Organization of Biological Field Stations

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Newsletter Editor

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REMINDER

The next OBFS annual meeting will be held at the University of Colorado, Mountain Research Station, Nederland, Colorado from September 23-25, 1983.

HAPPY NEW YEAR !

MINUTES - 1982 ANNUAL MEETING FOR BUSINESS, SEPTEMBER 19, 1982 University of Michigan Biological Station, on Douglas Lake, Pellston, Michigan

- 1. In Attendance: From the host station, David Gates and Mark Paddock, (UMBS); Richard Bovbjerg, (Iowa Lakeside Laboratory, IA); Nell Caine, representing (Mountain Research Station, CO); Mike Christensen, (Phillips University Field Camp, CO); Richard Coles, (Tyson Research Center, MO); Millicent Ficken, (University of Wisconsin-Milwaukee, WI); Robert Fisher, (Raystown Field Station, PA); Richard Hartman, (Pymatuning Laboratory of Ecology, PA); Karen J. Reese, representing (Franz T. Stone Laboratory, OH); Joe King, (Hancock Biological Station, KY); Charles Kuschella, (Hancock Biological Station, KY); George Lauff, (Kellogg Biological Station, MI); James Layne, (Archbold Biological Station, FL); David Parmelee, (Lake Itaska, University of Minnesota, MN); Jennifer Shay, (Delta Marsh, Manibota, Canada); Richard Speairs, Jr., (Ouachita Mountains Biological Station, LA); Guest: Jim Tyler, (National Science Foundation, Washington D.C.).
- 2. The meeting was convened at 8:40 a.m.
- 3. The minutes of the meeting of September 26, 1981, were approved as circulated in the Newsletter.
- 4. The Secretary/treasurer, Coles reported that the membership now numbers 82. Of these 43 are station members, 24 are individual members and 15 have not yet paid 1982 dues. One station resigned membership in 1982. There have been 10 new members joined during the same period. Seven stations have experienced a change in director. The treasurer's report was presented current as of Sept. 15, 1982. During the previous year there has been income from dues (\$2390.) from the Course Announcement (\$1075.) interest on our CD (\$60.) interest of the NOW account (\$202.35), and from the cancellation of a bank charge, (\$2.10). The resultant total income is \$3729.45.

For the same period there were expenses as follows: Newsletter expense (\$221.10); travel to meetings: R. Hartman, AIBS (\$199.06); AIBS - dues and contribution, (\$100.); office supplies and expenses (\$80.46); Course Announcement publication (\$1014.); charges at the bank (\$1.71). Total expenditures for the period under review was \$1616.33. The balance as of September 15, 1982 was therefore \$5,255.79 - which represents an increase of \$2,113.12 from the above previous year's balance. (\$3,142.67). It should be remembered that the OBFS is the proud owner of a Certificate of Deposit, value \$1,000. which is at the Eureka, Bank, Eureka, MO.

- 5. Report of the Editor: The editor, having just returned from a six week sojourn in Europe was not in attendance and no report was presented.
- 6. Report of the AIBS Representative: Hartman reported that he had attended the Board of Governors meeting and learned that the AIBS problems with budgets in recent years appeared to be reversing. The shift in dues charged to organization is helping. Increased registration fees at the AIBS annual meeting is reversing losses as well. The next meeting for the board is scheduled for November 19 and 20, 1982.
- 7. Old Business: 2: Re: the Directory. At the Huyck Preserve meeting last year the membership voted to instruct the executive committee to develop a directory, suggesting that \$2000 be made available for this purpose, but apparently nothing significant has been done in the interim. Discussion focused on whether we should move ahead.

