

**Organization of
Biological Field Stations**

**Newsletter
No. 53
Winter 1991**



Newsletter Editor

Joseph F. Merritt

Powdermill Biological Station

The Carnegie Museum of Natural History

Rector, PA 15677

NEWSLETTER

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**I. MINUTES -- 1991 ANNUAL MEETING FOR BUSINESS,
LA SELVA BIOLOGICAL STATION, COSTA RICA,
CENTRAL AMERICA, 20 - 22 SEPTEMBER 1991.**

I. Session I - Sept. 20 - 10:30 a.m.

A. In attendance: Appendix I lists those attending.

B. President Aspinwall called the meeting to order, and indicated that three sessions of the business meeting would occur over the next several days. The composition of the nominating committee was announced: George Lauff (Chairman), Ross Shaw, and Laura Carter. Vacancies include: President, (1 yr term) Vice-President, (1 yr term) Secretary/treasurer (2-year term) and Member at Large (2 yr term).

C. The minutes of the '90 meeting at Lake Itasca Forestry & Biological Station were approved as circulated in the fall '90 Newsletter.

D. The report of the Secretary (Dick Coles): Current membership is 163 (131 stations, 32 individuals). In the last year 12 new members have joined, there have been four new directors appointed at member stations and 3 resignations. For details, see Appendix II.

E. Treasurer's report (Dick Coles): As of August 31, 1990 the treasury held \$6838.78. Income (from dues, interest on checking account and CD, sales, plus the cashing in of our \$7500 CD) added during the year was \$14,823.35. Expenses were: Office and misc., \$1825.72; AIBS dues, \$100.; travel (by board members to AIBS meeting and by guests invited to the annual meeting) \$959.10; Brochure printing and postage, \$5615.87; Newsletter \$784.91; Directory postage, \$150.00; and for incorporation in Missouri, \$11.00. Total expenses were \$9476.60, leaving a checking account balance of \$12,215.53. This figure reflects the cashing in of our CD. For details see Appendix III.

(It was decided later to set aside \$9000 for the production and distribution of the 2nd edition of the Directory.)

Susan Allen, poster editor, reported the '91 edition had entries from 58 stations - each paid \$55. The poster is operated on a break even basis separate from general OBFS financial activities. Production of the '91 edition left \$263.06 as surplus. Susan will apply this to the '92 edition.

F. Editor's Report (Joe Merritt): There are no remaining copies of the 1st edition of the Directory. Yet 30-40 new stations have joined and deserve inclusion in an updated edition. Joe agreed to produce an update utilizing a method to include three-holed punched paper and, as previously, the "perfect binding". The customer then could put the Directory in his own three ring binder and be prepared for further updates. Joe will also add page numbers to the station list at the front and will add the name, address, phone and FAX numbers of each station in it's narrative. It was decided to print 1500 copies of the second edition, distribute to each of our member stations, and to sell the remainder at the price of \$5.00 each.

The prior distribution to all the departments of biology on the AIBS list will not be repeated. Updates would be mailed at no charge to all owners of record. Sales will be promoted by placing announcements in newsletters, journals etc. An effort will be made to alert libraries, and a notice would be inserted mailings from the OBFS office announcing that the directory, poster and brochure are available. Once the basic distribution has been made, the secretary/treasurer would handle the additional sales. Joe and the secretary will keep records of all purchasers for use in distributing the updates.

The costs for this project would approach \$9000. A motion was passed to encumber that amount in the treasury to finance the new edition. Should additional funding be needed the executive committee was authorized to act.

Individual members will not be listed; nor will any station not a member to which such individual members may have an affiliation. The directory instead is to list only OBFS member stations.

G. Historian's Report (Bob Fisher): Bob announced that surplus prints of photos from the Itasca meeting were available. He would like information, photos (prints or slides) of historic interest related to OBFS in the early days. This history extends back to 1967 and Bob has considerable information already, but more would be much appreciated.

