

# PHYCOLOGICAL NEWSLETTER



Dec. 15-17 at Waldorf

## CONFERENCE ON ALGAL PHYLOGENESIS PLANNED



The New York Academy of Science, Section of Biological and Medical Sciences, is sponsoring a conference on "Phylogenesis and Morphogenesis in the Algae" in New York City from December 15-17. Co-chairmen for the meeting are Jerome F. Frederick, Research Laboratories, Dodge Chemical Co., Bronx, N.Y.; Richard M. Klein and Philip W. Cook, both of the University of Vermont, Burlington.

The sessions begin on Monday, Dec. 15, with Registration at 8 a.m. at the Waldorf-Astoria Hotel in New York City, followed by a morning program on Phylogenetic Aspects of Algal Cytology and an afternoon program on Phylogenetic Aspects of Algal Biochemistry, I. The two sessions on Tuesday, Dec. 16, will deal with Phylogenetic Aspects of Algal Biochemistry, II, and Taxonomy and Systematics in the Algae. The program for the final day of the conference, Dec. 17, includes papers on Morphogenesis in the Algae, and Control Factors in Morphogenesis.

Further information about the Conference and copies of the program may be obtained from Dr. Richard M. Klein, Department of Botany, University of Vermont, Burlington, Vermont.

### Newly Elected Officers

## Ralph Lewin To Head Society

The results of the recent election of new officers of the Phycological Society of America for 1970 were announced at the annual business meeting during the recent International Botanical Congress in Seattle. Dr. Ralph Lewin, Scripps Institution of Oceanography, La Jolla, California, has been elected President. The new Vice-President will be Dr. Philip W. Cook, University of Vermont, Burlington. Secretary-elect is Dr. Patricia L. Walne, University of Tennessee, Knoxville.

Newly elected members of the Editorial Board for the *Journal of Phycology* are Dr. Richard Castenholz, University of Oregon, Eugene; Dr. Vernon Proctor, Texas Technological University, Lubbock; and Dr. David Chapman, University of Chicago.

New members of the Editorial Board who are appointed by the Editor are Drs. H.A. von Stosch, University of Marburg, Germany; Seibin Arasaki, University of Tokyo, Japan; and Kathleen M. Cole, University of British Columbia, Vancouver, B.C., Canada.

### WILLIAMS URGES INVOLVEMENT

"Members of the Phycological Society of America, deploring the uncontrolled pollution leading to the deterioration of natural waterways, recommend stricter controls to maintain and improve the quality of aqueous environments for the general welfare of mankind and, therefore, urge research scientists to become professionally involved in improving the understanding of the role of algae in the aquatic ecosystems."

The above resolution on water pollution represents an effort by Louis G. Williams, University of Alabama, in response to requests for resolutions to the Eleventh Botanical Congress in Seattle, solicited from each society by Dr. Ken-

neth V. Thimann, president of the Congress. Many other societies submitted resolutions dealing largely with food production, population control and conservation of natural resources. Despite some reservations by phycologists about submitting resolutions and some disagreement about the wording, many members felt that as phycologists we should be concerned about the rapid deterioration of aquatic environments and should show our social responsibility. To that end, it was felt that the above resolution could do no harm and might lend our support to improving the quality of aquatic environments.

-- Louis G. Williams

## New Publications

- "A manual of the fresh-water algae in North Carolina." 1969.

L.A. Whitford (N.C. State University, Raleigh) and G.J. Schumacher (N.Y. State University, Binghamton). Technical Bulletin No. 188. N.C. Agricultural Experiment Station. 313 pp., 71 pl. Paper bound. \$3.00.

The manual lists 1736 taxa of fresh-water algae with an illustration of each, together with an almost complete set of keys to species, and notes on distribution and habitat. There is a brief introduction and description of the area, an appendix on collecting fresh-water algae, and an index to genera. The manual can be obtained from: Publications Editor, 318 Ricks Hall, N.C. State University, State College Station, Raleigh, N.C. 27607.

- "Proceedings of the Conference on the Changes in the Biota of Lakes Erie and Ontario." 1969. Robert A. Sweeney, Editor. \$2.10.

