

**Organization of
Biological Field Stations**

**Newsletter
No. 28
March 1979**

OBFS Newsletter



March, 1979

Number 28

I. OBFS Announcements

A. New Officers for 1979

President--Dr. Robert Dalgleish, The E. N. Huyck Preserve, Inc.,
Rensselaerville, N. Y. 12147

Vice-President--Dr. Richard Hartman, Pymatuning Laboratory of Ecology,
University of Pittsburgh, Linesville, PA. 16424

Secretary-Treasurer--Dr. Richard W. Coles, Tyson Research Center,
P.O. Box 258, Eureka, MO 63025

Editor--Dr. Bonnie J. Davis, Sierra Nevada Field Campus, San Francisco
State University, 1600 Holloway Ave., San Francisco, CA 94132

B. The 1979 annual meeting of OBFS will be at the Archibold Biological Station, Lake Placid, Florida, September 27-29, 1979. The Host Director is Dr. James Layne.

C. The steering committee of R. Dalgleish, R. Hartman, P. Bultsma, R. Coles, and G. Lauff has not yet met. Hopefully, there will be a report for the next newsletter scheduled for August.

D. The Terra Alta Biological Station was voted to be discontinued by the Biology Department of West Virginia University. We appreciate the support given OBFS by Dr. Jesse Clovis and his attendance at past meetings. He will be missed at future ones.

E. At the end of this newsletter is the revised membership list of OBFS. It is typed in a format suitable for xeroxing onto the Xerox self-adhesive labels. An alternate method is to cut up the page and tape or paste on the envelope.

II. News from Member Field Stations

At the Eagle Lake meeting last September, a few members volunteered to supply material for the newsletter. I wish to thank the two stations that responded--The Iowa Lakeside Laboratory and The Kananaskis Center for Environmental Research.

Information from other stations would be appreciated for the August Newsletter. These should reach me by July 15th.

A. News from the Iowa Lakeside Laboratory, by R. Bovbjerg

We were one of those fortunate to receive support from Siever's Research Facilities program and a new building has just been completed. It adjoins a research lab funded by NSF a decade ago; a small greenhouse connects the two buildings. The 50 x 25 ft. building and greenhouse cost \$62,000; it is very attractive and blends well with the other stone labs. The new feature (and I am convinced it was the selling point to NSF) is the flexibility of use in the future. There are no interior walls or supports but several tall study darrels and storage walls are movable so that a variety of floor plans are possible; these can be plugged in anywhere in overhead lines. It can be used for different types of research in different years or in the same year.

Another exportable idea is a program funded by our graduate college to bring research yeast to our station. We have a modest, \$1000 per year, budget for visitor's stipends. We have used this in different ways: two distinguished visitors, spending a week each, giving daily seminars; or one researcher in residence working with an active program for a five week term; and last summer we had 45 grassland people for a rolling seminar on prairie ecology with people staying for two days to two weeks. These have been very stimulating and have been valuable in increasing our visibility. Suggest it to your administration as a tried and effective approach.

B. Kananaskis Centre for Environmental Research, by G. Hodgson

The following are excerpts from an article in Chemosphere No.4, pp 327-336, 1978, titled "The Academic Environment of the Rocky Mountains: The Environmental Sciences Centre (Kananaskis)".

Academic Structure: The Centre is placed in the university structure as an independent academic unit with a director reporting to the office of the academic vice president of the university. A core staff currently consists of ten scientists drawn from five disciplines in the natural, physical and social sciences. The major function of the in-house staff is to carry out funded research programs; the secondary function is to take part in teaching activities, largely in field-oriented format. Implicit in both functions is a substantial element of university service to the community. Total budget for the Centre is about \$750,000 per year, of which about 35% is provided from university funds through operating and capital budgets. The work of the Centre is guided by an advisory committee comprising university colleagues with environmental interests. The bulk of the research studies carried out in the Centre are conducted by full-time academic staff and technicians. Additional research is carried out by graduate students, undergraduate assistants and visitors from this and other universities. Although most of the students are registered in disciplinary programs of study, provision has been made for other students in programs which are clearly interdisciplinary and multidisciplinary by the establishment of a degree-granting committee on resources and the environment (CRE). It, like the Centre, is administratively independent of the established

departments of the University with the director of the Centre as chairman of the CRE committee. Many CRE students carry out their studies using the facilities of the Centre.

