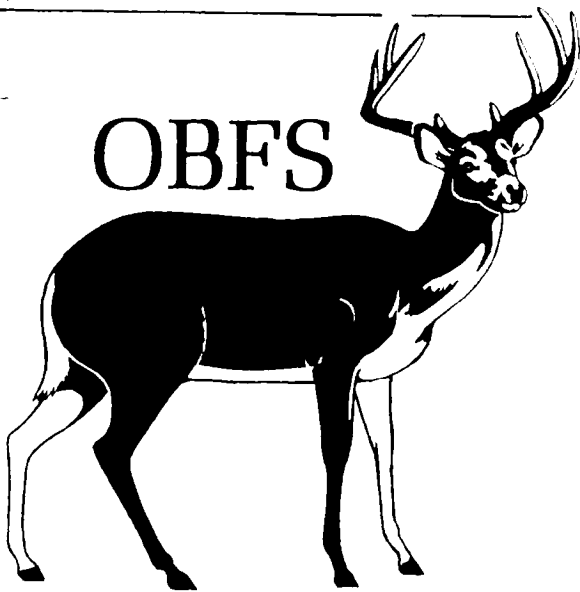


**Organization of
Biological Field Stations**

**Newsletter
No. 33
January 1982**

OBFS



Newsletter

NUMBER 33

JANUARY 1982

Newsletter Editor

Joseph F. Merritt
Powdermill Nature Reserve
Carnegie Museum
Star Route South, Rector, PA 15677

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"YE OLDE OFFICIAL BALLOTTE"

President

Richard T. Hartman

Vice-President

Gordon W. Hodgson

Secretary/treasurer

Richard W. Coles

Please return ballot by February 15, 1982
Mail to Richard W. Coles
P. O. Box 258
Eureka, MO 63025

B. Miscellaneous comments and queries (over)

MINUTES: 1981 Annual Meeting for Business, September 26, 1981
E. N. Huyck Preserve, Inc. Rensselaerville, NY

1. In Attendance: Robert C. Dalgleish, Host, (E. N. Huyck Preserve, Inc. NY); Robert Barlay, (U. of Manitoba Field Station, Delta Marsh); Richard V. Bovbjerg, (Iowa Lakeside Laboratory, IA); Peter C. Chabora, (Queens College - City University NY); Richard W. Coles, (Washington U. Tyson Research Center, MO); Robert Fisher, (Juniata College, PA); William H. Gotwald, Jr., (Utica College of Syracuse Univ. NY); James P. Halfpenny, (Mountain Research Station, CO); Richard T. Hartman, (Pymatuning Laboratory, U. of Pittsburgh, PA); Gordon Hodgson, (Kananaskis Centre, U. of Calgary, Alberta Canada); John Janovy, Jr., (Univ. Nebraska (Cedar Point Field Station), Lincoln, NE); George H. Lauff, Kellogg Biological Station, MI); James N. Layne, (Archbold Biological Station, Lake Placid, FL); Roger J. Lederer, (Eagle Lake Field Station, Chico, CA); Gordon Loery, (White Memorial Conservation Center, CT); Michael Mackey, (Department of Physiology, McGill Univ. Ontario); Peter Marchand, (Babcock Preserve, VT); Joe Merritt, (Powdermill Nature Reserve, PA); John A. Novak, (Colgate University, NY); Eugen Odum, (Inst. Ecology, Univ. of Georgia, GA); Mark W. Paddock, (The Univ. of Michigan Biological Station, MI); David Parmelee, (Itasca Cedar Creek Field Station, MN); Misha Plam, (Mountain Research Station, CO); Jerome G. Rozen, Jr., (American Museum of Natural History, NY); Betty and Richard K. Spears, (Ouachita Mountains Biological Station, LA); Lavern Weber, (Oregon State Marine Science Center, OR).

2. The minutes of the previous meeting were approved as distributed.

3. Secretary/treasurer Report: Coles reported that the membership now includes 74 members, broken down as follows: 33 station memberships, 27 individual memberships, 14 memberships in arrears for dues. Since our last annual meeting there have been three changes in directors; we've had two new members join, and four members have resigned.

