

Editor: Janet R. Stein, Department of Botany  
University of British Columbia, Vancouver 8, Canada

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The 1966 Officers:

**PRESIDENT** - Walter R. Herndon: Associate Dean of the College of Liberal Arts and Professor of Botany at the University of Tennessee, Knoxville. Dr. Herndon has served as Secretary-Treasurer (1961-1964) and Vice-President (1965) of the Phycological Society of America, Inc. He was born in Birmingham, Alabama, several years ago and received his Bachelor of Science Degree from the University of Alabama approximately 20 years later. He did graduate work at Vanderbilt University under the direction of Harold Bold (a past-President of the Society). Dr. Herndon has taught at Middle Tennessee State College (which seems to always have a Society member) and the University of Alabama before moving to the University of Tennessee in 1961 as Head of the Botany Department. His phycological interests lie in the realm of morphology and cytology, however, he has been concerned with ecology, physiology and ultrastructure. At present he is also in charge of the Marine Botany course of the Marine Biological Laboratory at Woods Hole, Massachusetts.

**VICE-PRESIDENT** - Paul R. Gorham: Head of the Plant Physiology Section of the Division of Applied Biology at the National Research Council of Canada in Ottawa. Dr. Gorham was born slightly prior to Dr. Herndon but in Fredricton, New Brunswick, and he received his Bachelor of Arts degree at the University of New Brunswick. He received the Master of Science and Ph.D. degrees from the California Institute of Technology in Plant Physiology. He has been associated with the National Research Council of Canada for over 20 years and has been Head of the Plant Physiology section for 13 years. He is active in plant physiology societies and was President of the Canadian Society of Plant Physiologist in 1958-59. His prime phycological interests are in physiological problems including culturing, nutrition, and toxic products of algae.

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Journal of Phycology

Volume 1, number 3 was distributed to the membership early in 1966. The last number of this first volume is at the Printer and should be mailed soon. However, at this time it is essential that more manuscripts be forthcoming to ensure maintenance of the high standards set. Information regarding style is included on the inside back cover of the Journal. At present almost 100 organizations receive the Journal, the result of a recent advertising campaign, and pressure by the members of the Society. A propos to the listing of the Editorial Board in the last Newsletter, the Lewin is J. and not R. (see p. 2, Newsletter, vol. 1, no.3). Sorry for any inconvenience this may have caused either party!

Please show Editor Provasoli that you appreciate his efforts on behalf of phycological research, by enundating, swamping, smothering, etc. him with manuscripts. Send them to: Dr. Luigi Provasoli, Editor, Haskins Laboratories, 305 East. 43rd Street, New York, New York 10017.

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CALL FOR MEMBERSHIP DUES - 1966

Members of the Society who have not paid dues for 1966 (vol. 2, Journal of Phycology) should remit them immediately to:

Dr. Bruce Parker, Secretary-Treasurer  
Department of Botany  
Washington University  
St. Louis, Missouri 63130 U.S.A.

This is the first dues notice and dues not paid by 1 August 1966 are delinquent.

Dues are: Individuals \$9 Joint (family) \$14 Sponsors \$500 (indefinite period)  
Students \$5 (5 year limit) Emeritus None (\$4.50 if Journal of  
Institutions/Organizations \$10 (\$45 for 5 years through 1971) Phycology is desired)

NEW MEMBERS -- November, 1965 to February 1966

Organizations: Agnes Scott College, Decatur, Georgia: American Cyanamid Company, Princeton, New Jersey; Brandeis University, Waltham, Massachusetts: Butler University, Indianapolis, Indiana: Canadian Department of Agriculture, Ottawa: Duke University, Durham, North Carolina: Indiana State Library, Indianapolis: State College of Iowa, Cedar Falls: Johns Hopkins University, Baltimore, Maryland: Linda Hall Library, Kansas City, Missouri: Lloyd Library, Cincinnati, Ohio: Max-Planck-Gesellschaft, Plön in Holstein, Germany: McGill University, Montreal: University of Michigan, Ann Arbor: Southwest Missouri State College, Springfield: Montana State University, Bozeman: University of Notre Dame, Indiana; Rutgers University, New Brunswick, New Jersey: University of Texas, Port Aransas: Tvärminnen Eläintietaelinen Asema, Helsinki, Finland: U.S. Fish & Wildlife Service, Bureau of Commercial Fisheries, Maryland: Vassar College, Poughkeepsie, New York.