Environmental Field Teaching: Traditionally, centres of environmental science offer a full program of field courses. In many instances this is the primary function of field stations. Research is commonly a secondary function. Because of curious combinations of fiscal and management circumstances, the Kananaskis Centre developed differently. After an initial try along traditional lines, the teaching thrust was abandoned. Scientific credibility derived, on the other hand, from the research function that arose from opportunities involving external funding. Once the Centre was firmly established on the research base the teaching role was re-established. At first, courses were offered at the traditional field level to complement those offered in undergraduate courses on the main campus. To these were added a short series of specialty courses based on the continuing research programs of the Centre. Several methods are used for staffing the courses. To some degree, the courses are taught by regular line department staff. Visiting lecturers are brought in for other courses, and staff of the Centre provide additional teaching as required. The regular credit courses are given in the spring and summer terms (Mid-May to late August). Many of these courses, both undergraduate and graduate, are identified for credit by course numbers directly with the line departments of the relevant disciplines. Some pressure has been put on the Centre to arrange for courses offered at Kananaskis to have Kananaskis numbers for credit at this and other universities. No action has been taken since it appears to violate principles of close cooperation between the Centre and the regular teaching departments. All courses offered at Kananaskis are open to students, graduate and undergraduate, from this and other universities. Other teaching functions involve graduate student supervision, which is conducted by Centre staff and other university faculty. Further, a number of workshops, seminars and conferences are organized and accommodated by the Centre at Kananaskis. The Centre is open the year round; each activity is conducted at the most appropriate season of the year.

Weaknesses and Strengths: Unusual and perhaps innovative approaches to environmental concerns in the academic scene are not without their weaknesses. The principal weakness of the Centre lies in its vulnerability within the academic structure. Since the approach is different, it is suspect in terms of its academic rigor. Secondly, the Centre tends to be defenseless in competition for university resources. The Kananaskis centre evolved to its present strength over a ten-year period with principal changes occurring in the last five years. It has considered other patterns of operation and it has experimented with some. It considered, for example, the oft-suggested pattern wherein there is no core staff, only staff assigned from other academic units. The Centre has not experimented with this pattern for it seems to have little merit. For any academic unit to survive and prosper it must have strong coherence and a primary dedication to a common objective--an objective so basic as to simply survive so that it can attempt to fulfill its purpose. Assigned or seconded staff can yield only profound weakness on this account and a unit that is fundamentally vulnerable will clearly not survive. Joint appointments have been experimented with in the Centre. They work reasonably

well when the primary identification of the individual is with the Centre. An experiment that failed was one in which new staff members were brought into the Centre in positions that were superficially different from those of existing staff in terms of position and responsibilities. Consequent stresses built up to intolerable levels. Another possibility frequently mentioned is for the Centre to buy expertise from other units in the university as a community of scholars. Buying and selling one's colleagues seems patently improper and the Centre has not used this approach.

Another experiment that failed was a persistent and prolonged attempt to launch a comprehensive research undertaking under the Man and the Biosphere (MAB) program. While the international and national objectives of MAB were clearly outstanding, all attempts by the Centre to initiate a strong regional study involving the Canadian Rocky Mountains under MAB foundered in conflict with the national committee, even after the University of Calgary itself funded a substantial pilot study.

Experimental management involved the participation of a variety of disciplines from a variety of universities on projects funded jointly by two or more agencies--both government and industry. Small projects integrate easily; but the larger the project the greater the management stress. For environmental teams in interdisciplinary work the individuals must not only be competent but compatible. If an individual participant is seen to falter on either count, the management must stand ready to correct the situation immediately before the team effort collapses. The Environmental Sciences Centre (Kananaskis) is only as strong as its research staff. Without scientific and personal compatibility and mutual respect within the Centre for each other the Centre will not work.

The strengths of the Environmental Sciences Centre (Kananaskis) as an academic unit derive from the strengths of its core staff which provide a powerful research base for graduate work. In a national and international sense, its strengths relate to its location as an academic gateway to the mountain environment. It has the strengths of practicing interdisciplinarity although these are weakened by the high costs of interdisciplinarity. Whatever the benefit/cost ratio however, the interdisciplinary work must be done since to neglect it is tantamount to passing over specific disciplines in environmental science. Pragmatic strengths of the Centre include the simple practice of bringing together those elements of the community which should have much closer contact: government, university, and industry. Fundamental benefits relate to the fact that some 30 to 40 people are able to work with one another in a range of studies that includes topics as diverse as human ecology, water chemistry, recreation design and plant physiology under a single institutional roof.