The treasurer's report was presented current as of September 15, 1981. (For purposes of comparison, the balance in the treasure as of 1980 was \$3,051.01). During the past year there has been income from dues (\$1960), from the Course Announcement (\$810), interest on the Certificate of Deposit (\$30), interest on the NOW account (\$65.50), for a total income of \$2865.50. For the same period there have been expenses as follows: Newsletter expense, (\$251.09), meeting expense, (\$21.65), travel to meetings, (\$516.06), AIBS dues and contribution, (\$100), office supplies and expenses, (\$75.44), publication costs for the Course Announcement, (\$807.50), charges by the bank (\$2.10), for a total expenditure of \$1773.84. The balance as of September 15, 1981 is therefore \$4,142.67. During the intervening year a Certificate of Deposit, value \$1000.00 was purchased, leaving a balance in the checking account of \$3,142.67.

4. Report by the Editor: Editor Merritt expressed concern about difficulties in receiving descriptions of stations in order to provide content for future Newsletters. Members Fisher and Marchand promised to provide descriptions of their stations for the winter Newsletter. Merritt indicated that he would buttonhole the directors of two additional stations for descriptions to go in the spring Newsletter. As usual the fall Newsletter coming up will include ballot information and so on and the spring Newsletter which may appear in approximately June will contain station descriptions and possibly a questionnaire for members to provide information to be shared with others.
5. Report of the AIBS Representative: Hartman announced his intention to attend the next meeting of the AIBS Board of Governors, which will be held on the 6th and 7th of November. A report of the previous years meeting was included in the Newsletter of Dec-

ember, 1980. Hartman reviewed several items, first the budget: In order to trim and reduce expenditures, the idea had been proposed that there be a reduction in the governmental relations function of AIBS, but there were strong sentiments from the membership and the board members, that this area was one of AIBS' most valuable functions and therefore after considerable discussion the Board decided not to make cuts in this area. (2) Consideration is being given to a possible revision of the dues structure to permit member organizations with large memberships to pay for more of the costs of their membership. At present, for example, organizations with six thousand members will pay up to, but no more than \$2,000. For purposes of reference, OBFS pays at a rate of \$1.00 per member and makes a voluntary contribution sufficient to raise our total contribution to \$100. (3) The adherent societies are again being asked to solicit new members in an attempt to increase income. (4) Advertising revenues of Bioscience have risen by \$1800. above the 1980 level. This, along with some restructuring of the journal (dropping of the yellow pages), is heading the publication toward a break-even status in 1981. (5) A major function that AIBS is able to perform is as a contributor of professional biologists to act as authorities in providing testimony before congressional committees and submitting positions to the administration. The Board of Governors feels that this role is especially appropriate for an umbrella organization of the type that AIBS represents.

6. Old Business: a) The OBFS has been considering make a resolution concerning required field experiences for undergraduate majoring in college curricula in Biology. Jennifer Shay had collected sentiments from several members in the form of drafts of such a resolution, these were distributed at the meeting and discussed. It was observed that the version which might be preferred by a particular member might be related to the use to which the resolution might be put by the member at his/her own institution. Marchand commented that some versions of the resolution could self-serving unless justified by substantial arguments. He observed that the Rozen statement fills this need. Chabora commented that at his institution, especially at the graduate level, this version would be voted down by his department. It was further observed by Coles that the resolution need only be used by those members who find it fits their situation; in other institutions the existence of the resolution need not be mentioned. After further discussion, the Rozen version was adopted as amended. It reads as follows:

WHEREAS the population growth and the needs of mankind are placing an ever-increasing demand upon the earth's natural environments,

WHEREAS the complex ecological relationships of the earth's vast flora and fauna are as yet poorly understood,

WHEREAS many persons currently trained in biology do not fully understand the intricacies of these relationships and the size and complexity of the world's biota,

WHEREAS the public, many conservationists, and numerous trained biologists still tend to focus on such eye-catching but simplistic concepts as "endangered species" rather than on the diverse, heterogeneous, and fragile ecosystems of the world, and furthermore,

