedarwood Lodge 541-822-3351
About a 10-mile, 15-minute drive from the Andrews Forest.
Small units and 1-bdrm cabins on the McKenzie River, approx \$81 per cabin.

Eagle Rock Lodge 541-822-3630
About a 16-mile, 20-minute drive from the Andrews Forest.
Bed & breakfast lodge on the McKenzie River, rooms from \$75 to \$195.

Holiday Farm 541-822-3715
About a 7-mile, 10-minute drive from Andrews Forest
Upscale cottages along a scenic reach of the McKenzie River, \$225 and up.
Historical (hysterical?) note: Pres. Herbert Hoover used to stay here when fishing the McKenzie. A cottage (not on the river) with Hoover memorabilia is available!

Horse Creek Lodge 541-822-3243
About a 12-mile, 18-minute drive from the Andrews Forest.
Mix of cabins and homes in wooded setting with easy access to river, from \$61 to \$220.

Log Cabin Inn 541-822-3432
About a 10-mile, 15-minute drive from the Andrews Forest.
Rustic cabins with access to river, approx \$86 and up.

McKenzie River Inn 541-822-6260
About a 16-mile, 20-minute drive from the Andrews Forest.
Bed & breakfast and cottage on the river, rooms \$59 (2 people), cottage \$69 (2 people).

River's Edge Inn 541-822-3258
About a 7-mile, 10-minute drive from the Andrews Forest.
Bed & breakfast inn on Blue River, rooms from \$85 to \$125.

Sleepy Hollow Motel 541-822-3805.
About a 7-mile, 10-minute drive from Andrews Forest
Nice, clean, no-frills motel, approx \$52 double, \$48 single.

MEALS

Meals are included in the registration fee. Please inform us of special dietary needs on the registration form. The caterer is working on a menu with a Northwestern theme. Our dining area is pretty funky and has limited

capacity (32), but will be warm on those cool mornings. We have an open-air pavilion where most folks will probably choose to sit at mealtime, but the breakfasts may prove bracing.

ITEMS TO BRING

Guests will need to bring all their own bedding (for single beds), towels, and toiletries. Our regulars use lightweight sleeping bags and bring a pillowcase (we supply pillows, but won't earn a four-star rating for them). We can accommodate a small number of requests for linens, towels, etc. (up to 10) for those folks that for whatever good reason cannot bring their own. But, we'd like to reserve our very limited supply for those with missing luggage, and there will be an additional fee.

September in the Oregon Cascades can mean spectacularly clear days in the 70s or 50-degree drizzles. Mornings tend to be brisk, in the 40s (frosts are rare). Most folks do fine with jeans and a polarfleece jacket or sweater and windbreaker. It can get into shorts-type weather in the

afternoons. Basically, this is a time of year when it pays to layer.

Other items to also toss in would be binoculars, daypack, water bottle, camera, flashlight, lightweight hiking shoes/boots, and light rain gear. We will modify the field trips if the weather is nasty enough to require heavy rain gear.

Those going on the pre-meeting float trip should plan on wearing clothing that dries fast and does not absorb much water. Polypro, wool, and nylon are good fabrics. The McKenzie River is a cold one (50s), and the paddle rafts will be splashy – hey! that's a lot of the fun!. Some folks might want to wear light rain gear. We will be shuttling vans to the pickup spot so a change of clothing for the end of the trip can be tossed in the vans.

TRAVEL

X **E**ugene (EUG) is the closest airport to the Andrews Forest, about 55 miles and an hour and a quarter away. Portland (PDX) is the next closest airport, and that is 160-plus miles and about 3 hours away (with no traffic hassles).

Directions from both airports will be included in the mailings to those that register. We will also include directions for those driving here from east of the Cascades.

We will help coordinate car-pooling by maintaining a file of arrival/departure dates and flights of registrants.

