The Physiological Newsletter is sent to all members of the Physiological Society of America, Inc., and to members of the Physiological Section of the Botanical Society of America.

If your zip code does not appear on your mailing label, send your code immediately to H. Bruce C. Parker, Department of Botany, Washington University, St. Louis, Missouri, 63130.

Also—if you anticipate a change of address for any reason (moving to a new position, taking a leave of absence or sabatical, etc.), be sure to send your new address and zip code to H. C. Parker.

1987 Annual Meeting A.I.P.S.—Texas A & M University, College Station, Texas
August 27 - September 1, 1987

The program for all participating societies will be published in the A.I.P.S., as usual, and abstracts of papers and colloquia will be published in the supplement to the Journal of Phycology in July. Extra copies may be obtained at the meetings.

Information regarding housing, field trips, excursions, and other sessions may be found in the March, April, and May issues of BioScience.


The By-Laws stipulate that members who have not paid their dues 90 days (ca. July 30) after the final dues notice will be dropped from the Society.

Send dues to:

H. C. Parker
Department of Botany
Washington University
St. Louis, Missouri 63130

Dues Schedule:

<table>
<thead>
<tr>
<th>Full-time students</th>
<th>Individuals (not full-time students)</th>
<th>Libraries and Organizations</th>
<th>Joint member (Spouse and wife)</th>
<th>non-student, 1 copy Journal</th>
<th>Retired individuals of at least 10 years’ tenure as members</th>
</tr>
</thead>
<tbody>
<tr>
<td>$25</td>
<td>$50</td>
<td>$10</td>
<td>$14</td>
<td>$6</td>
<td>$5</td>
</tr>
</tbody>
</table>

The Membership

Bob Anderson, Acting Membership Secretary, soon will begin an up-to-date roster of P.S.A. members. The total number of individuals and organizations will probably reach 1000 by the end of this year.
Manuscripts are requested by the Editor, Luigi Provasoli. The success of the Journal depends on the quality and number of manuscripts submitted. Support your Journal: Send manuscripts to Dr. Provasoli, 305 E. 43rd Street, New York, New York 10017.

* * * * * * * * * * * * * * * * * * * * * * * * * * * *

Miscellaneous Announcements

The American Society of Limnology and Oceanography will hold its annual meeting June 19-22 at the University of Newfound-land, St. John's, at which time the new Marine Laboratory will be dedicated.

The Canadian Botanical Association will hold its annual meeting May 31-June 2 at Ottawa, Ontario. Dr. A. E. A. Taylor will be in charge of the Physiological Section.

An international directory of individuals interested in diatoms is being compiled. For further information write Dr. Walter William Bernardt, Jr., Samo Production Research Co., P.O. Box 2185, Houston, Texas.

Contributions to the Dawson Memorial Fund may be sent to the Chairman, Department of Botany, Smithsonian Institution, Washington, D.C., 20560. Checks should be made payable to the Smithsonian Institution. The Fund will be used to purchase scientific books for the library of the Charles Darwin Research Station in the Galapagos Islands.

* * * * * * * * * * * * * * * * * * * * * * * * * * * *

IN MEMORIAM

Dr. Glenn C. Cough, Department of Botany, University of Oklahoma, Norman. November, 1966.


* * * * * * * * * * * * * * * * * * * * * * * * * * * *

International Symposium

A symposium on eutrophication sponsored by the National Academy of Sciences will be held June 11-16 at the University of Wisconsin, Madison. Further information may be obtained from Dr. Gerard A. Schlicht, Eutrophication Committee Chairman, 602 State Street, University of Wisconsin, Madison, Wisconsin 53705.

Syracuse University and the New York State Science and Technology Foundation are sponsoring a symposium on Algae, Man and the Environment from June 18-30. For additional information write Dr. D. F. Jackson, Department of Civil Engineering, Syracuse University, Syracuse, New York 13210.

* * * * * * * * * * * * * * * * * * * * * * * * * * * *
How would you like to have a glacier named after you? Jacques G. Zamzam, Professor and Director of the Institute of Cosmology, Old Dominion College, Norfolk, Va., thinks it's pretty cool! For his studies of Antarctic sub-ice algae, the U.S. Board on Geographic Names has honored him by naming one of the newly detected glaciers the "Zamzam Glacier." It is located at 85° 26' S. Latitude, 170° 20' W. longitude, east of the Shackleton Glacier.