IN recognition that the wellspring of man's hope to cope with his effects on ecosystems rests with his understanding their composition and complexities;

THEREFORE, be it resolved that the Organizaion of Biological Field Stations urges biological departments at colleges and universities in North America, and

indeed in the rest of the world, 1) to involve all students at both the undergraduate and graduate level in field studies that will provide them with a greater insight into ecological principles and practices and into the diversity of the flora and fauna, and 2) to strongly recommend or require that all students majoring in biology or pursuing higher degrees in that field participate in at least one full-time semester in residence at a field station, or in a similar environment, that provides an intimate contact with the heterogeneity and complexities of one or more ecosystems.

7. New Business: a) President Dalgleish observed that vacancies approached in the following offices: President, Vice-president, and Secretary/treasurer. He appointed a nominating committee composed of Marchand, Fisher and Lane. The floor was open for nominations, none were offered. (Secretary's note - later this committee produced the following slate of nominees - for President: Richard T. Hartman; for Vice-president: Gordon Hodgson; for Secretary/treasurer: Richard W. Coles.) b) Course Announcement Poster. It was moved and seconded and adopted to have the Course Announcement Poster again this year. An ad will be placed in Bioscience and possibly exploration will be given to a mechanism to circulate the posters to the members of the Beta Beta Beta. Poster Editor Dalgleish indicated that the deadline is quite important. Four stations last year submitted their material too late to be included in the Course Announcement Poster. (This year's deadline is December 1, 1981. The charge will be \$35.00. It was pointed out that this is not expensive in relation to the visibility and outreach provided by the Course Announcement Poster. Dalgleish indicated that the 1982 poster will include the use of a photograph from the University of Michigan Biological Station. c) The 1982 meeting of OBFS will be held at the University of Michigan Biological Station, on Douglas Lake, near Pellston, Michigan. Subsequent meetings are scheduled for: 1983 - Kananaskis Centre, University of Calgary, Alberta Canada; 1984 - Mountain Research Station in Colorado. d) Peter Chabora indicated that his department is setting up a series of travel courses which are designed to acquaint students with a variety of habitats in North America and some of these might wish to visit various OBFS member stations across the country. e) Lederer moved that the officers be instructed to develop a directory of field stations. It was intended during the discussions that up to \$2000 be devoted to this project. The motion passed. f) Lauff reported that a small group is working on a workshop to discuss data management at biological stations. Within a special focus being devoted to encouraging the use of stations and the use of the data. It was indicated that data management does not necessarily mean computerization of data. There has been interest from NSF as a source of funds for this workshop. Participants will include prominent research sites and some of the LTER sites, some of which have no data management system. This deficiency currently limits recruitment of scientists to work at the sites. The workshop of 25-30 people will be held at the Kellogg Biological Station probably in May of 1982. NSF may be able to defray travel expenses of the participants. The mission is to come up with guidelines to encourage educational and research activities at the sites. Those proposing the workshop are anxious to encourage representatives of OBFS to participate. In addition, a few observers would be welcome. OBFS members expressing interest included: Coles, Paddock, Janovy, Layne and Parmelee. g) The Canadian Mafia, (Hodgson, Shay and others) are trying to get the directors of the 22 Canadian Field Stations together for a meeting so that they may act on issues of mutual concern. It was pointed out that this effort was not intended to weaken OBFS nor distract from their participation with OBFS. h) Enrollment - there appears to be a decline in

enrollment at many stations. At Kellogg Biological Station, Lauff reported that students of biology and natural resource management are running at 60% of prior levels. So more promotion and a broader course array are being undertaken and directed at in-service teachers, photographers and so on. The decline is in the (pure) biological sciences. Lauff observed that students (especially brighter students) are shifting their interests into engineering and other job related employment areas. Lauff predicted that if deans around the various campuses in North America force biological stations to get into the credit hours/enrollment game, then there may be significant problems in the future for many field stations.

8. The meeting was adjourned at 4:58 p.m.

TELEPHONE NUMBERS OF OBFS MEMBERS

ALEXANDER, Dr. Richard D.