The book contains information on phytoplankton and includes techniques related to their collection and preservation. It may be obtained from: Buffalo Museum of Science, Humboldt Park, Buffalo, New York 14211. (Cost \$2.00 plus 10c for handling.)

- "Distribution of Marine Algae About Bermuda." 1969. William Randolph Taylor and Albert J. Bernatowicz. Bermuda Biological Station for Research, Special Publication No. 1. 42 pp. \$1.75 (free postage for surface mail).

This newly revised publication lists all the common shallow-water species, giving their detailed location as well as their seasonal development and fruiting period. A short list of pertinent literature and generic index is offered. The keys and descriptions appropriate to local species can be found in Dr. Taylor's general tropical algal manual (Marine Algae of the Eastern Tropical and Sub-tropical Coasts of the Americas, U. Michigan Press, Ann Arbor, 1960) for which page references are given with each species listed in this booklet. The booklet can be obtained from: Bermuda Biological Station for Research, Inc., St. George's West, Bermuda. Prepaid orders will be appreciated, made payable to Bermuda Biological Station for Research, Inc. Money orders (U.S. or International) and bank drafts are accepted.

- "Seaweeds of Cape Cod and the Islands." 1969. John M. Kingsbury. Chatham Press, Inc., 224 pp. \$12.50. (See review elsewhere in *Newsletter*)

Over 100 species of marine algae found in the waters of Cape Cod, Nantucket and Martha's Vineyard are classified by

(continued on page 6)

## BOOK REVIEWS



*Seaweeds of Cape Cod and the Islands* by John M. Kingsbury.  
1969. Chatham Press, Inc., 224 pp. \$12.50.

Dr. John M. Kingsbury, Cornell University's well-known phycologist and authority on poisonous plants, has just published a new book on the marine algae of the Cape Cod area, this one designed for the serious amateur or for biologists who never had a college course in phycology. *Seaweeds of Cape Cod and the Islands* is the product of the author's keen insight into the needs of a host of people interested in marine algae, people whom authorities on algae have rarely considered in their writings.

The book bears a certain limited similarity to the late Dr. E. Yale Dawson's popular *How to Know the Seaweeds* (Wm. C. Brown Co., 1956) but it is so different in many ways that count, and these differences establish for it a new standard of excellence for books of its kind on algae.

About 130 of the most common species of the Cape Cod region are delineated in detail in as many "essays" in which are incorporated an informal description accompanied by a wealth of information and observations of the author, the product of many years of sensitive insight into the ecology of these plants. Of major importance to the value of the book as a means of identification are ninety habit sketches by Edward and Marcia Norman. But the real contribution is in the author's species essays, for these contain a potpourri of facts and opinion, some of it previously unpublished or obscurely so. For this reason, Dr. Kingsbury's book will also be read and appreciated by his professional colleagues.

Like almost any other book, this one has a few things that permit reviewers to be supercilious: On page six the author slipped into "different.....than"; he fails to mention the special value of waxed paper (and its superiority in some cases) in place of cloth in preparing mounted specimens (page 8), or of the value of simply air-drying delicate species; on page 10 under "Plant-like animals" ("Others form erect, feathery colonies..."), the antecedent of others can be construed to be bryozoans, but *Sertularia* is a hydroid; eel grass is said to extend from Greenland to South Carolina, but this reviewer knows of no records of its occurrence south of Bogue Sound, N.C.; K. C. Fan in his 1956 revision of the genus *Calothrix*, apparently regards *C. scopulorum* as a synonym of *C. crustacea*; and Francis Drouet in his *Revision... of the Oscillatoriaceae* (Phila. Acad., 1968) has relegated the genus *Lyngbya* to synonymy; in the essay on *Sargassum* there is no indication that the two species characteristic of the Sargasso Sea never grew attached anywhere.

Dr. Kingsbury has done a most creditable job on this new book, and we predict that its sales and popularity will support this opinion.

--Harold J. Humm  
Marine Science Institute,  
University of South Florida  
St. Petersburg



*Studies in Phycology*. Bohuslav Fott, Ed. Published for Academia, Publishing House of the Czechoslovak Academy of Sciences by E. Schwiezerbart'sche Verlagsbuchhandlung, Stuttgart, 1969. 304 pp. \$12.80.