III. News from Washington--R. Dalglish

A. National Marsupial Center.

The Committee for the Establishment of a National Marsupial Center is seeking information from the research community on use of marsupials and the need for a more plentiful supply. Interested researchers may obtain a questionnaire and more information by writing to Dr. William Jurgelski, Jr., Committee for the Establishment of a National Marsupial Center, Post Office Box 12233, Research Triangle Park, North Carolina 27709, (919) 541-3451.

B. National Park Service Conference on Research and Education Programs at National Parks

R. Dalglish has learned of this forthcoming conference and is making an inquiry whether it will be open to scientists and educators outside the Park Service.

The following is a list of the Conference Chairmen and the sessions being planned. Those interested in specific sessions might write the chairman and make their own inquiries.

Conference Chairman--G. Jay Gogue, Regional Chief Scientist

Southeast Region
National Park Service
1895 Phoenix Blvd.
Atlanta, Georgia 30349
Phone: (404) 966-2520
FTS 260-9340

Terrestrial biology:
Botany, Resource Management,
Coastal Biology

Paul J. Godfrey
Associate Professor
Department of Botany
University of Massachusetts
Amherst, Massachusetts 01003
Phone: (413) 545-2235
(413) 549-1140

Terrestrial biology:
Zoology Resource Management

Mary Maagher
Supervisory Research Biologist
Yellowstone National Park
P.O. Box 168
Yellowstone National Park, Wyoming
82190
Phone: (307) 344-7381
FTS 585-0248

Physical Sciences

Ray Herrman
Chief, Division Air and Water
Resources
Department of Interior
Washington, D.C. 20240
Phone: (202) 343-5181
FTS 343-5181

Information Sciences

Charles H. Douglas
Director of General Research
University of Georgia
616 Graduate Studies Research Center
Athens, Georgia 30602
Phone: (404) 542-3360

Sociology

Donald R. Field
Regional Chief Scientist
College of Forest Resources
University of Washington
Seattle, Washington 98195
Phone: (206) 543-6210
FTS 392-6210

Technology

Richard B. Bowser
Appropriate Technology
National Park Service
1100 L Street, N.W.
Room No. 3405
Washington, D.C. 20240
Phone: (202) 523-5166
FTS 523-5166

Anthropology
Archeology

Douglas H. Scovill
Chief Anthropologist
National Park Service
Main Interior Building
Washington, D.C. 20240
Phone: (202) 343-6975
FTS 343-6975

Environment Concerns in
Urban/Impacted Parks

Richard Hammerschlag
Ecological Services Laboratory
National Capital Region
1100 Ohio Drive, S.W.
Washington, D.C. 20240
Phone: (202) 426-6796
FTS 426-6796

Aquatic Biology

Leo F. Marnell
Aquatic Ecologist
Glacier National Park
National Park Service
West Glacier, Montana 59936
Phone: (406) 888-5441
FTS 585-5011

Environmental Education

Barbara B. Clark
Chief, Environmental Education Specialist
National Park Service
1100 L Street, N.W.
Room No. 3401
Washington, D.C. 20240
Phone: (202) 523-5153
FTS 523-5153

IV. Three items from the A.I.B.S. Public Responsibilites Department--R. Dalgleish

A. Federal Budget: The administration's 1980 budget is on the whole generous to science. While spending in most areas of government has been tightened, the budget calls for \$4.6 billion for basic research, or a 9% increase over 1979. NSF has been handsomely endowed with a budget request topping the \$1 billion mark, which represents an increase of 11.8% for basic research.

However, many members of the 96th Congress were elected on promises to trim federal spending. Research projects with funny-sounding titles are easy prey. Already a bill has been introduced to require the submission of all research proposals to Congress before funding. If a sound commitment to science is to become a reality, Congress has to hear and accept the message that scientific research is good for the economy. Who is better qualified to sell this message than the scientists? A widely held view in Washington is that if Congress makes sizable cuts in the President's R&D budget this year, the administration will not stick its neck out to push science again in 1981. Whatever happens in the next few months may set the standard for the rest of the 1980's.

The AIBS met recently with several scientific and educational organizations to explore ways of carrying the "good science is good business" maxim to the Congress. Some joint presentations to the appropriations committees will be planned, but individual senators and representatives do listen to their constituents. This is an opportunity for your members to educate their representatives on the importance of dependable and consistent federal support to maintain a strong science and technology base for the United States.