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It was observed that data compilations on which EER I and EER II surveys were based might be used as a departure point. Lauff suggested that we should indeed proceed with the directory as a service to our members and to the scientific community. Paddock observed that a true need exists; he receives requests from students regularly. A description of each site would be worthwhile to include in the directory. was suggested that the form should be a small book, perhaps paperback with some reasonably inexpensive binding. Lauff suggested there be a strong preamble justifying the role of biological field stations in improving our understanding of the natural world and referring to previous directories. Hartman emphasized that the final product must be an attractive publication, not just a mimeograph. Gates and Lauff suggested a mechanism to permit updating of the contents, perhaps a loose-leaf format. Shay reported that the Canadian Council of University Field Stations (43 members) has done a directory and it is now available. Lauff observed that the project should not be limited by the \$2000. There might indeed be a possibility of getting outside money. In the past, NSF has indicated a willingness to entertain proposals for support of directory development. It was decided that we needed a committe to work on this project. The matter was resolved with passage of a motion that Paddock and Lauff would act as co-leaders and would form an expanded group from OBFS members. would also be the possible involvement of outside reviewers or critiquers. Jim Tyler representing the Biological Research Resources Program of NSF indicated that he would indeed entertain the possibility of supporting the preparation of a directory as a service to the research community.

New Business: a) Elections. 1) Gordon Hodgson has resigned as director of Kananaskis and as a member of the OBFS. His office (Vice-president) therefore stands open. In addition, the term of Editor is up for re-election. 2) The Nominating Committee (Bovbjerg, Paddock and Speairs) presented Parmelee as a nominee for Vice-president to fill the one year vacancy. In addition, the committee suggested that the current 3) This slate was accepted and will appear on the bal-Editor stand for re-election. lot in an upcoming Newsletter. Members are reminded that the elections take place toward the end of the calendar year and those elected assume office the following January. b) It was suggested that the board appoint someone to act as a government laison/surveillance person for the OBFS. This individual would keep a finger on the federal pulse. George Lauff agreed to serve in this capacity if as such he could be one of several persons to act as an advisory committee to assist the board, and serve the community of field stations users and directors. It was intended that the laison function would inform members of OBFS of developments by way of the Newsletter and/or by special announcements and mailings. It was suggested that the steering committee have overlapping membership with the board, but be able to function independently of the board. It was moved, seconded and passed that the board appoint an ad hoc advisory committee having one person from the board as a member for purposes of communication. The charge given this committee was to 1) exercise laison with programs at the NSF and other agencies, 2) to explore what it is that OBFS is doing and where it should go, 3) explore potential interactions with marine stations which have indicated an interest in joining our organization. (Should they so join we must be prepared to render to them various services and this is one of the factors that the committee needs to consider.) c) Course Announcement: In the absence of Bob Dalgleish, who has produced the course announcement in the past, the group glowed with gratitude to Bob for his service in this most effective and most visible of all the activities the OBFS conducts. Dalgleish has indicated a willingness to serve again as the compiler of the course announcement poster. Based on discussions with Dalgleish in the recent weeks, Hartman reported that the poster appears to break even