H. Summer Course Announcement Poster (Susan Allen): Susan will mail out a questionnaire to all who might wish to be represented in the '92 poster, along with an invoice for the related charge, which will again be \$55. The poster will mention the brochure and the directory (at \$5.00) although the directory will not be available immediately. Poster format, colors, etc. will be revised at the discretion of Susan.

I. Future Meeting Sites (Nevin Aspinwall):

1. For 1992 we have accepted an invitation from Lucile Housley at the Malheur Biological Field Station. The dates will be Thursday, September 17th through Sunday, the 20th. (It was subsequently decided to have an optional start date of Wednesday, September 16. Details to follow.)

Lucile, not present, sent word that the nearest airports are: Boise, Idaho (4 hr. drive); Redmond, Oregon (3 1/2 hr.) and Portland, Oregon (7 hr.) Malheur houses up to 200 people; but visitors must bring bedding and linens. The cost is \$90 - \$100 per person for the three days. Slides of Malheur were shown before dinner during one of La-Selva's several rainfalls. The terrain provides open habitats - marsh, flat water, and grasslands with relief provided by hills, some of them volcanic. The area is one of the best places in North America for the observation of ducks and other waterfowl. In September, these should be abundant. The H.J. Andrews Experimental Forest, near the center of Oregon, would receive visitors traveling between Malheur and Portland.

2. Subsequent meetings: The motion was made, seconded and passed to meet in '93 at the Adirondack Ecology Center in northern New York. Additional invitations for future meetings include: Flathead Lake (Montana), the Northern Studies Center (Churchill, Manitoba), Mountain Research Station (Colorado), and the Treehaven Nature Center (Wisconsin), which has an anniversary coming up.

J. AIBS Representative (Steve Havera): Steve attended the Feb. meeting of the AIBS Executive Council which focused on Science Funding. His report is Appendix IV.

The AIBS president is Paul Risser, (former director of Lake Texoma Biological Station. The 1992 president will be Tom Lovejoy of the Smithsonian Institution.

A registry of life scientists is being developed by AIBS. OBFS decided to participate by providing a list of our members.

AIBS is considering a resolution concerning biodiversity which appears as Appendix V. They desire our endorsement to be added to those of the other adherent societies. We conferred same, thus encouraging AIBS to continue it's leadership role in the effort to make biological diversity preservation a national priority.

In addition, OBFS moved to endorse the proposal to establish a National Institutes of the Environment. This matter had been discussed at the '90 annual meeting. In closing Steve indicated that AIBS has established listing a peer registry women and minority scientists thus to encourage greater participation by these groups in government and professional activities.

II. Session II - Sept. 21

K. The report on the Data Management Workshop (Jeff Kennedy). Jeff summarized the meeting held at Kellogg Biological Station in May. There was much discussion of the workshop and its report to the National Science Foundation with regard to funding of Data Management and Geographic Information Systems.

L. Reports of Standing Committees: Nevin Aspinwall encouraged those interested to volunteer to serve on a standing committee.

1. Administration & Facilities (Chairman Peter Connors, Steve Davenport, Alan Grundmann). This committee has been relatively inactive and needs a new chairperson. In spite of this apathy, the topics proposed for discussion at meetings generate lively participation and keen interest. Volunteers to join this committee are needed, as are suggestions for future discussion topics. Geographic Information Systems might be discussed as a tool for management as well as a practice to support research efforts. Jeff Kennedy suggested we annually update the previous questionnaire using a standardized format to permit comparisons between years and collection of more meaningful data. It was observed that the diversity of field stations would nevertheless complicate comparisons.

2. Education (Chairman Susan Allen, John Maron and Jerry Scherba): There were 36 respondents to a questionnaire from Jerry Scherba in a recent Newsletter. The results were compiled by Susan. Enrollments at stations could be increased by encouraging academic departments to require a summer field experience of their majors. Ten respondents said that courses at a station are already required to satisfy a more general academic requirement. Some stations lack a mechanism to evaluate the success of their courses. Some would like to make a proposal to NSF for a workshop on education at field stations. (Dave Schindel of NSF had said previously that NSF would receive with pleasure any proposal from field stations to do teacher training.) Such a proposal would have to build a strong case describing what is special and valuable at field stations for supporting education. Proposals to plan and give teacher training workshops, perhaps at several different stations, in a sequence or in a region would be an appropriate expression of our commitment to improving education. The committee is also pondering the issue of whether or not education is adequately valued, and how it fares when in competition with research activities. The committee plans to develop an NSF proposal for a workshop to plan for the development and training of high-school science teachers.