Campus: (313) 764-0471

ALLISON, Dr. David C.

Campus: (309) 457-2021

ANGELL, Dr. Robert W.

Campus: (303) 753-3620

ARNETT, Dr. Ross H., Jr.

Campus: (518) 758-7219

BAXTER, Dr. George T.

Campus: (307) 766-4207

Home: (307) 745-4155

BETTS, Dr. Burr J.

Campus: (503) 963-2171, ext. 310

Home: (503) 963-9647

BOVBJERG, Dr. Richard V.

Campus: (319) 353-3421

BROWN, Dr. D. F.

Campus: (819) 569-9551

Home: (819) 569-9551

BRUCE, Dr. Ricahrd C.

Station: (704) 526-2602

COLES, Dr. Richard W.

Station: (314) 938-5346

Home: (314) 938-5271

DALGLEISH, Dr. Robert C.

Station: (518) 797-3440

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DAVIES, William

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Home: (219) 484-7358

DAVIS, B. Jeanne

Temporary Numbers

Campus: (512) 471-7435

Parents: (915) 388-4983

Friends: (512) 459-4465

DAVIS, Dr. John

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Campus: (415) 642-3567

Home: (408) 659-2672

DIEM, Dr. Kenneth L.

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EDIGER, Dr. Robert

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FERGUSON, Dr. Denzel

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Home: Same

FICKEN, Dr. Millicent

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Home: (414) 377-7962

Pg. 2 - OBFS Telephone Numbers

FISHER, Dr. Robert L.

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Home &
Station (814) 658-2191

HARTMAN, Dr. Richard T.

Station: (814) 683-5813
Campus: (412) 624-4278
Home: (412) 486-4902

FLORA, Dr. Charles J.

Station: (206) 293-6800
Campus: (206) 676-3510
Home: (206) 398-2491

HERDENDORF, Dr. Charles E.

Station: (419) 285-2341
Campus: (614) 422-8949
Home: (419) 285-2531

FOREMAN, Dr. Ronald

Station: (604) 728-3301
Home: (604) 728-3239

HILL, Dr. Loren G.

Station: (405) 564-2463
Campus: (405) 325-5391
Home: (405) 329-7016

GATES, Dr. David M.

Station: (616) 539-8408 (Summer Only)
Research: (616) 539-8406
Campus: (313) 763-4461
Home: (313) 769-4847

HODGSON, Dr. Gordon W.

Station: (403) 673-3662
Campus: (403) 284-6344
Home: (403) 288-1559

GRAHAM, Dr. Benjamin F.

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JANOVY, Dr. John

Station: (308) 284-6501
Campus: (402) 472-2307

HANNAN, Dr. H. H.

Station: (512) 245-2284
Home: (512) 392-5754

JOHNSON, Donald W.

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Home: (502) 474-8871

HARMAN, Dr. Willard N.

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Campus (607) 431-3703
Home: (607) 988-7716

KLIEFORTH, Dr. H. E.

STation: (702) 784-6188

HARPER, P. P.

Station: (514) 563-3111
Campus: (514) 343-6790
Home: (514) 678-2959

LACKEY, Dr. James A.

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Campus: Same

Pg. 3 - OBFS Telephone Numbers

LAUFF, Dr. George

Station: (616) 671-5144

LAYNE, Dr. James N.

Station (813) 465-2571

LEDERER, Dr. Roger J.

Campus: (916) 895-5356

Home: (916) 343-6870

MAGNUSON, John J.

Station: (715) 385-2750

Campus: (608) 262-2840

MARCHAND, Dr. Peter J.

Campus: (802) 635-2356

Home: (802) 635-7720

MARTIN, Dr. James E.

Campus: (605) 394-2494

Home: (605) 342-2958

MARTIN, Dr. Robert E.

Station: (616) 597-4298

Campus: (616) 528-3140

Home: (616) 526-7484

MARTIN, Dr. William H.