AUCTION FOR THE OBFS RESERVE FUND

The 4th Annual OBFS Auction (and Chautauqua, Circus, Tent Meeting, Vaudeville, Minstrel Show..., what is this thing we've created???) will take place on Saturday night starting about 7 PM. Peter

Connors and Dan Dawson have agreed once again to act (wow, is that word appropriate) as auctioneers, and Sedra Shapiro will repeat some of the multiple metamorphoses for which she became famous last year as well as bedazzle us with new ones. Front row seats will go fast!

Members are encouraged to bring (or send if you cannot attend) unusual items of scientific, cultural, regional, historical, or personal interest that relate in some manner to their station or lab. Brief narratives about the items are welcome, as well as *certificates of authenticity*. These narratives/certificates often make the items more

cherishable, and help the auctioneer promote the object's real value.

Please limit items that advertise your station or lab (T-shirts, caps, mugs, posters, etc) to one of each type.

DRAFT AGENDA

Wednesday, 13 Sept.

2-5 PM Participants for pre-meeting field trips arrive at Andrews Forest.
5 PM Reception
6 PM Dinner
7 PM Intro to & logistics of field trips

Thursday, 14 Sept.

7 AM Breakfast
8 AM Cascades Loop Field Trip departs.
9:30 AM McKenzie River Raft Trip departs.
2-5 PM Non-field trip, OBFS attendees arrive.
5 PM Reception
6 PM Dinner
7 PM Welcome and introduction to Andrews Forest
8 PM OBFS Slide Show

Friday, 15 Sept.

5:30 AM Optional birding tour (if enough interest)
7 AM Breakfast
8 AM OBFS Business meeting
10 AM OBFS Committee meetings
11 AM Andrews Forest science tour
4:30 PM Facilities tour
5 PM Mixer
6 PM Dinner

7 PM Presentations on Northwestern Native American culture
9:30 PM Optional herpetological tour (if enough interest)

Saturday, 16 Sept.

5:30 AM Optional birding tour (if enough interest)
7 AM Breakfast
8 AM OBFS Business meeting
9 AM NSF Representative's presentation (Dr. Gerald Selzer)
10 AM Concurrent Sessions
Education
Field station start-up
1 PM Local field trips:
Carpenter Mountain
Horsepasture Mountain
Tamolich Falls
McKenzie Pass
5 PM Mixer
6 PM Dinner
7 PM Auction

Sunday, 17 Sept.

7 AM Breakfast
8 AM OBFS Business meeting
12 AM Finis

ITEMS FOR OBFS BUSINESS MEETING

The following is a partial list of items that will be discussed during the business meeting portions.

- Planning for OBFS/NAML joint meeting in Washington DC and joint initiatives.

- Status of OBFS Data management position in the LTER Network Office, Univ. of New Mexico.
- Status of KDI project (an LTER-led set of data networking activities involving several OBFS stations).
- Probable future of the National Ecological Observatory Network program at NSF.

- Status of OBFS proposal to the FSML competition to produce an operations and policy manual.
- Update on FIRST project activities and future plans.
- Update on AIBS activities.
- Overview of OBFS web site activities.

FIELD TRIP DESCRIPTIONS

Pre-meeting field trips (fees do NOT include meals/lodging/etc.):