3. Research (chairman Steve Havera, Hal Klieforth, Bill Scharf, Jack Stanford, John Fitzpatrick and Rick Wyman): The committee met and developed four major points.

(1) How do OBFS and field stations interact with federal agencies, management organizations, NOAA, the weather and climatological stations, the Forest Service, Department of Interior, the BLM and conservation groups like The Nature Conservancy? There is significant bio-

diversity on federal lands which include roughly 270 million acres being managed by the Bureau of Land Management. Grazing fees on these areas are set too low thus jeopardizing of the biodiversity present. A recent act of congress with amendments has tightened scrutiny of over grazing and has raised grazing fees. The committee encouraged OBFS to establish contact with representatives from BLM and other agencies at the Oregon meeting, so fruitful discussion might result.

(2) What can OBFS do to increase our interaction and membership around the world, and would this be desirable?

(3) How could we increase global recognition of, and appreciation for, research done at field stations and for what has been done to assist conservation and preservation of biological diversity. This might involve the public relations committee too.

(4) How do we increase funding at field stations? Could a speaker from the National Institutes for the Environment advocacy group make a presentation at an annual meeting (perhaps Steve Hubbell or David Blockstein)?

4. Program Committee (Susan Allen) Susan's appearance was greeted with applause reflecting the group's appreciation for the program at La Selva. Next year the program will be developed by Peter Connors, Lucile Housley, Lucinda McDade, and Art McKee (chairperson). Suggestions conveyed to any of these would be most welcome.

5. Public Relations (Chairman Diane Calabrese, Laura Carter, Paul Siri, Nevin Aspinwall, Lou Yurasits.) The committee pondered how to further distribute the Brochure. Cost breaks allowed the printing of many more copies than originally planned. Consequently, the committee suggested a press release (accompanied by sample copy) to be mailed to 150-200 major media outlets. It was agreed. Secondly, the committee requested a poll to identify what is the essence of one's field station. Various descriptive words were offered by those present.

The committee also expressed an intention to generate an article, which would present field stations from a qualitative point of view. With de-emphasis on technical and analytical content, this article will dwell on the essence of the field station and to its relationship to its neighbors and to society more widely. Bioscience was the target publication first mentioned, but a general and qualitative article might as well be directed toward Reader's Digest, National Geographic, the Wall/Street Journal, or The Chronicle of Higher Education.

Welcoming suggestions and content, Dianne gave her bitnet number as :OUT 407DC@UMCVMB. Her address: 22 Anderson Avenue, Columbia, MO 65203-2673. In the future the Public Relations Committee intends to promote the landscape, scenery and research efforts of biological field stations through a video using field station footage and appropriately prepared for public TV. It was cautioned however, that while we do wish to be better understood and better appreciated, we do

not wish to encourage hoards of visitors coming to field stations. The committee would like ideas and suggestions here as well.

As an outgrowth of these discussions it was decided that the OBFS office provide at no cost, copies of our brochure to station members in any quantity requested. The secretary was also encouraged, to distribute copies to members heading towards conferences, meetings, etc. The OBFS treasury would pay the postage.

Laura Carter is working for Natural History Magazine. Those wishing to solicit publicity in that publication should send Laura, a summary of your station's findings. Perhaps the editor will ask you to write an article. The address: Laura Carter, Natural History Magazine, Central Park West at 79th Street, New York, NY 10024.