The papers in this volume present the work of several botanists who have a major interest in algal morphology and development as criteria for taxonomy. Edited by Prof. Dr. Bohuslav Fott, Professor of Cryptogamic Botany at the Charles University in Prague and Head of the Department of Botany and of the Phycological Laboratory at the Czechoslovakian Faculty of Sciences, the book serves to clarify the classification of certain genera of algae, which are economically important and useful in basic research as well. Rather than giving only cursory attention to a large number of genera, the book concentrates on only a few—*Chlorella*, *Scenedesmus*, *Ankistrodesmus*, *Monoraphidium*, *Oocystis* and *Pediastrum*—which are used often in mass cultivation and which are primary producers in natural environments.

Perhaps the most impressive aspects of the book are the thoroughness and careful attention to detail which characterize the authors' efforts. The six papers may be divided into two categories: those studies initiated in Prof. Fott's laboratory, and which deal primarily with morphology, ecology and taxonomy; and those performed in the Laboratory of Experimental Algology, Tréboň, under the direction of Dr. J. Komarek, and which are concerned with field experiments on open-air culture.

(continued on page 5)

# MINUTES OF THE 1969 ANNUAL BUSINESS MEETING IN SEATTLE, WASHINGTON

The meeting was called to order by President Bruce Parker at 4:00 PM, August 27, 1969. Approximately 100 members were present.

President Parker pointed out that only two members of the Executive Committee had been able to attend the meeting; therefore, any business conducted at the Annual Meeting should be referred back to the other Executive Committee members for their approval.

The Secretary's membership report was accepted. As of August, there were 726 individual and joint subscribers and 266 institutional subscribers. This represents a 20% increase in total subscriptions since the previous membership report. A new membership roster will appear as a supplement to the September issue of the Journal of Psychology.

Dr. Nichols submitted the Treasurer's Report which was distributed and accepted.

## Financial Report for the PSYCHOLOGICAL SOCIETY OF AMERICA, INC. For the period August 26, 1968 through August 20, 1969

BALANCE ON HAND (August 20, 1968) \$ 1,443.35

### INCOME:

For the period August 20, 1968 through August 20, 1969:  
Dues (Students, individuals, libraries, and sale of back issues) \$13,732.94  
Sale of Reprints (net) - voluntary dues charges - Journal of Psychology 4,311.87  
Dividend (A.I.H.S.) 29.00  
Gifts to the Society 1,045.00  
Sale of Banquet tickets (A.I.H.S., 1968) 296.10

GRAND TOTAL \$20,818.11

### EXPENDITURES:

Banquet expenses (A.I.H.S., 1968) \$ 283.50  
Postage 30.00  
Reprints from Vol. 4, #2 Journal of Psychology 745.35  
Journal of Psychology, Vol. 4, #1 2,380.84  
Reprints from Vol. 4, #3 508.30  
Psychological Newsletter (Vol. 4, #3) 208.20  
Invoice stationery \$ 6.80  
Postage (stationery) 100.00  
Refund for membership cancellation 20.00  
Telephone service - all officers 57.48  
Journal of Psychology, Vol. 4, #4 4,079.65  
Addressograph Service and postage 120.28  
A.I.H.S. Membership dues 400.00  
Psychological Newsletter (Vol. 5, #1) 257.98  
Journal of Psychology, Vol. 5, #1 and Reprints from Vol. 4, #4 4,139.16  
International Congress expenses 500.00  
Psychological Newsletter, (Vol. 5, #2) 208.48  
Mailing to membership for 1969 Election of Officers 58.80  
Bank collection of dues on foreign checks 81.16

TOTAL EXPENDITURES \$14,248.02

TOTAL INCOME \$20,840.11

TOTAL EXPENDITURES \$14,248.02

### TOTAL ASSETS OF THE SOCIETY (to date) -

Savings Account Balance \$ 6,188.20  
Check Book Balance (August 20, 1969) \$ 6,600.10

GRAND TOTAL \$12,788.48

### COMMENTS FROM THE TREASURER

The financial report for the Psychological Society of America, Inc., reflects several substantial changes which have been initiated during the past two years. First, our elevated dues rates for individual and institutional membership and the increased page charges for the Journal have certainly aided in the solution of some of our financial problems. Secondly, I have been able to collect individual and especially institutional delinquent dues and other debts of long standing to the Society. Finally, contributions, new members and somewhat stringent budgetary measures have combined to maintain financial stability and meet rising costs of publication of our Journal and Newsletter. It is indeed a pleasure to present to the Society a financial report which is not as pessimistic as those previously given.