- 1) **McKenzie River Rafting Trip** – (\$60 per person) – The clear and beautiful McKenzie River starts as huge springs in the High Cascades and flows swiftly through lush forest. We have arranged a drift with a celebrated local guide, Jim Berl, with paddle rafts so that everyone gets immersed in the action (bad choice of words?). There'll be white water and thrills aplenty, but the rapids are moderate (class 3 max) not terrifying. This will be a fun-filled, 4- to 5-hour drift with a break for lunch. Jim and his crew will provide pre-drift instructions, a catered lunch, and all equipment including life jackets. We will work with Jim on the shuttle between launch and haul-out. The cost of \$60 per person represents a \$20 saving over the standard price. The maximum number is 70 participants, so if you want to take family members, register early. Children must be 6 or more years of age.
- 2) **Depending upon weather and river level we will either drift from Paradise to Blue River landings or from Blue River to Thompson landings. Both are about a 15-mile drift. The former is higher in the basin, has a wilder flavor with fewer homes, slightly more class 1 and 2 rapids, and a couple of class 3s. There is an impressive logjam in the upper drift at one point that has been opened in a collaborative effort between the Forest Service and boaters. The lower drift is more open with more sunshine for cool days, and runs a little closer to the main highway, but boasts Martin's Rapids, a solid class 3 experience that occurs at the very end of the drift – a sort of grand finale. Should we go with the Paradise to Blue River drift, we will also pull out at Jim Berl's home for lunch. He has a sand volleyball court, horseshoe pits, and a nice lawn with chairs to sit in and soak up the famous Oregon sunshine.**
- 3) **Cascades Loop Drive** – (\$25 per person) – This will be an all-day loop over the crest of the Cascades via two passes with stops to see waterfalls, lava flows, dramatically different forest types and research sites. Cost includes a copy of Franklin and Dymess's classic, **Natural Vegetation of Oregon and Washington**.
- 4) We will drive up the Old McKenzie Highway and stop to visit the Proxy Falls area that has old-growth trees on an old lava flow and two waterfalls (one of them a tourist attraction in its own unique way!). We will then go to McKenzie Pass and see some recent (2800 to 3000 yr before present) lava flows and formations.

We will then drive east to a juniper natural area with short stops along the way. The rainshadow effect is profound on the east side of the crest with the forests changing quickly as you descend from upper montane, mountain hemlock/lodgepole pine to mixed conifer to Ponderosa Pine/bitterbrush to western juniper/sage brush.

We will backtrack into the Ponderosa pine zone and visit a Research Natural Area and a big spring (Head of the Metolius River). Next, we'll head up toward the Santiam Pass and visit examples of high-elevation forest types.

On the way home, we'll stop at a turn-of-the-century, Forest Service guard station on one of the first wagon roads to cross the Cascades, and two impressive waterfalls (Koosah and Sahalie Falls) on the McKenzie River. All these stops have interesting vegetation stories to be told. And, time permitting, we'll stop at other geological and natural history features such as lava tubes, a dramatic scarp, and sites of some rare plant species.

FIELD TRIPS DURING THE MEETING:

Andrews Forest Science Tour (Friday) – Several scientists associated with the Andrews Forest will join us for the day to talk about their research. We will split into two groups and rotate to four or five stops. Probable topics (and scientists) include: decomposition and Carbon dynamics (Mark Harmon); Nitrogen cycling (Kate Lajtha); below-ground biology (Bob Griffiths); soil arthropods (Andy Moldenke); aquatic and riparian ecology (Stan Gregory); autecology of the northern spotted owl (Steve Ackers); old-growth forests (Tom Spies/Steve Acker); disturbance processes and landscape ecology (Fred Swanson); and new perspectives on hydrology (Julia Jones/Barbara Bond). Many of the presentations will include implications for, and linkages with, natural resource management.

Local Field Trips (Saturday) – These will be concurrent trips. Participants will sign up for them on Friday night. Estimated distances are one-way.

- 5) **Carpenter Mountain** – About a mile hike through upper montane forests and meadows to a fire lookout in an unusual location, a 150-foot high, columnar basalt dome. 360-degree views of western and high Cascades including a bird's eye view of Wolf Rock, one of the world's largest monoliths. Great photo ops, moderate grade. We will also make a short in-and-back hike on an old-growth trail.
- 6) **Horsepasture Mountain** – Tour of a Research Natural Area (Olallie Ridge RNA). About a mile and a half hike through upper montane forests and meadows to the site of

an abandoned fire lookout. The meadows are rich in endemic plant species (but it is a bad time of year). Views are great, the RNA is close to the Three Sisters Wilderness Area with the main peaks about 15 miles away. ***Caution*** Twisty road with lots of exposure, if you're inclined to acrophobia, this trip might not be your choice.