Individual Members: (\*= graduate student) \*ARTHUR, James, University of California, Davis: \*BLINN, Dean W., University of Montana, Missoula: \*BOWES, Gerald, Scripps Institution of Oceanography, California: \*BOWMAN, Gene, University of Montana, Missoula: CAPON, Brian, California State College, Los Angeles: \*COHEN, Alan J., Washington University, Ames: \*CRAYTON, Michel A., Kansas City, Missouri: DUTHIE, H. C., University of Waterloo, Ontario: \*FINDLEY, Davis, University of Tennessee, Knoxville: GODWARD, Maud B. E., Queen Mary College, London, England: \*HARRINGTON, Dalton, Montana State University, Bozeman: HILLSON, Charles J., Pennsylvania State University, University Park: HOLMES, Robert W., University of California, La Jolla: \*HUGHES, John, Johns Hopkins University, Baltimore, Maryland: JAHN, THEODORE L., University of California, Los Angeles: \*KJELDSEN, Chris, Oregon State University, Corvallis: KYTE, Mrs. Lydiane, University of Washington, Seattle: \*LEE, Robert W., University of Massachusetts, Amherst: \*LEMBI, Carole, University of Tennessee, Knoxville: \*LIDDLE, Larry B., University of California, Santa Barbara: \*LISSANT, Mrs. K. J., St. Louis, Missouri: \*LOCKWOOD, Linda Gail, Columbia University, New York City: \*MADJERICK, Barry, University of Texas, Austin: \*MARTIN, Dan, Montana State University, Bozeman: \*MCCOY, George A., Central Michigan University, Mt. Pleasant: MCINTIRE, C. David, Oregon State University, Corvallis: \*MELVILLE, James F., New York City: \*MORALL, Sandra Lee, University of Pennsylvania, University Park: MULLEN, John L., University of Idaho, Moscow: \*NEUBERGER, Damian, Pennsylvania State University, University Park: \*PARSONS, William, North Texas State University, Denton: \*PESSONEY, George, University of Texas, Austin: \*REA, Ina, Washington University, St. Louis, Missouri: SOROKIN, Constantine, University of Maryland, College Park: \*STEINBACK, John T., Ohio State University, Columbus: \*SWIFT, Elijah, Johns Hopkins University, Baltimore, Maryland: VERDUIN, Jacob, Southern Illinois University, Carbondale: WASMER, Otto, Technical Station, Ruston, Louisiana.

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AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

December, 1965, Berkeley, California

As an affiliate of the AAAS, the Phycological Society of America was represented at the Council meeting by G. F. Papenfuss, as the official representative, R. F. Holton, was unable to attend. Many items were presented to the Council ranging from affiliation of societies to election of officers to resolutions concerning Viet Nam and research funds. Details concerning the Council meeting will be published in Science or may be obtained from Dr. Holton, University of Tennessee. Phycological papers presented included: Environmental control of reproduction in Arochaetium-Rhodochorton complex (J. West, University of Washington); Growth of Zonaria (L. Liddle *et al.*, University of California, Santa Barbara); Influence of sea urchins on algae (R. Vadas, University of Washington); Cell growth in Fucus (E. Pollock, San Fernando Valley State College); Ecology of cryophylic algae (C. Amundsen, University of Colorado); and Productivity of phytoplankton community (I. Efford, University of British Columbia). At the annual symposium of the Botanical Section, Norma Lang (University of California, Davis) contrasted the ultrastructure of bacteria and blue-green algae on the basis of her work with the blue-greens.

A.I.B.S. -- PHYCOLOGICAL SOCIETY OF AMERICA, INC.  
Annual Meeting -- August 14 through 19- University of Maryland

Symposium: Extracellular Products of Algae -- Featuring: Paul R. Gorham on blue-green algae; Beatrice Sweeney on diroflagellates; John Helleburst of marine phytoplankton; and Robert Wright.