M. Nominations Committee (Chairman George Lauff, Ross Shaw, Laura Carter): The committee offered this slate: President, (1 yr) Nevin Aspinwall, (incumbent, from Reis Biological Station, St. Louis), Susan Allen (Rocky Mountain Biological Lab, Colorado). Vice-President (1 yr) Jack Stanford (Flathead Lake Biological Station, Montana); Art McKee (Andrews Experimental Forest, Oregon State). Secretary/Treasurer (2 yr) R. W. Coles, (incumbent, Washington U. Tyson Research Center St. Louis). Member at large (2 yr) Steve Havera (Illinois Natural History Survey Forbes Biological Station), John Fitzpatrick (Archbold Biological Station, Lake Placid, Florida).

The committee also suggested that as membership turns over, an effort be made to get turn-over in the semi-permanent offices, such as Editor, and Secretary/ Treasurer. This would give the persons occupying those positions an opportunity to move into other positions of leadership. The ballot will be in the next Newsletter.

N. New Business.

1. Annual Dues: The Constitution says that the membership must re-establish the dues structure every year. Aspinwall suggested we keep the present rates. This step was ratified.

2. Future Directions of OBFS:

a. Rich Wyman suggested that we go global and offered to pay for a representative from a third-world station attend the annual meeting with us. Coles observed that we do have individual members around the globe. Dalgleish said that there are other international organizations of field stations, including one of European stations which is based in France. To begin with, a research project might identify international field stations, we might list these in the Directory giving only the name and location of the station. Shortly this becomes an issue of what is a field station, a matter with which we have struggled occasionally over the years. Rich will chair a committee to pursue the internationalization of OBFS.

3. Hal Klieforth suggested that weather and climate data gathered at field stations will be increasingly important as science deals with the greenhouse effect, ozone depletion, global warming and other long term changes. Field stations are usually free of urban influences, and might contribute significantly to climatic monitoring. Hal suggests that directors should become acquainted with the state climatologists pertinent to their location. Such individuals might not know about field stations either. In planning research it's important to find out in advance what the local data collection site is and what kinds of data are gathered there. Weather station specifications and summaries of climatological monitoring practices are all represented in an LTER prescription which is about to be published. The LTER prescription will establish three different levels of operation, recommendations about brand names for equipment, and so on. Hal will continue as a member of the Research Committee and as our climatological consultant.

4. Rich Wyman has edited a new book on global climatic change and it's impact on amphibian populations. The New England working group, with Rich Wyman as chairman, is searching for data regarding amphibian populations. Their newsletter will include a form to be returned with any population data. Those interested should contact Rich.

5. A bibliography on the field station movement starting back before the formation of OBFS and continuing to the present, would be an interesting and valued part of all field station libraries and in a broader context. A review article on the history of the field station movement would be useful to those considering new stations, working at stations and preparing proposals. George Lauff said he would be willing to participate with others in such an effort.

6. In response to prior suggestions Coles presented a draft expenditure plan for OBFS. This budget as appended, received approval. The office will operate under this guide.

O. There was general acclaim and appreciation for the successful efforts by Lucinda McDade and the many other hosts in curating a meeting of fabulous enjoyment and professional enrichment.

The meeting was adjourned.

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III. REPORTS AND ANNOUNCEMENTS

A. PARTICIPANTS AT THE 1991 ANNUAL MEETING

Host Station: La Selva Bio OTS - Lucinda McDade, David Clark, Donald Siniff		Robert Dalglish Univ Massachusetts Massachusetts	Individual
Susan Allen RMBL - Crested Butte Colorado	Station	Steve Davenport Long Marine Lab California	Station
Kenneth B Armitage Kansas Ecological Reserves Kansas	Station	Daniel R Dawson Valentine Eastern Sierra California	Station
Nevin Aspinwall Reis Biological Station Missouri	Station	Leo R Finkenbinder Quetzal Education Res Costa Rica	Station
David Bosanko Cedar Creek Minnesota	Visitor	Robert L Fisher Raystown Field Station Pennsylvania	Station
Virginia Bouchet Sagehen Creek Field Sta California	Station	John W Fitzpatrick Archbold Biol Sta Florida	Station
Bill Bowman Mountain Research Sta Colorado	Station	Steve Golladay Univ Oklahoma Oklahoma	Individual
Stephen L Buchmann Sonoran Arthropod Studies Arizona	Station	Alan Grundman Jasper Ridge Biol Pres California	Station
Diane Calabrese Columbia Missouri	Individual	Robert W Hastings Turtle Cove Biol Sta Louisiana	Station
Laura S. Carter E N Huyck Preserve (Bd of Directors) NY	Individual	Stephen P Havera Ill Natural History Survey Illinois	Station
Richard W Coles Washington U Tyson Res Missouri	Station	Carolyn Hax Univ Oklahoma Biol Sta Oklahoma	Visitor
Peter Connors Bodega Marine Lab California	Station	Kathleen Keeler Cedar Point Biol Sta Nebraska	Station
Tom Crandell Michigan Biol Station Michigan	Individual	Jeffery Kennedy UC Natural Reserve System California	Station