- 7) **Tamolich Falls** – About a two-mile hike along the upper McKenzie River through old-growth forests and across old lava flows in various stages of succession. Great views of the McKenzie River tumbling through a gorge. Tamolich Falls is a seasonal waterfall and big upwelling spring, but, in September, will not have a cascade. The crystal-clear pool with the upwelling spring is a knockout, however, and well worth the trip, with an ethereal blue color caused by diatom-skeleton back-scattering of light.
- 8) **McKenzie Pass** – Broadly overlaps with the first third of the pre-meeting field trip. We will drive up the Old McKenzie Highway and stop to visit the Proxy Falls area that has old-growth trees on an old lava flow and two waterfalls (one of them a tourist attraction in its own unique way!). We will then hike about one mile into a seasonal lake, followed by driving to McKenzie Pass to see some recent (2800 to 3000 yr before present) lava flows and enjoy views of the high Cascades. ***Caution*** The Old McKenzie Highway is tortuous. We will drive slowly, but if you're prone to motion sickness this trip might not be your choice.

1999-2000 ELECTION RESULTS

More than 60 OBFS Station Members voted in the 1999-2000 election – possibly the best turnout ever! Hilary Swain was elected as President, Eric Nagy as Vice President, and Philippe Cohen as Executive Committee Member at Large. Peter ~~Connors Connors Connors~~ Connors was reelected as Secretary. The Organization extends special thanks to Mark Stromberg, Sedra Shapiro, Steve Havera, and Chuck Yohn who were the other candidates for offices and who also were willing to donate their time and efforts.

STATION NEWS

THOMAS MORE COLLEGE BIOLOGY FIELD STATION

Thomas More College Biology Field Station has received funding from the Ohio River Sanitation Commission (ORSANCO) to install a "River Tap" in the Center for Ohio River Research and Education building. The "river tap" will pump raw untreated river water directly into the building and thereby allow for a vast array of research and teaching opportunities in house. Installation will begin as soon as the river level permits. ORSANCO researchers will be the first to use this new system once it is operational.

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PINELANDS FIELD STATION

It is difficult to believe that just over 5 years has gone by since I came to the USA to become the Director of the Rutgers Pinelands Field Station. I admit to having been a sleeping member of the OBFS, but I have been wanting to get set up and a program running so that I had something more to say than, "Hi, I'm here"!

When I started, Rutgers was good enough to hold a grant from Victoria Foundation for me to hire a postdoc for a year. So, with Christine Conn and Dennis Gray (our faithful and indispensable technician) we started developing the station to work on below ground processes. Christine looked at the role of leaf litters influencing ectomycorrhizal communities on roots and we started trying to get involved in educational programs, with limited success. Amy Tuininga joined us a PhD graduate student and Heather Livesey as MS (now at medical school!). Amy is still with us and finishing off a great thesis on the effects of control burning on ectomycorrhizae and nutrient availability. This she has done with

Dennis doing a lot of soil analyses as a joint project. Indeed, Dennis has become so interested in this idea, he has recently joined the graduate program and is working on his doctorate.

With a second grant from Victoria Foundation we added some vegetational analyses to the fire study and, together with Max Haggblom and Bob Tate, we have been trying to see if we can use phospholipid fatty acid and BIOLG plate methods to detect shifts in microbial communities due to this disturbance. Shannon Nix (PhD) is working on phylloplane fungi on cranberries, Murray McHugh is finishing his MS work on the role of mycorrhizal inoculation, salinity, inundation and fertilizer on the establishment of *Spartina* seedlings, whilst Leigh Ann Rowlan will be starting to characterize bacterial communities associated with different ectomycorrhizal communities. Meanwhile, with thanks to NSF and USDA grants we are working with Jim Baxter and Lena Jonsson (postdocs) on the role of leaf litters and faunal grazing on the outcome of ectomycorrhizal community structure and the effects of these communities on nutrient uptake. We are also running an experimental protocol for Lou Kaplan at the Stroud Water Research Center (PA) with Christine Edly, as part of a NSF grant.