Respectfully submitted,

H. Wayne Nichols,  
Treasurer

The report of the Editor of the Journal of Psychology was read and accepted. Dr. Provasoli intends to keep the pagination of the Journal of about 350-400 for Volume 5.

The cost per issue (90 pages) is averaging about \$3300. Much of the cost is defrayed by page charges and the sale of reprints. It was announced that Dr. Provasoli's 5-yr. term as Editor expires this December and Dr. Papenfuss then moved that Dr. Provasoli be reappointed for a second 5-yr. term. The motion carried unanimously. The following statement was then read:

The Psychological Society of America expresses its sincere thanks to its Journal Editor, Luigi Provasoli, for his efforts toward establishing and maintaining our Journal over the past five years, 1964-69. We commend him for his ever-increasing enthusiasm and support of our Journal, for being instrumental in enlarging it and improving the quality of its contributions, and for the sacrifice of his time and a part of his career in the interest of our Society.

Reports from the representatives of other Societies were presented. Dr. Robert Krauss, the AIBS representative, explained the philosophy behind the proposed 1970 National Biological Congress which is being sponsored by the AIBS. He strongly urged that the Psychological Society take an active part. A motion instructing the President to appoint a committee to determine the appropriate participation of the Psychological Society in the National Biological Congress was introduced and carried. A summary of the report of the National Research Council-Division of Biology and Agriculture representative, Dr. Raymond Galloway, was read. Problems discussed at the NRC meeting included the support of research, pollution, second-class status of applied researchers, and non-military applications of atomic energy. Dr. Roy Holton, the AAAS representative, reported that there was a very active discussion concerning the long-term as well as the short-range effects of herbicides at the December meetings. He also mentioned that reorganization of the Council of the AAAS would be likely in the future.

Dr. Janet Stein reported on the status of the Psychological Techniques Workbook. The first volume will be concerned with culture methods and growth measurements. Contributors have been contacted and it is hoped that the first volume will be published by January, 1972.

A summary of the report from Dr. Cornelius Weber on the activities of the Committee on Literature Services was read. In it, he strongly urged the establishment of a computerized literature service and pointed out that much of the background work for such a system has already been done by various agencies. In the discussion which followed, the question of cost and funding was raised. Dr. Isabella Abbott announced that the International Psychological Society was discussing the same problem and suggested that the Committee contact the IPS. Other points which were brought out in the discussion included the inadequacy of present systems similar to Biological Abstracts and the necessity for a cooperative effort by psychologists on a global basis. It was felt that the Committee should continue its exploration of a suitable retrieval system and that it should coordinate its efforts with those of the IPS.

The future of the Psychological Newsletter was discussed next. The Secretary reported that about 35 people responded to the request for viewpoints and that most were strongly in favor of maintaining the Newsletter. However, some felt that it should be continued in a less expensive form. Dr. Papenfuss moved that the Newsletter be published twice a year in mimeographed form. Some members wished more frequent publication and the motion was amended to remove the stipulation concerning frequency of publication. The motion was passed. A motion to discontinue the Newsletter in any form was unanimously defeated. It was announced that our current Newsletter Editor, Dr. Patricia Wolfe, is resigning and the Executive Committee will therefore be searching for a successor who will be as devoted and capable as Pat has been.

It was voted to hold the next Annual Meeting during the 1970 AIBS meetings in Bloomington, Indiana. The possibility of meeting with the Botanical Society of America and related societies in Edmonton, Alberta in June 1971 was discussed. The sentiment of the membership was that the Psychological Society should meet with the Botanical Society instead of with the AIBS in 1971.