Harold E Klieforth Whitell Forest Nevada	Station	Paul Siri Bodega Marine Lab California	Visitor
George H Lauff Kellogg Biol Sta Michigan	Individual	John Smiley Big Creek Reserve California	Individual
Lyndal Laughrin Santa Cruz Island Res California	Station	Robert L Smith Desert Station Arizona	Station
John Maron Bodega Marine Lab California	Station	Jack A Stanford Flathead Lake Biol Sta Montana	Station
Corky McReynolds Treehaven Field Sta Wisconsin	Station	Robert B Waide El Verde Field Station San Juan PR	Station
Joseph F Merritt Powdermill Nature Res Pennsylvania	Station	David S White Hancock Biol Station Kentucky	Station
Allan Muth Boyd Deep Canyon Desert Res California	Individual	Richard L Wyman Huyck Preserve New York	Station
Paula Orkand Institute of Neurobiology Puerto Rico	Station	Louis A Yurasits, Jr Pymatuning Lab of Ecol Pennsylvania	Station
Mark Reynolds Sagehen Creek Field Sta California	Station		
Gordon Robinson Univ F S Delta Marsh Canada	Station		
William C Scharf Cedar Point Biol Sta Nebraska	Individual		
Ross F Shaw Thomas Crowley Lab Washington	Station		
Wade C Sherbrooke Southwestern Res Sta Arizona	Station		

B. CURRENT STATUS OF THE OBFS MEMBERSHIP

163 members - 131 station members; 32 individual members
12 new members - 4 New Directors at Member Stations
3 resigned

NEW MEMBERS

Dr David S Bruce - Wheaton College Science Station IL
David C Duffy - Seatuck Foundation, Inc NY
Joseph Jones - Hancock Field Station OR
Erik Kiviat - Bard College Field Station NY
Dr Carl Lieb - Univ Texas Indio Mountains Res Sta TX
Lawrence V Lof - Rancho del Cielo TX
Dr Lane McDonald - Mira Costa College CA
Carolyn Porter - NA
Dr Norman Quinn - Virgin Island Ecological Res Sta VI
Dr Robert L Smith - Univ Arizona Desert Station AZ
Dr Wesley N Tiffney - Nantucket Field Stand - MA
Robert B Waide - El Verde Field Station San Juan PR

NEW DIRECTORS AT MEMBER STATIONS

Kathleen H Keeler - Cedar Point Biol Station NE
Dennis Macknak - Churchill Northern Studies Manitoba
Robert Nowak - Whittel Forest & Wildlife Area NV
Dr Lynda Shapiro - Oregon Institute Marione Biol OR

RESIGNED

Dr Charles Brand - Newfound Harbor Marine Ins FL
Mark Paddock - Representative Univ Mich Res Sta MI
Dr Philip White - Queens College Center NY

C. OBFS FINANCIAL REPORT, HISTORY, AND SUGGESTIONS FOR BUDGET

Balance Checking Account, August 31, 1990 \$6,838.78

Income

Dues	\$6175.73	
Interest on NOW	752.93	
Interest on CD	304.69	
Sales - Directory	90.00	
Cashed & Transferred CD*	7500.00	
		14,823.35
		21,662.13