Links with campuses at both New Brunswick and Camden have allowed joint NSF funded research with Georgia Arbuckle (Chemistry, Camden) where Marcella Mascarenhas investigated the use of FT-IR microspectroscopy as a tool for investigating real-time changes in carbohydrate chemistry of leaves during decomposition. Undergraduate internship programs from both Camden and New Brunswick, together with a link to the University of Puerto Rico at Mayaguez has allowed us to develop undergraduate research training. This has been successful from the students point of view and we have one paper in press and another in prep to show for it. Roxanne Robles Torre also completed her MS at UPR (joint student) on mycorrhizae of trees in the tropical dry forest of Guanica (similarities to pine barrens, but a different suite of plants) and we are expecting to publish her work.

Finally, we have persuaded the University to inject some cash into the station. We now have a new phone system (no more running between buildings to find people) and air conditioning in the office!! More upgrades are expected in the next few months and I am hoping that this will act as good matching funds for a NSF improvement grant to increase our pitiful accommodation space. Then, I hope we can get some short courses underway. A couple of years ago we set up a Web page, but, being left to me to update, soon got out of date. Jim Baxter recently offered to resurrect it, so please check us out at <http://celebes.rutgers.edu>.

John Dighton
Rutgers University

KEMP NATURAL RESOURCES STATION

Research and Education Among Wisconsin's Northwoods: Located in the heart of Wisconsin's Northwoods, Kemp Natural Resources Station is a University of Wisconsin-Madison facility dedicated to research, instruction and outreach on the management, conservation and preservation of natural resources. Kemp's 230 acres support some of the last remnants of old-growth forest in the Lake States, and its location on the shores of the 3,500-acre Tomahawk Lake make Kemp a unique research and teaching facility.

Diverse Flora and Fauna: Kemp offers extensive opportunities for scientists to study the forests, soils, wildlife, and water resources of northern Wisconsin. Several distinct ecosystems are found on site, including:

- Old-growth forests of eastern hemlock, pine, and northern hardwoods;
- Second-growth forests of aspen, birch, pine, and oak;
- Several bogs, marshes, wetlands, and one bog lake;
- More than one mile of shoreline along Tomahawk Lake.

This varied environment supports a diverse wildlife population of mammals, birds, amphibians, reptiles, fish and invertebrates. In addition, Kemp is situated among 3.3 million acres of public forest land and several thousand

lakes. These features make Kemp Station ideally suited as a center for natural resources research and education.

Laboratory, Classroom, and Lodging: Kemp Station provides laboratory facilities and accommodations in historic northwoods-style buildings. Facilities include laboratory, classroom, lodge, cabin, kitchen/dining hall, boathouse, and workshop. The laboratory was recently modernized with a National Science Foundation FSML grant. The building includes wet and dry labs, sample preparation area, computer lab, offices, and conference room. The classroom has space for 30 people and is well equipped with audiovisual equipment. Overnight accommodations are located in the lodge and cabin. The lodge sleeps 30 people and offers a dramatic view of Tomahawk Lake. Visitors prepare their own meals in the fully equipped kitchen & dining hall. The cabin sleeps an additional 6 people and includes bedroom, bathroom, kitchen, and living room. The boathouse and boat launch provide ready access to the waters of Tomahawk Lake and the Minocqua chain of lakes.

A Tradition of Research and Education: Kemp Station has a rich and varied history. The Station was built in the early 1900s as a summer estate by the family of Edward M. Kemp. In 1960, Susan Small and Sally Greenleaf, Mr. Kemp's granddaughters, donated the property to the University of Wisconsin-Madison. This most generous gift was made for the purpose of "research on the management, preservation and wise use of land and water resources."

Today Kemp Station conducts a variety of research projects covering a broad range of disciplines. These include botany, forest ecology, wildlife ecology, plant pathology, entomology, limnology, and rural sociology. An extensive curriculum of field courses trains today's students to become tomorrow's scientists and resource managers. And, an active outreach program puts research to work, linking the residents of northern Wisconsin with the informational resources of the University of Wisconsin-Madison.

Kemp Station invites scientists, instructors, and outreach educators to use its facilities for the pursuit and dissemination of natural resources knowledge. For more information, contact:

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HUMBOLDT FIELD RESEARCH INSTITUTE

New Co-sponsorship of Eagle Hill Seminar Series in Ecological Restoration ...