President Parker expressed the thanks of the Society to our Committee on Local Arrangements (Dr. Richard Norris, Dr. George Papenfuss and Dr. Janet Stein) for their efforts in organizing the Banquet. He then reported on the results of his campaign to obtain funds from foundations and industrial organizations to subsidize the Banquet and to bolster the financial status of the Society. A total of \$1100 from these sources as well as \$100 from donations by members was received. The membership approved allocation of \$600-700 to support the Banquet.

In appreciation for their significant financial contribution, the Foundation for Microbiology and the Soap and Detergent Association were elected as Sponsors of the Society. President Parker announced that plans for establishing a permanent archival for Society records are still being worked upon.

No applications for life membership have been received and it was felt that the dues (\$350) might be too high. A suggestion to lower the life membership dues was faded for future discussion.

The Secretary distributed copies of proposed amendments to the By-Laws and requested comments on them before submitting them to the general membership for approval. The new Officers for 1970 were announced. The new President will be Dr. Ralph Lewin; the Vice-President, Dr. Philip Cook; and the Secretary, Dr. Patricia Wolfe. R. Grates-Volz, V. Proctor and D. Chagnon were elected to the Editorial Board. The new members of the Editorial Board who are appointed by the Editor have yet to be announced.

After a few brief announcements, the meeting was adjourned.

Respectfully submitted,

Philip W. Cook,  
Secretary

# News of Members

## ● Richardson to Miami

Norman Richardson recently completed his Ph.D. degree at the University of California, Irvine, under the direction of Peter S. Dixon. He is now Assistant Professor of Biology at the University of Miami, Coral Gables, Florida, where he is teaching marine phyecology, marine ecology, and participating in the Organization of Tropical Studies program in Costa Rica in the summer.

## ● Drum Moves to UCLA

Ryan W. Drum is Visiting Assistant Professor of Botany at UCLA this year, where he is teaching marine botany and special topics in phyecology. He has been at the University of Massachusetts, Amherst.

## ● Stein on Leave, Travels

Janet R. Stein is on leave from the University of British Columbia this year and is traveling and visiting laboratories in Australia. She will return to UBC in the spring.

## ● Hilton to Baltimore

Richard L. Hilton, Jr., has recently completed his Ph.D. degree at the University of Arizona, Tucson, and is now Assistant Professor in the Department of Biological Sciences at Towson State College, Baltimore, Maryland.

## ● Rosowski Accepts Post at Nebraska

James R. Rosowski has begun his tenure as Assistant Professor of Botany at the University of Nebraska, Lincoln. He completed his Ph.D. degree last year at the University of Arizona under the direction of Dr. Robert Hoshaw.

## ● Raschke Returns, Goes to Rutgers

Ronald L. Raschke returned to the United States in September after a year in Australia as a Fulbright postdoctoral fellow. He is now Assistant Professor of Botany at Rutgers University, New Brunswick, N.J.

## ● Hostetter to Flagstaff

H.P. Hostetter, who finished his Ph.D. degree at the University of Arizona last spring, is Assistant Professor of Biological Sciences at Northern Arizona University, Flagstaff.

## ● Wells Moves to Lenoir Rhyne

Charles V. Wells has accepted a position as Assistant Professor of Biology at Lenoir Rhyne College, Hickory, North Carolina. He recently completed requirements for the Ph.D. degree at the University of Arizona, Tucson.

## ● Cook on Sabbatical; Studies, Travels

Philip W. Cook, PSA Secretary and Vice-President elect, is on leave from the University of Vermont. He is currently engaged in study and research at the University of California, Berkeley, and later in the year plans some travel in Australia and other places "down under."

# RESEARCH TOPICS UNDER INVESTIGATION

This is a continuing effort to promote communication among those engaged in phyecological research. Please feel free to write to the investigator or to the laboratory directly.

## \*The University of Arizona, Tucson

HOSHAW, R. W.