Station: (606) 633-5828

Campus: (606) 622-3122

MARZOLF, Dr. Dick

Station: (913) 532-6643; 6615

MERRITT, Dr. Joe

Station: (412) 593-2221

MILLER, Dr. Neil A.

Station: (901) 876-5772

Campus: (901) 454-2970

Home: (901) 761-0143

MURRAY, J. J. Jr.

Station: (703) 626-7196; 7171

Campus: (804) 924-3151

Home: (804) 924-7868

OTTO, Dr. William

Station: (715) 739-6655

(May through August

Campus: (715) 392-8101, ext. 253

PARKER, V. T.

Campus: (415) 469-2375

PARMELEE, Dr. David F.

Station: (218) 266-3302; 3691

Campus: (612) 373-1292

PAYNE, Dr. Willard W.

Arboretum: (914) 677-5343

PENNINGTON, Dr. Frank C.

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PLAM, Dr. Misha

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Campus: (303) 492-6387

Pg. 4 - OBFS Telephone Numbers

ROTH, Dr. Vincent

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SHAY, Jennifer M.

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Home: (204) 453-5830

SMITH, Edmund

Office: (707) 526-7200

SOLTERO, Dr. Raymond A.

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Campus: Same

Home: (509) 235-6644

SPEAIRS, Dr. Richard K., Jr.

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STANFORD, Dr. Jack A.

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Home: (406) 549-4384

SWEENEY, Dr. Robert

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Campus: (716) 878-5422; 5423

TEER, James G.

Station: (512) 364-2643

Home: (512) 364-1411

WARNOCK, Dr. John

Station: (217) 256-4519

Campus: (309) 298-1272

Home: (309) 833-2947

WEBER, Lavern

Station: (503) 867-3011

These are the telephone numbers that are available in our files.
Any additions or corrections would be greatly appreciated.

National Science Foundation
 Biological Research Resources Program
 Awards by Major Program Emphases*
 (Thousands of dollars)

Systematic Collections	20,310.2	64.9%
Living Organism Stock Centers	5,710.5	18.3%
Field Station Facilities	3,069.2	9.8%
Controlled Environment Facilities	1,628.6	5.2%
Workshops-Surveys	525.2	1.7%
Monograph Publications	53.3	0.1%
 GRAND TOTAL	 <u> </u> \$31,297.0	

* Prepared by J. Tyler from BRR Program Records as of 9/30/80

Total number of actions (including continuing commitments) for FY 80

Number of awards	57	83% of total	\$5,408.5 K (awarded amount)
Number of declines	12	17% of total	1,732.3 K (requested amount)
TOTAL	<u>69</u>	<u>100%</u>	<u>7,140.8</u>

Total number of actions on new proposals (i.e., excluding continuing commitments) for FY 80 divided by program elements and by awards and declines

	Awards		Declines		Total
Systematic Collections	22	76%	7	24%	29
Living Organism Stock Cultures	11	100%	0		11
Field Stations	3	50%	3	50%	6
Controlled Environment Facilities	2	50%	2	50%	4
Workshops	1	100%	0		1
Monographic Publications	1	100%	0		1
TOTALS	<u>40</u>	77%	<u>12</u>	23%	<u>52</u>

National Science Foundation
 Biological Research Resources Program
 Categorized Support From FY 72 to FY 80*
 (Thousands of dollars above percent)

	FY 72	FY 73	FY 74	FY 75	FY 76	FY 77	FY 78	FY 79	FY 80	Total to End of FY 80
Systematic Collections	950.1 100.0%	1,208.3 77.3%	1,235.1 83.9	2,787.2 69.8%	2,657.1 68.4%	2,553.1 57.7%	2,967.2 63.1%	2,870.5 58.7%	3,081.6 57.0%	20,310.2 64.0%
Living Organism Genetic Stock Centers **			109.3 7.4%	726.6 18.2%	723.3 18.6%	849.3 19.2%	1,010.3 21.5%	1,097.8 22.4%	1,193.9 21.1%	5,710.5 18.3%
Field Stations		40.0 2.5%	22.9 1.6%	113.3 2.8%	80.0 2.1%	806.0 18.2%	600.1 12.7%	641.7 13.1%	765.2 14.1%	3,069.2 9.8%
Controlled Environment Facilities		264.0 16.9%		233.9 5.9%	370.9 9.5%	218.6 4.9%	127.3 2.7%	103.4 2.1%	310.5 5.7%	1,628.6 5.2%
Workshops-Surveys		51.3 3.3%	104.8 7.1%	132.9 3.3%	53.6 1.4%			178.6 3.7%	4.0 0.1%	525.2 1.7%
Monograph Publications									53.3 1.0%	53.3 .1%
SUBTOTAL	950.1	1,563.6	1,472.1	3,993.9	3,884.9	4,427.0	4,704.9	4,892.0	5,408.5	
TOTAL										31,297.0