Expense

Office and Miscellaneous		
124.5 hr @ \$10.30	1282.35	
Postage	395.81	
P O Box Rental	6.50	
Phone (toll calls)	48.04	
Xeroxing & Copying	93.02	1,825.72
AIBS DUES		100.00
Meetings & Travel		
P. Denapoli	190.00	
J. Dunlop	119.60	
S. Havera	649.50	
		959.10
Brochure	Printing	5083.32
	Postage	532.55
		5615.87
Newsletter	Postage	240.31
	Printing	544.60
		784.91
Directory	Postage	150.00
Incorporation Expense		11.00
		9,446.60
Balance Checking Account August 31, 1991		\$12,215.53

*CD #6837 matured, cashed and transferred to NOW account

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OBFS FINANCIAL HISTORY & SUGGESTION FOR BUDGET

	8/31/88	8/31/89	8/31/90	8/31/91	Proposed Budget Fy 91-92
Income					
Dues	\$4630	\$4770	\$5808	\$6176	\$6250
Interest	1140	1050	928	1057	1000
Sales	-	-	-	90	0
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	\$5770	\$5820	\$6736	\$7323	\$7250
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Expense					
Office - Wages, phone postage, etc	1460	1359	1512	1826	\$2000
AIBS Dues	100	100	100	100	100
Travel - Officers		411	1107	650	1000
Travel - Guests			1009	310	500
Newsletter	556	905	861	784	1000
Projects					2400*
Directory Postage	52	2830	30	150	
" Production	122	8637			
Reprint					
Questionnaire	189		394		
Brochure				5615	
Other Expenses				11	250
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Total Expense	\$2479	\$14,242	\$5013	\$9446	\$7250

*The Projects category is intended to accomodate non-recurrent special activities (eg. Directory, Brochure, etc.) As with other categories, funds not spent here will be carried forward to the next subsequent fiscal year (begins Sept. 1). The corpus thus accumulated will be available for occasional major activities, each of which might exceed in cost that which could be accommodated in a single year's budget.

D. REPORT OF THE AIBS REPRESENTATIVE

The AIBS Council meeting convened 20-22 February 1991 in Washington, D.C. The Council consists of 55 members including 12 board members, six members-at-large, and 37 representatives of societal members of AIBS, such as OBFS. The theme of the meeting was Science Funding.

AIBS societal members were brought up-to-date on recent activities. Paul Risser was installed as AIBS president for 1991. Thomas E. Lovejoy is president-elect. Lovejoy, a tropical biologist with the Smithsonian Institute, is the originator of the concept of debt for nature swaps in which conservation projects are initiated in exchange for the forgiveness of international debt in countries such as Costa Rica. Among other notable accomplishments, Lovejoy is also the founder of the Public Television Series, *Nature*.

Because of the interface AIBS provides between the biological community and the federal government, part of the program was again devoted to discussions of how AIBS can be an effective umbrella organization for all biological societies. Although AIBS represents approximately 70,000 biologists, students, and 40 affiliated societies, only about 7,000 individuals are members who pay dues. Approximately 6,200 of the dues-paying members live in the United States and about 8,000 live in Canada. This membership level of 7,000 has been stable in recent years with a renewal rate of around 85%. AIBS would like to have all members of affiliate organizations also be members of AIBS because an umbrella organization with a larger membership would likely make a difference in policy, resources, human capital, and the level of respect of biologists.

The development of a national registry of life scientists was also discussed. AIBS has invited all biological societies, including OBFS, to participate in a national registry. A national registry would eventually

consist of a comprehensive integrated list of members of the various societies and would be useful to aid and improve communications and information exchange among biologists and the public. As of 14 February 1991, 18 affiliate societies representing over 50,000 scientists have accepted the invitation to be listed in the National Registry. The first registry should be finalized near the end of 1991 and will include the name, address, phone number, and society membership of the scientists. A subsequent revision will occur in 2-3 years and will include additional information such as the discipline of the scientists. OBFS should consider having its membership listed in the National Registry.

THE AIBS Board of Directors approved a resolution on Biological Diversity on 21 February 1991. A copy of the resolution is attached.