Biology of the filamentous conjugating algae  
Marine Algae of the Gulf of California

Clay, W. F. (Ph.D. candidate)

Biochemistry of senescence in *Chlamydomonas*

Dennis, A. E. (Ph.D. candidate)

Speciation in *Sirogonium*

Duewer, E. A. (Ph.D. candidate)

Taxonomy of the lichen *Acarospora* with special reference to the phycobiont *Trebouxia*

Kennedy, F. G. (Ph.D. candidate)

Morphology and cytology of *Mougeotia*

Miller, R. D. (Ph.D. candidate)

Hormonal control of conjugation in *Zygnema*

Staker, R. D. (M.S. candidate)

Environmental control of cell division in *Zygnema*

## \*Louisiana State University, New Orleans

DEMPSEY L. THOMAS

Isoenzymes of *Chlamydomonas* mating types.

Isoenzymes of selected chlorosphaeracean algae.

## \*Universidad de Concepcion, Chile

D. H. KIM

A 10-year research contract between the University of Concepcion and the Institute of Fisheries Development (Instituto de Fomento Pesquero) of Chile has allowed the establishment of an Algological Research Center in Chile. Under the title "Industrial Marine Algae on the Chilean Coast," major attention is given to research on the application and utilization of marine algae abundant in Chile, especially, *Gracilaria*, *Gelidium*, *Iridaea*, *Gigartina*, *Chondrus*, *Macrocystis*, *Durvillaea* and *Lessonia*. The program of research was largely planned to solve biological and technological problems concerned with *Gracilaria*. The research contract will contribute to the collection of Chilean algal specimens (formalin preserved and pressed material), for exchange with other institutions which possess especially subantarctic cool-temperate marine algae. Contact with other phyecologists, taxonomists to biochemists, would be greatly appreciated, and the donation of pertinent reprints or herbarium specimens of marine algae would be especially welcome.

Please direct inquiries to: Senor Dong Ho Kim P., Laboratorio de Algas, Instituto Central de Biologia, Universidad de Concepcion, Casilla 1367 - Concepcion, Chile.

(continued on page 5)

# FOREIGN GUESTS, PAST PRESIDENTS GRACE BANQUET TABLE

Dr. Richard Norris and his committee are to be commended for their excellent organization of the Phyecological Society of America's banquet, at the recent International Botanical Congress in Seattle. Past presidents of PSA, who were present at the banquet included Drs. G.F. Papenfuss, 1956-57; L.A. Whitford, 1957-58; P.C. Silva, 1958-59; R.C. Starr, 1959-60; William Dally, 1962-63; R.W. Krauss, 1963-64; Janet Stein, 1965-66;

W.R. Herndon, 1966-67; F.R. Trainor, 1968-69.

Foreign guests attending the PSA banquet were: Mr. C. E. M. Bicudo (Brazil), Dr. & Mrs. A. Donald Honey (Great Britain), Dr. & Mrs. V. J. Chapman (New Zealand), Dr. T. Christensen (Denmark), Dr. Elsie Conway (Great Britain), Dr. John D. Dodge (Great Britain), Dr. Sophie Docker (Australia), Dr. P. Fay (Great Britain), Dr. & Mrs. Jean L. Feldman (France), Dr. B. Folt (Czechoslovakia), Dr. Lisbeth Fries (Sweden), Mr. & Mrs. (Paulotte) Grayral (France), Dr. Maude B. E. Godward (Great Britain), Dr. H. Hirose (Japan), Dr.

Joanna M. Jones (Great Britain), Dr. A. Kylin (Sweden), Dr. G. W. Lawson (Ghana), Dr. Susan Loiseux (France), Dr. F. Magne (France), Dr. K. Mikrakis (Greece), Dr. Betty Moss (Great Britain), Dr. Mary A. Pocock (South Africa), Dr. & Mrs. K. Ross (Great Britain), Dr. M. Sasaki (Japan), Dr. R. N. Singh (India), Dr. Alena Sladeckova (Czechoslovakia), Dr. W. D. P. Stewart (Great Britain), Miss Nordelle Ugenco (Philippines), Dr. H. A. von Storch (Germany), Dr. A. E. Walsby (Great Britain), Dr. Elise M. Wollaston (Australia), and Dr. & Mrs. H. B. S. Womersley (Australia).