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presently with a charge of \$35.00 to those listed. Only members of OBFS are listed. The compiler Dalgleish needs input from directors by early December in order to assemble and distribute the poster at an appropriate time. The most recent version of the poster appeared slightly too late and thus did not have maximal impact on the enrollment community. The compiler also needs contributions of photographs from OBFS members to stand at the top of this document. It was decided that the course announcement would be continued and directors should be urged to get information to Dalgleish quickly, realizing that a listing on the poster is not an inflexible commitment. Instead, listings are tentative and offerings are subject to change depending on enrollment, arrangements for instruction, etc. It was moved, seconded and passed that the OBFS indicate to Dalgleish that we would deeply appreciate his contribution in doing the poster again this year. We think it is very important. was also strongly urged that the project be placed on an expedited schedule so that it appears just after the mid-winter holidays. This avoids the Christmas card mailing crunch, but it hits the students when they are making plans for summer. An additional suggestion was that the names of directors of stations might be deleted from the address given on the poster and that instead there be a line on which the stations telephone number be presented. d) Site for the 1983 meeting. The resignation of Gordon Hodgson as director of the Kananaskis Station implies that it would be inconvenient for that facility to host an OBFS meeting in 1983 as originally scheduled. The Mountain Research Station in Nederland, Colorado had been scheduled as the 1984 meeting site. One possibility would be to utilize the hospitality of the Mountain Research Station in 1983. The representative of this station present at the meeting, Nell Caine, indicated a warm willingness to host the OBFS meeting in 1983; however those present regarded this as a tentative invitation pending further deliberation in Colorado about the convenience of having an OBFS meeting descend upon them. The date, under normal conditions, would be September 22 - 25, 1983. Subsequent discussion expressed great appreciation for the efforts made at previous meetings by station directors to introduce the visitors to the ecology of local habi-Such an orientation is facilitated if the group can convene in a nearby transportation terminus and travel to the station as a group. In 1983 it would appear convenient for the group to assemble in Boulder on Thursday night, Sept. 22. The hosting station expressed a willingness to orient the group with respect to Rocky Mountain habitat types, vegetation zonation, and so on between Boulder and Niwot Ridge. It was also suggested that there be more coverage on data management which has occuped the attention of members during the non-business portions of the OBFS in 1982. In order to incorporate this kind of discussion it was suggested an extra day be included in the schedule. It was decided that a program committee be formed (and that it should function more actively than it has in some years) to assist and work with the host station director. Some members in attendance at the current meeting indicated that great savings of money were available if airline tickets could be ordered significantly in advance. Shay suggested that there should be an entry in the Newsletter reporting on the content of the non-business portions of the OBFS meeting. e) Relations with Marine Stations: The possibility of meeting at a marine station was considered as well. Some of these are members already. Lauff suggested however, that before meeting at a marine station, the OBFS should have a more well developed understanding of our own destiny and interactions with marine stations including the possibly of expanded marine representation among our membership. dent Hartman pointed out that there has been growing expression of interest among the marine stations about joining OBFS. Indeed, a contingent group had been suggested as attenders at the 1982 meeting, but because of scheduling difficulties, it was not possible for marine directors to join us. In the near future, Hartman anticipates

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that several marine directors will send OBFS a letter indicating the desire among their group for continued discussion and consideration of affiliation with OBFS. Lauff indicated that the directory being considered should include coastal and marine facilities. This would be a natural lead-in to the greater involvement of marine stations in the OBFS. There may be already a directory on marine stations which would represent a good departure point for including them in an OBFS produced document.

- 9. It was moved, seconded and passed that pending confirmation, the OBFS accept with gratitude the Mountain Research Station's invitation to advance the meeting at their facility to the year 1983. It was also moved, seconded and passed that the suggested dates be Sept. 22 25 for this meeting (arrival should occur Thursday evening in Boulder, thus allowing full programing on Friday and Saturday, and a major portion of Sunday morning.
- 10. Nell Caine provided a brief description of their facility. He encouraged members coming by air to land in Denver, take public transportation to Boulder, and from there on Friday morning a University vehicle would drive our group the 25 miles westward through Nederland to an elevation of 9000 feet, the elevation of the station's major facility. Weather will be cool and windy, it could well snow. The facility, an LTER site, includes cabins and dorms. There is a communal dining area. Researchers from the Mountain Research Station work at still higher elevations in the Alpine habitat and under Arctic conditions. There would be an intention to visit Niwot Ridge.
- Report of the NSF Representative James Tyler from the Biological Research Resources 11. Program. a) Jim Tyler described the contents of a document which gives a breakdown of the distribution of biological research resources funding during the recent several years since 1973. A copy of the document forms an attachment to these minutes. b) Tyler described his program as being one of five in the division of environmental biology. The others are the programs in systematic biology, population biology; ecology, and ecosystems studies. The program started in 1972. Funding in Fy'81 had risen to 1.2 million dollars and the aggregate expenditure over the nine year peiod of 1973 - 1981 amounts to about 4.3 million dollars. Systematic collections support has consumed roughly 65% of the funds over that period. Among these the living organism stock center represent a 20% expenditure. Roughly 10% of the funds have gone to field stations, especially terrestrial and fresh water stations. Controlled environment facilities like the biotron have consumed funds. Funding for biological field stations has been rising to 15-20%, the rate of ascent depending on the number and quality of proposals submitted. NSF funding has remained level and there is no possibility of embarking on new programs. But there may be some shift in activities within the present budget. For example, the biological research resources program has requested the biotron and the organism stock centers to increase their charges to users, thus freeing up some funds to go elsewhere, e.g. to field stations. The basic budget for Biological Research Resources is about \$6 million. An additional \$2 million is now available for fauna and flora (including fossil) survey work. A second new function in the Biological Research Resources program is a special competition each year for renovation of a marine lab. reported that this special competition is supported by additional new funds and therefore relieves some of the pressure on funds available for terrestrial and fresh water stations. He also pointed out that there had been a kind of falling into the cracks experienced by coastal and in-shore sites. Some of this may be redressed