* Prepared by J. Tyler from BRR Program records as of 9/30/80

** Includes some microorganism systematic collections.

National Science Foundation
 Biological Research Resources Program
 Support for Field Station Facilities
 Awards and Continuing Commitments *
 (Thousands of dollars)

	FY 73	FY 74	FY 75	FY 76	FY 77	FY 78	FY 79	FY 80	Total to End of FY 80	Continuing Commitments		
										FY 81	FY 82	FY 83
Organization of Tropical Studies, Costa Rica Field Station	40.0		85.0	80.0	219.2		253.6	196.5	874.3	181.1		
University of Michigan, Biological Station, Douglas Lake		22.9	8.3		63.2			50.0	144.4			
Michigan State University, W. K. Kellogg Biological Station			20.0			453.7			473.7			
University of Iowa, Lakeside Laboratory					45.0				45.0			
Oregon State University, H. J. Andrews Experimental Forest					95.0	128.4	132.9	335.3	691.6	150.7	163.9	
University of Minnesota, Lake Itasca Forestry & Biol. Station					22.0				22.0			
University of Washington, Friday Harbor Laboratories					361.4	18.0			379.4			
Mount Desert Island Biological Laboratory							167.6		167.6			
University of Wisconsin, Trout Lake Station							47.3		47.3			
Missouri Botanical Garden, Panama Field Station								18.4	18.4	12.0	12.0	
Rocky Mountain Biological Laboratory							40.3		40.3			
University of South Carolina, Baruch Field Laboratory								165.0	165.0	65.0		
GRAND TOTAL	40.0	22.9	113.3	80.0	806.0	600.1	641.7	765.2	3,069.0			

* Prepared by J. Tyler from BRR Program Records as of 9/30/80

OPERATION OF A RESEARCH STATION

At the last O B F S meeting a suggestion was made that comments on the operation of a "successful" research station be written up. The definition of "successful" was interpreted as one which had a small deficit. Perhaps useful ideas at other research stations could be summarized in future bulletins.

The S.W.R.S. has been successful in attracting researchers mainly because of its location, variety of habitats and animal life, isolation, beautiful setting and good weather. These are conditions which cannot be changed by other stations but the following can:

The new guest is provided with a feeling of friendliness by an introduction to resident colleagues, by joining them for at least one meal, at which time they are familiarized with the station and facilities (where the ice cubes can be located etc). The researcher is acquainted with the laboratory facilities, provided with maps of the area and familiarized with the surrounding area.

We provide good food with the addition of a variety of cereals in the morning, and a variety of drinks (coffee, tea, spiced tea, Koolaide, milk chocolate milk and decaffienated coffee) at all meals. We gather together in the dining room at mealtimes which provides opportunities for an exchange of ideas and research problems.

Collections of the local flora and fauna are relatively complete, providing background information in many fields. Our insect collection (about 12,000 specimens) is one of the best and collections of mollusks, arachnids, lichens and almost complete collections of the vertebrates, two collections of plants, a regular herbarium and a mini-herbarium (on 3 by 5 cards) and a collection of geological specimens are available to everyone.

An excellent library covering the local flora and fauna as well as topographic and geological maps are in the laboratory.

Volunteers who work with us are often willing to provide assistance to researchers for an opportunity to work with them.