Dalgleish's comments: Dr. Richard C. Atkinson, Director, National Science Foundation stressed that while the budget was encouraging, it has not yet been adopted. The 1980 NSF budget is 8.4% over 1979, when basic research is broken out, it increases by 9.9% per NSF program. Also instrumentation is viewed as continuing to need substantial support and instrumentation support is increased by 50%. It is the view of Dr. Atkinson that biology is well represented in the NSF.

Pursuing a rumor, I inquired of Dr. Atkinson as to the future of the Biological Research Resources Program following the retirement of Mr. William Sievers. Dr. Atkinson deferred to Dr. Eloise Clark, who indicated the program would be continued. She further expressed her appreciation of Mr. Sievers. Though Dr. Clark indicated the program will continue, it behooves OIBS and each member to express support for this program. Support for facilities if included within a "research" program, tend not to be competitive for support of personnel.

B. Ethics in Government Act: The Ethics in Governement Act was designed to stop the excesses of "revolving door" government-to-industry employment in which high level federal administrators leave government service to go to work for organizations doing business with the same agency the administrator had just left. However, laudatory its intentions, the law may cause problems for government, science and education administrators, who accept government positions for a brief time with the intention of eventually returning to academe. The act prohibits former federal officials of GS-17 or higher from having any communication with their former agency for two years. This includes counseling others in their approach to that agency. A strict interpretation could prevent a university administrator from

from advising a faculty member on preparing proposals for an agency with which that administrator had been associated. Several high ranking science administrators have indicated they may be forced to resign before the law becomes effective on 1 July.

Agency officials are concerned that the law may impede future recruitment. Secy. Joseph Califano, of HEW, and Secy. Harold Brown, of DOD, have discussed the problem with the President, who reportedly has assigned a White House aide to look into it.

There does not seem to be a consensus on what the scientific community can do to seek relief. Congress watchers within the agencies do not anticipate much sympathy for opening the act for amendments. As this is a criminal statute, final interpretation and enforcement lies with the Justice Department. One course of action would be letters to Attorney General Griffin Bell describing how a narrow interpretation of the act would work a disservice on both government and higher education and research institutions. An Office of Government Ethics has been established within the Office of Personnel Management. This office will write the regulations governing the act, and comments may also be sent there. Addresses are as follows:

Attorney General Griffin B. Bell
Department of Justice
10th St. and Constitution Ave. NW
Washington, D.C. 20530

Mr. Bernard Wruble
Office of Government Ethics
Office of Personnel Management
1900 E St. NW
Washington, D. C. 20415

Dalglish's comments: According to Dr. Atkinson, this act has been interpreted by the Justice Department in a manner that he believes NSF and the Scientific Community will find satisfactory, however, he believes the fiscal disclosure requirement remains an unnecessary and potentially dangerous provision of statute.

- C. OSHA Carcinogens: OSHA has proposed standards for exposure and protection of workers handling some 115 substances classified as Category I carcinogens. These include such common laboratory chemicals as benzene, carbon tetrachloride, and chloroform. The regulations have not yet become final, but if they do, compliance would be costly for academic and research laboratories. No one is questioning OSHA's responsibility to protect worker health, but many scientists have objected to OSHA's failure to recognize the differences between a scientific lab and an industrial plant. In academic labs, aides generally work with smaller quantities of toxics, are better informed of dangers, and are better supervised. Several scientific societies have written to OSHA Administrator Dr. Eula Bingham pointing out the differences and describing the hardships the proposed regulations would impose on academic laboratories. Her address is as follows:

Dr. Eula Bingham
Assistant Secretary of Labor for OSHA
Department of Labor
200 Constitution Avenue, NW
Washington, D.C. 20210

Dalgleish's comments: If it has not already impacted your facility, OSHA may do so in the near future. The proposed standards on newly recognized Category I carcinogens if applied equally to industry and research will significantly change the storage and use of these common chemicals in the research laboratory.

V. Final Comments

- A. R. Dalgleish requests a copy of any correspondence by OBFS members that relate to the three issues above.
- B. The editor hopes all stations have a successful summer and appreciates your patience in waiting for this newsletter.

Again, I would appreciate comments from other stations for the August newsletter or any constructive criticism on the newsletter format.