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in future funding patterns. In recent years, in Fy'78 and Fy'79 for example, \$600,000 - \$700,000 was awarded to biological field stations. In 1981 this rose to \$1.26 million. This represents 22% of the budget. These monies went to biological field stations including a significant award to the Rocky Mountain Biological Laboratories in Colorado which had submitted a high quality proposal. Additional funds went to meet special needs of the Organization of Tropical Studies. Problems in this area are diminishing and it appears that OTS is acquiring increased vitality, thus Tyler anticipates that they won't be draining the funds so significantly in the future. The science education division at NSF is drying up.

In 1982 the budget for Biological Research Resources is a bit smaller in expenditure level. It will rise in 1983 (awards are in the pipeline, poised near the exit, awaiting allocation of the budget). Gates inquired what kinds of things is the Biological Research Resources Program supporting. Tyler responded saying usually it is not the building of a new building, although renovations will be supported. Tyler says the NSF does not put money into a biological field station unless it has firm institutional commitment (most convincingly evidenced by cost sharing) and a significant research history of quality. He does not support purchases of general equipment, (furniture, chairs, typewriters, so on). He will support computerization of data management base at a field station or the purchase of special equipment such as a scanning electron microscope. He is not able to support educational activities. In order to help one's proposal the framer of the application is encouraged to document firmly the level of institutional commitment. Secondly, Tyler looks at the biological field station and whether it is attempting to increase its usage by visiting investigators from the national research community. Such activities would contrast significantly with merely attempting to serve one's home faculty. Finally, Tyler indicated that there may be additional LTER sites chosen in the future.

12. The business meeting adjourned at 11:20 a.m., with an expression of gratitude to the University of Michigan Biological Station for its warm hospitality.

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 F	FY 78	FY 79	FY 80	FY 81	Total to End of FY 81	Continuing Com FY 82 FY 83 FY	
Organization of Tropical Studies. Costa Rica Field Station University of Michigan, Biological Station, Douglas Lake Michigan State University, W.K. Kellogg Biological Station University of Iowa, Lakeside Laboratory	40.0	22.9	85.0 8.3 20.0	80.0	63.2 45.0	453.7		196.5	118.1	1,310.4 262.5 473.7 45.0		
Oregon State University, H.J. Andrews Experimental Forest University of Minnesota, Lake Itasea Forestry & Bio. Station University of Washington, Friday Harbor Laboratories					22.0 361.4		132.9	335.3	150.7	842.3 22.0 379.4	163.9	
Mount Desert Island Biological Laboratory (Maine) University of Wisconsin, Trout Lake Station							167.6 47.3		32.5	200.1 47.3	22.5 22.5 22	2.5 22.5
Missouri Botanical Garden, Panama Field Station Rocky Mountain Biological Laboratory (Colorado) University of South Carolina, Baruch Field Laboratory University of California, Santa Cruz Island Kansas State University, Konza Prairie							40.3	18.4 165.0	12.0 300.5 65.0 100.0 50.0	30.4 340.8 230.0 100.0 50.0	12,0	
GRANT TOTAL	40.0	22.9	113.3	80.0	805.8	600.1	641.7	765.2	1,264.9	4,333.9		

^{*}Prepared by J. Tyler from BRR Program Records as of 9/30/81.