His investigations have taken him to Antarctica twice in the last few years, and he will go again in June to continue his study on Antarctic Marine Algae of the Ross Sea, financed by the NSF Office of Antarctic Programs. Since his discovery of seaweed in a region formerly considered too frigid for plant life, he has been seeking explanations for how the algae live under constant sub-zero temperatures, in darkness much of the year. This year, he and two research assistants—Leonard Naro and David Bresnahan—will spend the Antarctic winter months of June-August trying to find out what happens to algae under 6-8 feet of ice during long periods of darkness. It will be dark for 23 hours each day in the southern part of the Ross Sea.

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

SUGAR TRACING

Thomas R. Widdowson, UCLA, at Humboldt State College, Arcata, California.

Pater Dixon and Maurice Dube at Friday Harbor Laboratory of the University of Washington, Seattle.

G. W. Prescott and William Vinograd at University of Montana Biological Station, Flathead Lake.

Gene Steaen at Kellogg Biological Station, Gull Lake, Michigan.

Claiton Dawes at University of South Florida's Boy Campus, St. Petersburg.

George J. Hollenberg, Professor Emeritus, University of Redlands, and Robert E. Kehl, University of Arizona, at the Marine Research Station, Puerto Penasco, Mexico.

Russell G. Rhode, Kent State University, at Virginia Institute of Marine Science, Gloucester Point, Virginia.

Walter R. Hornson will be in charge of the Marine Botany Course at the Marine Biological Laboratory at Woods Hole. Others on the staff: Philip H. Cook, Kelvin S. Fuller, R. Wayne Nichols, and Janet R. Stein. William Randolf Taylor and Richard C. Starr will serve as consultants. Special lecturers will include Paul Green, McKinley Leach, Bob Ullas, John Kingsbury, and Frank Trinay. Assistants for the course are Tom Lee, University of Connecticut, and Davis and Diane Findlay, University of Tennessee.

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
Janet Stein has accepted appointment as Editor of the Physiological Techniques Book. Her work is underway, and we should hear of her progress at the Annual Meeting and in the November Newsletter.

**SOURCEBOOK OF METHODS IN DEVELOPMENTAL BOTANY**

The Developmental Section and the Committee on Education of the Botanical Society of America are sponsoring the preparation of a Sourcebook of Methods in Developmental Botany for use by teachers of botany and biology. The Sourcebook is designed to assist the teacher in introducing developmental botany into the curriculum by providing detailed information on developmental experiments and exercises which can be done by students with limited time, equipment and training.

The Sourcebook will have a standard format giving details of materials needed (and sources of supply), lead time for preparation and estimated time for student manipulations and the collection of data. Techniques will be presented and illustrated where appropriate and there will be suitable references and indications of the relation of the experiment to general biological concepts.

The Sourcebook Committee solicits the ideas and techniques of teachers and research workers in plant growth and development—broadly interpreted. We would appreciate techniques and experiments which personal experience has shown to work and to be stimulating to students. Please contact any member of the Committee:


John H. Miller, Biological Research Laboratories, Syracuse University, Syracuse, New York 13210.

Walter G. Bergen, Department of Biology, State University of New York, Buffalo, New York, 14214.

Emioll E. Stevens, Department of Botany, George Washington University, Washington, D. C. 20006.

Seymour S. Feigle, Department of Biology, University of Oregon, Eugene, Oregon 97403

**NEWS OF MEMBERS**

Mitosu Chihara, National Science Museum, Tokyo, Japan, will be a National Research Council Post-doctoral Fellow at the University of British Columbia with R. E. Seagel in September.

Peter Dixon, University of Washington, Seattle, will move to the University of California, Irvine, where he will be full Professor. Before coming to this country in 1966, he was at the University of Liverpool, England.
Patricia A. Delano, graduate student at Fordham University, is this year's recipient of the Crossland-Curtis Fellowship for the Marine Botany Course at M.B.L. Woods Hole, Massachusetts.

Dean C. Griffen III will be Assistant Professor of Botany and Biology at the University of Florida, Gainesville, in September. After receiving his Ph.D. from the University of Tennessee in 1966, he spent a year in Zara as a Fulbright Teaching Fellow and has been Visiting Assistant Professor at the University of Tennessee this year.

Valter E. Hargreaves, University of Tennessee, has been promoted from Associate Dean of the College of Liberal Arts to Assistant Vice-President, Academic Affairs.

Emard J. Hurren is moving from Queens College, Charlotte, N. C. to the Marine Science Center, University of South Florida, Bayboro Harbor, St. Petersburg, Florida 33701.

Robert E. S. Lee, formerly at the University of New Bedford at St. John's, is now at National Museum of Canada, Ottawa.

Dr. M. Nisamuddin, University of Karachi, Pakistan, has been at Scripps Institute since last June and visited the Pacific coast of North America in March.