Bonnie J. Davis

<p>Dr. James R. Barnes Utah Lake Research Station Brigham Young University Provo, Utah 84601</p>	<p>Mr. Paul M. Bultsma Ordway Memorial Prairie Biol. Star Route, Box 17 Leola, South Dakota 57456</p>	<p>Dr. Millicent Ficken Univ. of Wisconsin Field Sta. Route 1, Box 216 Saukville, Wisc. 53080</p>
<p>Dr. Raymond J. Barnett Eagle Lake Field Station California State University Chico, CA 95929</p>	<p>Dr. William Buskirk D. W. Dennis Biological Sta. Earlham College Richmond, Indiana 47374</p>	<p>Dr. Robert L. Fisher Raystown Field Station Juniata College Huntingdon, PA. 16652</p>
<p>Dr. James H. Barrow, Jr. Hiram College Biological Sta. Hiram College Hiram, Ohio 44234</p>	<p>Dr. Jesse F. Clovis Biology Department West Virginia University Morgantown, West Virginia 26506</p>	<p>Dr. Sven Froiland Black Hills Nat. Science F.S. Augustana College Sioux Falls, S. D. 57102</p>
<p>Dr. Bruce D. J. Batt Delta Waterfowl Research Sta. R. R. #1; Portage la Prairie Manitoba, Canada R1N 3A1</p>	<p>Dr. Richard W. Coles Tyson Research Center P. O. Box 258 Eureka, MO 63025</p>	<p>Dr. David M. Gates Univ. of Michigan Biol. Sta. Natural Science Bldg. Ann Arbor, Michigan 48109</p>
<p>Dr. George T. Baxter Knight Science Camp University of Wyoming Laramie, Wyoming 82071</p>	<p>Dr. Robert C. Dalglish The E. N. Huyck Preserve, Inc. P. O. Box 77 Rensselaerville, N.Y. 12147</p>	<p>Dr. Robert E. Gordon Office of Advanced Studies University of Notre Dame Notre Dame, Indiana 46556</p>
<p>Dr. Burr J. Betts Lily White Environmental F.S. Eastern Oregon State College LaGrande, Oregon 97850</p>	<p>William Davies Dept. Biological Sciences Indiana U-Purdue Univ-Ft. Wayne 2101 Coliseum Blvd. East Fort Wayne, Ind. 46805</p>	<p>Dr. Benjamin F. Graham Conard Environmental Res. Area Grinnell College Grinnell, Iowa 50112</p>
<p>Dr. Richard V. Bovbjerg Iowa Lakeside Laboratory University of Iowa Iowa City, Iowa 52240</p>	<p>Dr. B. J. Davis San Francisco State University 1600 Holloway Avenue San Francisco, CA 94132</p>	<p>Dr. David E. Greenland University of Colorado Mountain Research Station Nederland, Colorado 80466</p>
<p>Dr. William S. Brooks Department of Biology Ripon College Ripon, Wisconsin 54971</p>	<p>Dr. John Davis Hastings Natural History Reserv Star Route, Box 80 Carmel Valley, CA 93924</p>	<p>Dr. H. H. Hannan Director of Aquatic Station Southwest Texas State Univ. San Marcos, Texas 78666</p>
<p>Dr. D. F. Brown Bishop's University Lennoxville, Quebec J1M 1Z7</p>	<p>Dr. Kenneth L. Diem Dept. of Zoology & Physiology P. O. Box 3166, Univ. Station Laramie, Wyoming 82071</p>	<p>Dr. F. K. Hare Inst. for Environmental Stud. University of Toronto Toronto, Ontario M5S 1A4</p>
<p>Dr. Richard C. Bruce Highlands Biological Station P. O. Drawer 580 Highlands, N. C. 28741</p>	<p>Dr. Robert Ediger Eagle Lake Biological Station Chico State College Chico, CA 95926</p>	<p>Dr. Willard N. Harman Biology Department State University College Oneonta, N. Y. 13820</p>
<p>Dr. Robert H. Buchholz Department of Biology Monmouth College Monmouth, Illinois 61462</p>	<p>Dr. Denzel Ferguson Malheur Environmental Field S. P. O. Box 989 Burns, Oregon 97720</p>	<p>P. P. Harper Universite de Montreal C.P. 6128, Succ. "A" Montreal, Que H3C 3J7</p>