The status of the National Institutes for the Environment (NIE) proposal was discussed. This proposal is an effort toward increasing environmental research and training. NIE hopes to build a broad coalition among scientists, environmentalists, business people, and other concerned citizens in support of research for environmental quality. NIE believes its position would be about midway on a continuum of basic and applied research, or near middle ground between research supported by federal agencies such as the Forest Service or Fish and Wildlife Service and that funded by NSF. As of 21 February 1991, 26 societies have endorsed the proposal to establish NIE. OBFS should consider endorsing the NIE proposal. Appropriate information is attached.

Other points of information were presented at the meeting. AIBS is compiling a peer registry for women and minorities. It is anticipated that this registry will help make these people available to share their expertise in serving on committees or other similar functions. *BioScience* now has a circulation of 12,000 copies, about 6,000 to members and 6,000 to libraries. There is still an effort to increase circulation internationally with the help

of a marketing group. *BioScience* won a top national award in publications. This prestigious award was the Golden Circle Award presented by the American Society of Association Executives. Broad-based competition included journals from associations, such as scientific, trade, military, and others.

The 1992 AIBS meeting will be held at the University of Hawaii. The theme could possibly be a topic relating to the 400th anniversary of Columbus' discovery of the New World, such as island ecosystems.

The program also included two invited presentations regarding science funding by the Study Director of the Science Policy Task Force and also the Vice President of the Association of American Universities. An excellent plenary address was presented by Sylvia Earle, Chief Scientist of the National Oceanic and Atmospheric Administration. Her topic, *Sharks, Squids, and Horseshoe Crabs: The Significance of Marine Diversity*, was delivered in the Library of Congress.

The last half day of the meeting included visits by Council members to Capital Hill in order to interact with professional staff members, minority staff directors, science consultants, and congressional fellows to provide our important viewpoints. Featured topics discussed on Capital Hill were science funding, agricultural research, education, and endangered species. Last year's hill visits were very successful. Two of the three legislative initiatives for which we "lobbied," a science education bill and increased funding for agricultural competitive grants, were approved by Congress. The third topic, biodiversity, moved further than it had in the previous Congresses.

Respectively submitted by Stephen P. Havera, 1991.

E. COMMENTS ON WASTE DISPOSAL, GREY WATER, ETC., AT BIOLOGICAL STATIONS

Submitted by George Lauff

The National Small Flows Clearinghouse (a U.S. EPA activity) is located at West Virginia University, Morgantown, WV (1-800-624-8301). The Small Flows newsletter describes fresh approaches to wastewater treatment. The newsletter summarizes alternative wastewater treatment and management case studies. In addition, it does focus on individual states with respect to research, regulation, management programs and outreach programs. The Clearinghouse will provide on-site, small community and individual application technology information.

Recent activities have included constructed wetlands, use of sphagnum peat for the treatment of septic tank effluent, and various systems that match wastewater treatment to soil and site conditions.

F. OBFS DIRECTORY OF MEMBERS, 1992

Editor's comment: I plan to mail questionnaires for the 1992 OBFS Directory of Members to all station members in early January 1992. For member stations with descriptions published in the 1989 Directory, I will enclose a copy of your description along with the cover letter for your review. For new stations (not included in the 1989 Directory) I will ask you to submit a description of your station in the style of the 1989 Directory. Since I have all stations in the 1989 Directory "on disk," it will be an easy task to update your original submission. However, the new stations will take a bit more time. The new Directory will possess some minor changes, but format and style will be quite similar to that of the 1989 edition. All things remaining equal, member stations will receive two free copies of the new Directory in winter 1992.