Dr. Cyrokkii Raymark, from Turku, Finland, is presently at the University of California, Berkeley, and visited the Pacific Northwest in April.

Robbie South, NATO Post-doctoral Fellow with R. F. Seagel at University of British Columbia, will be Assistant Professor at the Memorial University of Newfoundland, St. John's, in September.

Bob Sweeney completed his Ph.D. at Ohio State and is now with the Great Lakes Laboratory and Education Department of the State University College, Buffalo, New York.

POSITIONS AVAILABLE

Butler University, Indianapolis, Indiana, is seeking an Instructor or Assistant Professor for introductory courses and advanced work in the person's speciality, effective September 1, 1967. An M.A. or M.S. in Botany or work toward the doctorate is minimal. Salary and rank depend upon training, experience, and degree status, up to $8800. Higher for experienced Ph.D. Applicants should supply a transcript and three letters of recommendation. Write Mr. John F. Felton, Department of Botany, Butler University, Indianapolis, Indiana.

University of Puerto Rico announces new positions open in genetics, comparative physiology, plant physiology, and marine biology. Rank and salary depend on background and experience; selected applicants will be expected to develop a course in their special field, organize a research program, and direct graduate students. A reconstructed Battersea type shrimp trawler and an outboard Boston Shaler are available as research vessels. A tropical rainforest is within an hour's drive from the campus. Applicants should submit a curriculum vitae and
three letters of recommendation. Write Dr. Gustavo Candelas, Chairman, Department of Biology, University of Puerto Rico, Rio Piedras, P.R. 00931.

University of Southern Mississippi is seeking a staff member with interests in the lower plants, especially the algae. Salary from $4000-$6000, depending on training and experience. The University is 71 miles from the Gulf Coast and 83 miles from the Gulf Coast Research Laboratory. A Ph.D. program has been initiated recently for majors in biology, microbiology, botany, ecology, and marine botany. Write Dr. J. F. Walker, Chairman, Department of Biology, University of Southern Mississippi, Hattiesburg, Mississippi.

Washington State University has an opening at the Assistant Professor level for a person with interests in any of the following fields—plant anatomy, plant ecology, physiology. He will be expected to participate in teaching courses in general biology and to develop a research program in his own area. The University assists research through internal grants which favor new faculty members. Candidates who do not already have a doctorate should have completed essentially all requirements. Applicants should send transcripts, personal and curriculum vitae, and three letters of recommendation. Write Dr. Adolph Eecht, Chairman, Department of Botany, Washington State University, Pullman, Washington 99163.
CANDIDATES FOR OFFICE, 1968

President (1-year term):
Francis R. Greiner - Associate Professor of Botany, University of Connecticut, Storrs. (Genus Ceratophyllum and related algae)
Richard D. Wood - Professor of Botany, University of Rhode Island, Kingston. (Characeae)

Vice-President (1-year term):
Larry R. Hoffman - Assistant Professor of Botany, University of Illinois, Urbana. (Zygdaceae)
Bruce C. Parker - Associate Professor of Botany, Washington University, St. Louis. (Ecology, helix, transplantation)

Secretary-Treasurer (3-year term):
Philip W. Cook - Assistant Professor of Botany, University of Vermont, Burlington. (Dennidiaceae and fungi)
H. Wayne Nicholas - Associate Professor of Botany, Washington University, St. Louis. (Freshwater Rhodophyceae, Ulvaceae)

Editorial Board (3-year term):
Richard W. Castenhols - University of Oregon, Eugene.
Hannah L. Cresson - Dartmouth, Hanover, New Hampshire.
Walter R. Herndon - University of Tennessee, Knoxville.
Robert W. Herndon - University of Arizona, Tucson.
Jack Myers - University of Texas, Austin.
Bruce C. Parker - Washington University, St. Louis.

Chase Van Baalen - University of Texas, Port Aransas.

*** B A L L O T ***

President (vote for one)    Vice-President (vote for one)    Editorial Board (vote for three)
__________________________  __________________________  __________________________
F. R. Trainor               L. R. Hoffman               B. Castenhols
R. D. Wood                  B. C. Parker               H. Crossdale
P. W. Cook                  W. Herndon               J. Myers
H. W. Nicholas              B. Parker               C. Van Baalen

Secretary-Treasurer (vote for one)

__________________________
P. W. Cook

Secretary-Treasurer (vote for one)

__________________________
H. W. Nicholas

Return Ballot by Aug. 1 to:
Dr. Janet R. Stein
Department of Botany
Univ. of British Columbia
Vancouver S, Canada