Dr. Richard T. Hartman Pymatuning Lab. of Ecology University of Pittsburgh Linesville, PA 16424	11/78	Dr. Roger J. Lederer Dept. of Biological Sciences California State University Chico, CA 95925	11/78	Dr. Loren S. Putnam 1735 Neil Avenue Ohio State University Columbus, Ohio 43210	11/78
Dr. Charles E. Herdendorf Ohio State University 484 W. 12th Avenue Columbus, Ohio 43210	11/78	Dr. J. E. McInerney Bamfield Marine Station P. O. Box 99 Bamfield, B.C. VOR 1B0	11/78	Dr. Paul Risser Univ. of OK Biological Sta. 730 Van Vleet Oval Norman, OK 73019	11/78
Dr. Loren G. Hill University of Ok. Biol. Sta. 730 Van Vleet Oval Norman, OK 73019	11/78	Dr. Peter J. Marchand Babcock Nature Preserve Johnson State College Johnson, VT. 05656	11/78	Dr. Vincent Roth Southwestern Biological Sta. P. O. Box g Portal, Arizona 85632	11/78
Dr. Gordon W. Hodgson Kananaskis Science Centre University of Calgary Calgary, Alberta T2N 1N4	11/78	Dr. Robert E. Martin Box 5041-Tech Aqua Biol. Sta. Tennessee Technological Univ. Cookeville, Tenn. 38501	11/78	Dr. W. B. Scott Huntsman Marine Laboratory Brandy Cove Road St. Andrews, N.B. EOG 2X0	11/78
Dr. Mario Iona High Altitude Laboratories University of Denver Denver, Colorado 80208	11/78	Dr. Dick Marzolf Div. of Biological Sciences Kansas State University Manhattan, Kansas 66506	11/78	Dr. Jennifer M. Shay 304E Parker Bldg. Univ. F.S. University of Manitoba Winnipeg, Manitoba R3T 2N2	11/78
Dr. S. H. Jenkins Whittell Forest & Wildlife Area University of Nevada Reno, Nevada 89507	11/78	Dr. George R. Maxwell, II Rice Creek Biological Station State University College Oswego, N.Y. 13126	11/78	Dr. A. Randolph Shields MACCI Field Biology Center Maryville College Maryville, Tenn. 37801	11/78
Donald W. Johnson Hancock Biological Station Furray State University Furray, KY 42071	11/78	Dr. Neil A. Miller Edward J. Meeman Biol. F. S. Memphis State University Memphis, Tenn. 38152	11/78	Dr. Edmund Smith Pacific Marine Station Dillon Beach, CA 94929	11/78
Dr. Edwin H. Ketchledge Department of Forest Botany State College of Environment Science and Forestry Syracuse, N.Y. 13210	11/78	J. J. Murray, Jr. Mountain Lake Biological Sta. University of Virginia Room B-64, Gilmer Hall Charlottesville, VA 22903	11/78	Dr. Richard K. Speairs, Jr. Ouachita Biological Station Louisiana State University Shreveport, LA 71115	11/78
Dr. Thomas H. Kunz Sargent Biological Field Sta. Boston University Peterborough, New Hamp. 03248	11/78	Dr. Brent B. Nickol School of Life Sciences University of Nebraska Lincoln, Neb. 68588	11/78	Dr. L. Stebbins, Director Westcastle Biological F. S. University of Lethbridge Lethbridge, Alberta Canada	11/78
Dr. George Lauff J.K. Kellogg Biological Sta. Michigan State University 1700 East Gull Lake Dr. Hickory Corners, Mich. 49060	11/78	Dr. Oscar H. Paris Univ. Wyoming/National Park Ser. P. O. Box 170 Moran, WY 83013	11/78	Dr. Robert Sweeney Great Lakes Laboratory University College 1300 Elmwood Buffalo, N.Y. 14222	11/78
Dr. James N. Layne Archbold Biological Station Lake Placid, Florida 22852	11/78	Dr. David F. Parmelee Field Biology Program 349 Bell Museum of Natural Hist Minneapolis, Minn. 55455	11/78	Dr. John F. Tibbs Univ. of Montana Biol. Sta. University of Montana Missoula, MT. 59812	11/78

Dr. Gertrude L. Ward "178
David Worth Dennis Biol. Sta.
Earlham College
Richmond, Indiana 47374

Dr. John Warnock "178
Kibbe Life Sciences Station
Western Illinois University
Macomb, Ill. 61455

Dr. Steven B. Young "178
Center for Northern Studies
Town Hill
Wolcott, Vermont 05680

Dr. Aaron N. Moen
New York State College of
Agriculture and Life Sciences
Ithaca, N. Y. 14853