(continued from page 4)

### \*Memorial University of Newfoundland, Canada

G. ROBIN SOUTH (Phycology)

Distribution and ecology of marine algae of Newfoundland & Labrador. Annotated Check-List of Marine Algae of Eastern Canada. Guide to Common Seaweeds of Newfoundland (in co-operation with the Newfoundland Government).

Culture / autecology / taxonomy of selected N. Atlantic macrophytes. (Research Assistant: Richard D. Hill)

Alan Whittick (Ph.D.)

Ecology and taxonomy of N.W. Atlantic species of *Alaria*.

Robert N. Stevenson (M.Sc.)

Aspects of the biology of the algal symbionts of *Placopecton magellanicus* (Gmelin).

CHARLES C. DAVIS (Planktology)

Seasonal Phytoplankton distribution in selected Newfoundland ponds.

Maxine Parsons (M.Sc.)

Eutrophication of Newfoundland Bays and Harbours as indicated by phytoplankton quantities.

Frank Murphy (prospective M.Sc.)

L.B.P. Program. Primary Productivity in the Gulf of St. Lawrence.

A quantitative study of algae and animals of an intertidal reef at Bonne Bay, Newfoundland.

GEORGE MOSKOVITS (Marine Microbiology)

Ecology of Marine Bacteria and Marine Phytoplankton. Phytoplankton / Bacteria interactions.

Y.H. Lin (M.Sc.)

Seasonal distribution of Diatoms and Armoured Dinoflagellates at Logy Bay, Newfoundland.



Photograph—Memorial University of Newfoundland, Marine Sciences Research Laboratory, Logy Bay.

### BOOK REVIEWS (continued from page 2)

For all of the studies, there is repeated emphasis on the importance of complete life histories and of detailed, methodic analyses of algal morphology under various environmental conditions, as necessary precludes to reliable taxonomy. Proper classification of organisms is, in turn, put forth as the basis for further studies of a physiological, cytological or ecological nature. The Editor suggests, for example, that even mass culture of algae and field studies require that the organisms be well-defined taxonomically and that this is accomplished by studying morphological variability caused by changing conditions.

Initial studies of morphology and taxonomy were based on material collected from nature, demonstrating variability under natural conditions. Subsequent investigations were done in the laboratory on organisms in culture, and the resulting morphological changes in various artificial media were analyzed. Thus, both constant and variable characteristics were distinguished, and the latter were excluded from use in identification keys.

Dr. Fott's paper on *Chlorella* provides a much-needed monograph of the genus based primarily on morphological characteristics, as opposed to many earlier papers based largely on physiological criteria. It is clear that this monograph, which could well serve as a model for other monographs, represents a thorough and careful study. The descriptive data, together with the drawings and keys, will make this an especially valuable reference for those studying *Chlorella*.

Despite the variety of papers which have been published on *Ankistrodesmus*, *Oocystis* and *Pediastrum*, there remains considerable controversy over the systematics of these genera. The contributions by Komarkova-Legnerova, Rehakova, and Sulek, respectively, are informative and especially valuable treatises on the above genera, since they, like Fott's, are based largely on morphological data. Unlike so many papers which have obviously been written in haste, these papers are particularly refreshing because the carefulness and in-depth nature of their work is evident. In addition to helpful drawings, each paper contains an extensive and pertinent bibliography.

Ecologists, hydrobiologists and water economists should be interested in the papers on open-air mass culture of *Scenedesmus* by Komarek and Ruzicka, and by Simmer. Many data on factors influencing biomass are presented in graphic and tabular form; photographs and line drawings of apparatus are included.

This is an interesting and informative book. The papers, in English or in German, are good, some excellent. While the book is not likely to be used as a text in a general course in phycology, the data presented on certain economically important genera should be highly useful to biologists who use these and similar organisms in their research programs. The entire book should be a valuable reference source for students, professional researchers, and scientific libraries.

Patricia L. Walne, Department of Botany,  
University of Tennessee, Knoxville

### Deadline for Next Issue Set at January 9

All materials to be included in the February, 1970, issue of the Newsletter must be received no later than January 9, 1970. Copy should be typed and double-spaced throughout. Since a new Editor has not yet been named, please continue to submit your entries to the present Editor, who will forward materials to the new Editor, when selected. Remember the January 9 deadline!