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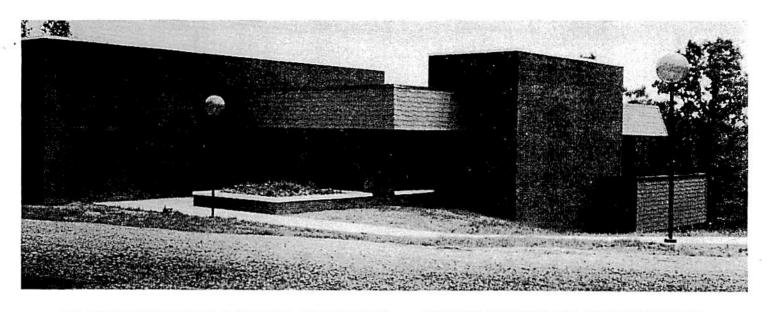
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HANCOCK BIOLOGICAL STATION — MURRAY STATE UNIVERSITY

THE STATION

The Hancock Biological Station began operation in 1973 to provide students with opportunities for individualized instruction, participation in research programs, and on-the-job experience through involvement in a variety of grant and contract research projects. The Station is a modern structure with 13,000 square feet of air-conditioned and heated space, thereby providing favorable conditions for year-round teaching and research. The physical plant consists of teaching and research laboratories, classrooms, an aquarium room, offices, dormitory rooms, a cafeteria and a library. In addition, the Station has a large covered dock equipped with a specimen holding and processing room and ten research vessels.

The Station is located in southwestern Kentucky, a few hours drive from one-third of the U.S. population; it is fifteen miles from Murray, Kentucky (pop. 17,000). The Station is ideally located in an area with diverse aquatic and terrestrial habitats. Kentucky and Barkley Lakes, ponds, and streams are in close proximity to the Station. Kentucky Lake is one of the largest reservoirs in the United States (184 miles long) and is joined by a canal to Lake Barkley; together they provide over 3,500 miles of shoreline and 250,000 surface acres. The Station grounds consist of sixty-three acres of woodlands on the western shore of Kentucky Lake and investigators have access to 172,500 acres of terrestrial habitats in the nearby Land Between The Lakes. Other readily accessible areas for study include the cypress swamps of Murphy's Pond and Reelfoot Lake, mesophytic forests, grassland areas, and coastal plain deposits.

ECOLOGICAL CONSORTIUM OF MID-AMERICA

The Hancock Biological Station serves as the base of operation for the Ecological Consortium of Mid-America. The Consortium is a formally constituted group of nine educational institutions cooperatively utilizing the facilities of the Station and the resources of the Land Between The Lakes and the Kentucky-Barkley Lake complex in carrying out their educational, research, and service missions. Member institutions are: Austin Peay State University, Bellar-

mine College, Georgetown College, Kentucky Wesleyan College, Murray State University, Oakland City College, St. Louis Community College, University of Kentucky, and University of Louisville. of boats, traps, plankton nets, water samplers, seines, portable fish shockers, photometers, autoclaves, a liquid scintillation counter, an ultracentrifuge, an atomic absorption spectrophotometer, a gas chromatograph, spectrophotometers, water baths, a Turner fluorometer, incubators, dissolved oxygen meters, an osmo-



EXPERIMENTAL ECOLOGICAL RESERVE

The Hancock Biological Station and the Land Between The Lakes have been designated as an Experimental Ecological Reserve by the National Science Foundation and The Institute of Ecology. As an Experimental Ecological Reserve, the Station and the Land Between The Lakes have been identified as an important natural system for long-term experimental research. Scientists from many disciplines and many institutions interact comfortably at the Station in their work on the terrestrial and aquatic systems of the Station/LBL site.

EQUIPMENT

Equipment available for Station use in-: cludes a four-wheel-drive vehicle, a wide variety meter, and pH meters. Laboratories are also supplied with running lake water.

SUMMER COURSES

A summer program is provided from June to August each year. The core curriculum includes courses such as ecology, limnology, ichthyology, and field biology. Staff members of the Consortium schools may submit other course proposals for the summer program. This arrangement provides an ample offering of lower and upper level field oriented courses which draw on the expertise of instructors from several institutions. The summer program consists of two four-week sessions. Students are allowed to take two courses per summer session.