Special Lecture: William Randolph Taylor (University of Michigan)

Luncheon, Field Trip, Paper Session: Deadline date for submission of papers is: 20 March 1966. Use the enclosed form and be sure to submit two copies of the abstract. Participants will be notified in June of the scheduled time for the paper.

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BIOCHEMICAL ECOLOGY OF HOT SPRINGS

Thomas D. Brock, Department of Bacteriology, Indiana University, Bloomington

A research program initiated on the biochemical ecology of hot springs has included studies in Yellowstone National Park, Wyoming; Iceland; and at Steamboat Springs, Nevada. A hot spring is an excellent model ecosystem for studies on factors influencing productivity and photosynthesis. Many hot springs provide in their effluents wide thermal gradients from temperatures near boiling down to air temperature. Under appropriate conditions, temperature can be the only variable. Quantitative cores taken at a number of positions along such thermal gradients were assayed for chlorophyll, protein, and RNA. For each a strikingly sharp optimum temperature for biological development was found at 48-55 C., with each spring exhibiting its own characteristic optimum. It is usually considered that CO<sub>2</sub> concentration or light intensity are the limiting factors for photosynthesis. The present results suggest that in these alkaline hot springs, where neither CO<sub>2</sub> nor light should be limiting, that temperature is the limiting factor up until temperatures are reached that entropy effects begin to predominate. Future work will involve measurements of photophosphorylation and CO<sub>2</sub> fixation as a function of temperature, and experimental modification of light regimes.

Correspondence with those interested in study of hot springs would be welcome. A preliminary report of this work will appear in Nature, Volume 209, February 8, 1966.

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PHYCOLOGICAL SURVEY

Enclosed with this issue of the Newsletter is a two-page Phycological Survey. This is being conducted on members of the Phycological Society of America, Inc., and the Phycological Section of the Botanical Society of America, Inc. It is a pilot study to gain as much information about Phycologists and their work as is possible. If the results of the survey are satisfactory, it will be extended to an international level. Please, fill in the form immediately and return it as soon as possible. Any comments, etc., will be gratefully received (even though you may thoroughly dislike such surveys!)

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FELLOW IN ACADEMIC ADMINISTRATION

Brother Joseph Cain of St. Edward's University, Austin, Texas, is one of 23 people selected as the first interns in the American Council on Education's program to train College administrators. The program is supported by a Ford Foundation grant and provides a year of interning. The intern works at another education institution under the president or a ranking administrative officer. Brother Cain selected Tulane University, New Orleans, Louisiana, for his training. Upon his return to St. Edward's he will be involved in the expansion program that will include a coordinate college for women. So goes another phycologist to administration!!

NEWS OF MEMBERS ETC.

Isabella ABBOTT will be offering the Phycology course again this summer at the Hopkins Marine Station of Stanford University, at Pacific Grove, California.

Alan J. BROOK (University of Minnesota) and Richard L. MEYER (Chico State College, California) will be teaching Phycology courses at the University of Minnesota Biological Station at Lake Itasca during the summer.

Gary E. DILLARD, recent Ph.D. from North Carolina State University is at Clemson University, South Carolina.

Peter DIXON (University of Washington) and Louis D. DRUEHL (University of British Columbia) are teaching Marine Phycology at the Friday Harbor Laboratories of the University of Washington.

F. E. FRITSCH's "Structure and Reproduction of the Algae" has been reprinted by Cambridge University Press. This was in response to the many requests made by Phycologists and the Societies (including PS of A).

Walter R. HERNDON (University of Tennessee) is again in charge of the Marine Botany course at Woods Hole, Massachusetts. He will be assisted by H. Wayne NICHOLS (Washington University), M. S. FULLER (University of California, Berkeley) and J. R. STEIN (University of British Columbia).

Max H. HOMMERSAND (University of North Carolina) will be at the University of California Marine Station at Bodega Bay this summer.

Harold J. HUMM formerly at Duke University had moved to Queen's College, Charlotte, North Carolina.

The Indiana University Culture Collection sent out over 5000 cultures from July 1964 through June 1965!

Larry JONES, formerly at R.I.A.S. of the Glenn L. Martin Company, has joined the faculty at the University of Tennessee.

Raymond F. JONES, has moved from Princeton University to the State University of New York at Stony Brook, Long Island.