### BOTANICAL SOCIETY SEEKS SECTION REORGANIZATION

At the recent Council Meeting of the Botanical Society, there was some criticism of officers of other societies serving as section officers within the Botanical Society. At the present time, the President and Secretary of the PSA also act as officers of the Phycological Section within the Botanical Society. Although a majority of members within the Phycological Section (most of whom are also PSA members) favored the present arrangement in a recent questionnaire, it now seems desirable to proceed with plans to establish by-laws and elect separate officers. Any PSA members who are also members of the Botanical Society are invited to send suggestions for organization of the Phycological Society to Philip W. Cook, Department of Botany, University of California, Berkeley, California.

- P.W. Cook

## Thirty-five on Post-Congress Field Trip

Drs. Richard Norris and Maurice Dube organized and led some 35 enthusiastic participants from all parts of the world on a field trip of several days duration after the International Botanical Congress. The group moved along the Pacific coast and spent some time at the marine labs at Friday Harbor. Phil Cook reported that *Postelsia* was the hit of the trip, but that there were many other interesting algae as well.

### GERMAN INSTITUTE PRODUCES BOTANICAL FILMS

A wide variety of film for teaching and research purposes are available for purchase or rental from the Institut für den Wissenschaftlichen Film, Göttingen, West Germany (Institute for the Production of Scientific Films). At present, there are 16 titles on algae alone, including Differentiation and Growth of *Micrasterias denticulata*, Asexual Reproduction in *Chlamydomonas reinhardtii*, and Sexual Reproduction of the Diatom *Stephanopyxis turris*. Other films cover topics in bacteria, fungi, mosses, ferns and higher plants.

The catalogue listings divide the films into two categories—E or Encyclopedia films, which are without spoken commentary, but most of them come with an explanatory paper, and C or teaching films, which have a spoken commentary in English or German. The C films may be obtained only from the Institut für den Wissenschaftlichen Film, 3400 Göttingen, Nonnenstieg 72, West Germany. E films may be obtained either from Göttingen or from Audio-Visual Services, The Pennsylvania State University, 6 Willard Building, University Park, Pennsylvania 16802. Further information, catalogues, price lists may be obtained from either of the above addresses.

### BRITISH PHYCOLOGICAL SOCIETY INVITES NEW MEMBERS

The British Phycological Society invites interested persons to apply for membership. The Society is sponsoring the preparation of a new British Marine Algal Flora; biological studies of selected algae are being produced; a distribution maps scheme for marine algae is being planned. Two meetings are held each year—two days of papers in London in January, and later in the year a second meeting with some special emphasis, such as ultra-structure or algal ecology. Annual dues are \$8 for regular members; \$5.50 for full-time students; or \$3 for students who do not wish to receive the *Journal*. Further information and forms may be obtained from Dr. John Dodge, Hon. Secretary, Department of Botany, Birkbeck College, Mallet Street, London, W.C.1.

(continued from page 2)

Division and Order. Details of reproduction, structure and growth pattern are given, together with essays on the ecology of seaweeds and their importance to man.

- "Studies in Phycology." 1969. Bohuslav Polt, Editor. E. Schweizerbart'sche Verlagsbuchhandlung, Stuttgart. 304 pp., 32 figs., 67 pl., 14 t. \$12.80. (See review elsewhere in *Newsletter*)

This book serves to clarify the taxonomy of several algal genera by careful analyses of their morphology and ontogeny, by good descriptions and drawings. Important for general research as well as for economic applications, the "Studies" aid in reliable identification of species and provide sound bases for physiological, cytological & ecological research.

Phycological Newsletter  
October, 1969 Volume 5, No. 3

Non-Profit Org.  
U.S. Postage  
PAID  
Permit No. 220  
Knoxville, Tennessee

Department of Botany  
The University of Tennessee  
Knoxville, Tennessee 37916  
Editor: Patricia L. Walne

Printed by Graphic Arts Service, Knoxville, Tennessee 37916