Now in its second year, the Eagle Hill Ecological Restoration Seminar Series is being co-sponsored by the Society for Ecological Restoration. The professional-level seminars listed below, provide a wide range of opportunities to study and understand the complex process of planning and carrying out ecological restoration projects. Seminars are intended for restoration practitioners involved in the repair and restoration of both aquatic and terrestrial ecosystems, including stream and riparian ecosystems. Introductory seminars provide comprehensive overviews of key topics that are then presented in greater detail in followup seminars. Master seminars provide specialized study opportunities for those with advanced backgrounds. As a whole, the Seminar Series emphasizes the applied aspects of ecological restoration and their basis in the science of restoration ecology.

The Eagle Hill Ecological Restoration Seminar Series provides training and experiences for the growing number of professionals who are working beyond the traditional limits of landscaping, reforestation, reclamation, land management and the corollary pure sciences. The Seminar Series is, of necessity, interdisciplinary in nature. It merges concepts and techniques from a number of disciplines in order to develop optimal approaches for the restoration of lands and waters to more natural ecological conditions. The seminars are taught by experienced instructors who are professionally involved in planning and carrying out restoration projects and thus provide knowledge of up-to-date methods, thought processes, and ways of restoring lost ecological processes and cover to land- and waterscapes. Given that the discipline of ecological restoration

is in rapid transition, participants are expected to put serious and creative efforts into each seminar.

Seminars are held at different locations across the United States and Canada and at other locations upon request of a sponsoring organization. Seminars may be taken individually or as a series in order to earn a Certificate in Restoration Ecology.

The Institute is interested in hearing from field stations that might be interested in hosting and co-sponsoring one or more of these seminars, especially in the eastern half of the US and Canada.

Seminar topics

- Applied Ecological Restoration: Introduction and Overview
- Applied Habitat Restoration in Flood-Adapted Ecosystems
- Bioengineering with Natural and Native Fiber-based Materials
- Forest Restoration
- Freshwater Wetland and Upland Restoration in the Southeastern Coastal Plain
- Introduction to Bioengineering
- Restoration of Gravel Mines and Erosional Surfaces in the Sub-arctic
- Restoration of Parklands
- Restoration of Phragmites Degraded Salt Marshes: The Science and Techniques
- Riparian Restoration, Planning, and Design
- Salvage of Plant Communities
- Techniques for Reviewing Restoration Plans

Seminar locations

- Bartow, Florida, USA - Florida Institute of Phosphate Research
- Churchill, Manitoba, Canada - Churchill Northern Studies Center
- Concord, New Hampshire, USA - Society for the Protection of New Hampshire Forests
- Milwaukee, Wisconsin, USA - Riveredge Nature Center (Newburg, WI)

- New London, Connecticut, USA - Connecticut College Center for Conservation, Biology and Environmental Studies
- Niagara Falls, Ontario, Canada - Niagara College (St. Catharines, Ontario)
- Philadelphia, Pennsylvania, USA - Pennypack Ecological Restoration Trust (Huntingdon, PA)
- Steuben, Maine, USA - Humboldt Field Research Institute
- Yellow Springs, Ohio, USA - Glen Helen Ecology Institute

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**MOUNT DESERT ISLAND BIOLOGICAL
LABORATORY**

The Mount Desert Island Biological Lab's Marine DNA Sequencing Center opened for business the beginning of July, 1999, and to date has sequenced over 1.3 million base pairs of DNA from a wide variety of marine species. Nearly 700 expressed sequence tags (ESTs) have been run from Dr. John Forrest's dogfish shark rectal gland cDNA library. He has given these ESTs to MDIBL and their sequence will soon be put in the public domain for scientists world-wide to use. Investigators have also submitted samples to be sequenced from such organisms as green crab, skate and zebrafish, to augment extensive physiological studies with the benefits of the latest in genetic technology. Should you have any questions, please feel free to contact the facility's supervisor at cmsmith@mdibl.org, or look at our web site, www.mdibl.org, which includes instructions and preparation tips for submitting marine DNA samples.

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THE OBFS NEWSLETTER

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