Joyce LEWIN is the first lady faculty member in the department of Oceanography at the University of Washington!

Ralph LEWIN, University of California, La Jolla, visited 46 laboratories in the Far East last Autumn during a period of 10 weeks.

Michael NEUSHUL (University of California, Santa Barbara) will be spending the summer at the University of Hawaii.

Aaron J. SHARP has been made a Distinguished Professor of Botany at the University of Tennessee. This is academically rewarding as well as financially!

Shirley R. SPARLING (California Polytechnic College, San Luis Obispo) is scheduled to teach the course in Marine Algae at Humboldt State College, California.

STANFORD UNIVERSITY PRESS (Palo Alto, California) is publishing an addendum to G. M. SMITH's "Monterey Algae". The addendum, compiled by Isabella ABBOTT, may be ordered from the Press by those possessing the book. Future printings will incorporate the addendum.

Richard WAER, received his M.Sc. from University of Arizona and is now at the University of Tennessee.

Emeritus Professor Y. YAMADA (Hokkaido University) has resigned as President of the Japanese Society of Phycology. The new President is Professor J. TOKIDA also of Hokkaido University.

PACIFIC SCIENCE CONGRESS - TOKYO, JAPAN  
August 22 to September 10, 1966

In the first week of the Congress, several symposia are planned including one on 'Algae in the Pacific (Biology and Cultivation)'. The second week will be devoted to contributed papers presented at the divisional meeting on Botany. Excursions are planned for the third week. Information regarding the Congress can be secured from Professor T. Tuzuma, Biological Laboratory, Ochanomizu University, Bunkyo-ku, Tokyo.

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UNESCO CONFERENCE -- November, 1965

The Psychological Society of America was represented by R. G. Anderson. Six plenary sessions and numerous section meetings were held. The objectives of the conference were to; 1) develop informed conclusions concerning the role of man, knowledge, and freedom in economic and social development; 2) consider benefits to Americans of U.S. involvement in such; 3) review policies and techniques of major development programs and explore possible new approaches. Of importance to psychologists is the need for volunteers to train the people in developing countries. Such people need to understand and appreciate the mores and cultural life of the developing countries. For more information write to Dr. Anderson, University of Missouri at Kansas City.

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Summer stipends for research are available at Itasca Biological Station of the University of Minnesota. Stipends are for predoctoral students (\$250), postdoctoral scholars (\$500) and independent research scholars (\$750) for one or two five-week terms. Information is available from the Director of Biology Session, 300 Coffey, Hall, University of Minnesota, St. Paul.

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Positions Available:

Kent State University, Kent Ohio (Dr. Charles V. Riley, Chairman) - prefer freshwater interests but not essential. Also available is a botanist position involving the introductory offerings.

University of Connecticut, Storrs (Dr. Henry N. Andrews, Head) - prefer interest in marine phytoplankton.

Southern Illinois University, Carbondale (Dr. Robert H. Mohlenbrock, Chairman) - prefer freshwater interests.

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Herbarium and Reprint request: Dr. André Cardinal, Station de Biologie marine, Grande-Rivière, Co., Gaspé, Quebec, Canada is interested in herbarium specimens particularly from the Atlantic Coast and in reprints. The library and herbarium are both almost non-existent.

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The ballot enclosed in the November Newsletter for amendment of the By-laws was passed unanimously (46 voting). The revised By-laws may be circulated in the May Newsletter. Also in the May Newsletter it is planned to include a complete Roster of the Members of the Society.

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MEMBERS OF THE PSYCHOLOGICAL SOCIETY OF AMERICA, INC. -- PLEASE PAY DUES IMMEDIATELY FOR 1966.

Early payment will save billing and postage - thus saving time and money that can be spent far more wisely for Psychology!

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There are FOUR (4) important items in this Newsletter:

For members of the Psychological Society of America, Inc.:

- 1) Pay dues to Bruce Parker (see p. 1)
- 2) Nominate officers for 1967 -- send nominations to Bruce Parker

For members of P S of A, Inc., and Psychological Section of the Botanical Society:

- 3) Submit a paper for the Annual Meeting in August -- see enclosure
- 4) Answer the Psychological Survey -- mail to Janet Stein (5¢ postage suffices)