Adirondack Ecol Center Dr William Porter S Huntington Wildlife Forest Rt 28N Newcomb, NY 12852	Beaver Island Biol Sta James C Gillingham S Central Michigan Univ Dept Biology Mt Pleasant, MI 48859	Cedar Point Biol Sta Kathleen Keeler, Dir S 224 Lyman Hall - Bio University Nebraska Lincoln, NE 68588-0188
Albright College Richard G Heller S Mountain Meadows Res Reading, PA 19612-5234	Belle Baruch Inst Dr John Vernberg S Marine Biol & Coastal Univ South Carolina Columbia, SC 29208	CEPARNIC Dr Timothy Moulton S Secretaria Do Meio Am Caixa Postal 43 11990 Cananei SP Brazil
Allen, C M Biol Sta Dr Ronald Dimock Jr S Dept Biology Wake Forest Univ Winston-Salem, NC 27109	Bermuda Biol Station for Research, Inc S Dr Anthony Knap Ferry Reach 1-15 Bermuda	Charleston University Carl T Meadors S Dept Biology 2300 MacCorkle Ave SE Charleston, WV 25304
Am Museum Natural Hist Dr Jerome Rozen Jr S Central Park West at 79th Street New York, NY 10024	Bimini Biological Sta Dr Samuel H Gruber S c/o RSMAS 4600 Rickenbacker Cswy Miami, FL 33149-1098	Churchill Northern Studies Centre Dennis Macknak S Box 610 Churchill Manitoba Canada ROBOEO
Andrews, H J Ex Forest Arthur McKee S Dept Forest Science P O Box 300 Blue River, OR 97413	Blandy Experiment Farm Dr Michael A Bowers S Univ of Virginia P O Box 175 Boyce, VA 22620	Cloquet Forestry Ctr Dr A Scott Reed S Univ Minnesota 175 University Road Cloquet, MN 55720
Archbold Biol Sta John W Fitzpatrick S P O Box 2057 Lake Placid, FL 33852	Bodega Marine Lab and Reserve * Dr Peter Connors S Univ of California Bodega Bay, CA 94923	Cranberry Lake Bio Sta William M Shields S SUNY College Environ Science & Forestry Syracuse, NY 13210
Au Sable Institute Dr David C Mahan S Environmental Studies 7526 Sunset Tr N E Mancelona MI 49659	Bowdoin Scientific Sta Dr Nathaniel Wheel- wright S Dept of Biology Brunswick, ME 04011	Crowley T B Laboratory Dr Ross F Shaw S Seattle Pacific Univ Seattle, WA 98119
Bamfield Marine Sta Director S General Delivery Bamfield, B.C. VOR 1B0 VOR 1B0	Calder Conserv & Ecol Stephen Threlkeld S Fordham University Drawer K Armonk, NY 10504	Dauphin Island Sea Lab Dr George F Crozier S Marine Environ Science P O Box 369-370 Dauphin Island AL 36528
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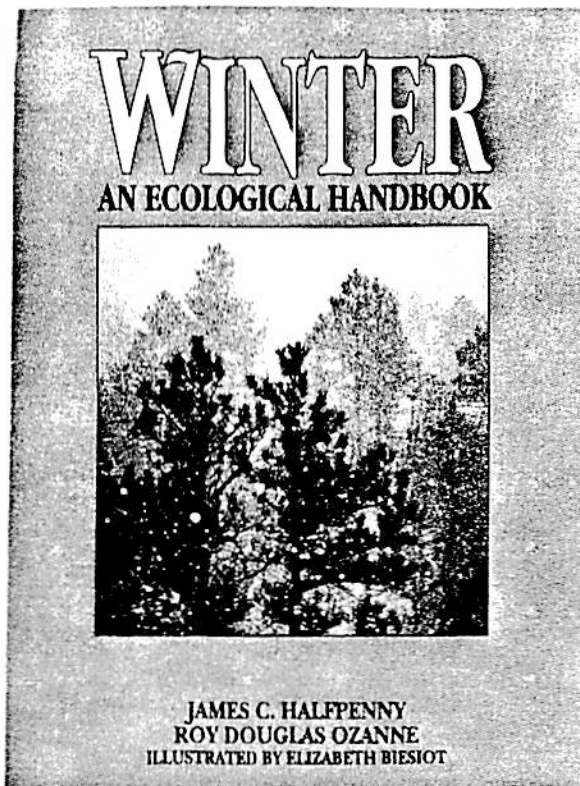
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Winter

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