Weekly seminars by local and visiting researchers or slide shows provide some scientific distraction. To prevent "cabin fever" which occurs when students or researchers work hard day after day (without TV to interrupt them) we provide volleyball, ping-pong, swimming, horseshoes, sponsor hikes or camp-outs and encourage everyone to take part in local dances, pot-luck get-togethers or visiting the local bar.

An annual newsletter keeps former researchers aware of the Station and as a result we have a large number of returnees, both graduate students and post-doctoral researchers.

Costs are kept down or reduced through the use of volunteers of college age who are utilized to help the operation during our busy season. These students receive room and board plus a chance to work with researchers for four hours/day, six days/week.

With the recent increase in costs of energy we have made many changes in our operation and facilities, most of which are suggested in a booklet available from "Tips for Energy Savers, Energy Conservation Now, Pueblo, Colo. 81009. Some of our ideas follow this article.

Income has been increased by encouraging use of the Station by tours, meetings, naturalist visitors or visiting scientists when space is available, or making meals available to visiting researchers (at a price).

These are some ideas for making a Research Station operate successfully and economically. How about some other ideas?

V. Roth.

CHANGES IN OPERATION FOR
CONSERVATION OF ENERGY AT THE SOUTHWESTERN RESEARCH STATION

Invited the local power company's energy loss inspector to review our equipment and facilities and provide ideas for energy saving. The main suggestions which we hadn't thought of were new gaskets and adjustments to refrigerators, coolers and freezer doors.

Reduced water usage in tank toilets by adjustment of floats and by the addition of bricks or water jars to reduce volume.

Added water constrictors-aerators to all shower heads and compared all shower heads. Changed a few which used an excess of water.

Placed aerators on all sink faucets where possible.

Wrapped all water heater tanks, storage tank, hot water lines, first two feet of incoming lines and all outside lines going to the storage tank and coming to the main buildings.

Switched to cold water soap for washers and turned off the hot water.

Turned water heaters down to pilot lights for personal units and to warm on other heaters. This has proven adequate in spite of large groups in the units. All heater pilot lights have been turned off for the summer period.

Added insulation to all ceilings, storm windows to units which are utilized through the winter, weather stripped doors of heated rooms and outside doors. We use no heat in the Log Cabin bedrooms and wood heat for the rest of the Log Cabin and the Living Room of the main house.

Our ice machine has an insulating cover as well as a shade from the summer sun.

Inside doors between the heated rooms and rooms left cold have been insulated.

A.

Positions Available

PLANT ECOLOGIST

INVERTEBRATE ECOLOGIST

The Archbold Biological Station of Archbold Expeditions, Inc., invites applications for two positions in the fields of plant ecology and terrestrial invertebrate ecology. The primary responsibility of the appointees will be to develop strong, field-oriented research programs in their respective disciplines focusing on the environments of the Station. Additional responsibilities will include directing research of undergraduate and graduate students, curating plant and invertebrate reference collections, and aiding in the management of the Station's natural areas.

The Station is located in south-central peninsular Florida 8 miles south of the town of Lake Placid. It is situated on the Lake Wales Ridge, one of the most distinctive biotic regions of the state. Major habitats represented on the 3900-acre main property include slash pine-turkey oak woodlands, sand pine scrub, scrubby flatwoods, low flatwoods, bayheads, and seasonal ponds. The Station's 8-acre Price Memorial Tract on nearby Lake Placid contains a black gum swamp, relict saw grass marsh, sand pine scrub, saw palmetto thickets, and a grass-forb beach zone. The Station's research and support facilities include laboratories, library, reference collections, darkroom, machine and carpenter shops, animal rooms, outdoor cages, greenhouse, and living accommodations for visiting investigators and students.

The closing date for receipt of applications is 1 February 1982. The preferred starting date is 1 July 1982, although alternative dates are possible. Applicants should submit a statement of research interests and goals, complete curriculum vitae, list of publications, and three letters of recommendation to: Dr. James N. Layne, Executive Director, Archbold Biological Station, Rt. 2, Box 180, Lake Placid, FL 33852. Equal Opportunity/Affirmative Action Employer.