

NEWSLETTER

American Association of Stratigraphic Palynologists, Inc.

VOLUME 12 DECEMBER, 1978 NUMBER 1 Texas A&M University Ray Christopher Vaughn M. Bryant, Jr. College Station, TX 77843 Assistant Editor Editor

PRESIDENT'S MESSAGE

I have just returned from our successful llth Annual Meeting in Phoenix, Arizona and would like to share two thoughts with you. First, is the A.A.S.P. isolated from the main stream of earth science, and second, the subject of outstanding student paper award.

The Association is eleven years old and by all measures has been and continues to be a successful scientific society. Membership has grown to over 500 The Association is eleven years old and by all measures has been and continues to be a successful scientific society. Membership has grown to over 500 from an initial 30 founding members. We host outstanding meetings and publish our own journal. The question has been raised, are we becoming isolated from the mainstream of the earth sciences by continuing to meet separately as we have in the past? We don't now appear to need anyone else, but is this a healthy situation for the continued expansion and acceptance of stratigraphic palynology? Should we not attempt to correct this situation by exploring possibilities of joint meetings with varied groups of earth scientists such as A.A.P.G., G.S.A., or other similar societies? This course would necessitate a changed format from our annual meeting. It is not enough to communicate with each other, age date strata, make time-rock correlations and solve nomenclatural problems internally. Most other earth scientists don't take palynology very seriously, because they don't know how versatile and effective is this paleontologic technique. It is our challenge as palynologists and members of A.A.S.P. to change this situation.

outstanding student paper award was not given in Phoenix for the following reasons: poor quality of slides that could not be read from the audience and the papers going far overtime allowing no time for questions. You will note the award is for "outstanding student paper" and in the opinion of the Judging Committee, none was presented for the reasons given. This clear statement by the Judging Committee should alert faculty of the need to improve their students presentations. The award is two years paid dues in A.A.S.P., a complete set of spure genera cards and an inscribed award certificate. These incentives appear more than adequate to encourage student participation.

Jack D. Burgess

EXECUTIVE MEETING

The AASP Board of Directors held meetings on Oct. 24th and Oct. 27th at the Del Webb Townhouse in Phoenix, Arizona. Minutes of the meeting are available from our Secretary-Treasurer, John Clendening.

1) Accepted the Membership Report. Total membership in AASP is now 511. Of these, 71 are Institutional Memberships and 3 are Honorary Memberships. This represents a decrease of 44 members from the 1977 total of 555 AASP members. The decline is the result of 53 members which were still delinquent in paying their 1978 dues as of Oct. 1. As stated in our By-laws, they have been dropped from the membership list.
2) Accepted the Treasurer's Report. Total assets of AASP Inc. as of Oct. 24th were \$7,061.20. This is our balance after paying the AASP Foundation for the publication and mailing of volume 2 of Palynology which cost \$10,685.
3) Accepted the Editor's Report. During the last year four Newsletters were published (Vol 11) and a Membership Directory was mailed to each member. Vol 2 of Palynology was printed and distributed to the members attending the annual meeting. Other copies have been sent to the rest of the membership. Vol 3 of Palynology is ready to be delivered to the printers and should be in production very shortly. We are hoping that Vol 3 will be printed and distributed to the membership by the carly summer of 1979. The 1978 Membership Directory will be mailed to the membership before the end of December.
4) Copies of a revised version of the AASP By-Laws were circulated among the Board of Directors by Norm Norton. Copies of the revised By-Laws will be sent to the membership for their consideration in the near future.
5) AASP Contribution Series 5b and 5c. Progress on AASP Contribution Series 5b (Mesozoic Palynology) is now in the final stages of typing. The AASP Foundation plans to complete this volume and have it ready for distribution during the first quarter of 1979. It now appears that Vol 5c (Paleo-zoic-Palynology) will not be published. Papers in that volume are being included in our journal Palynology.
6) Accepted the AAPG Cosuna Committee report by Barbara Whitney. She reported that 12 AASP members responded to the questionnaire in this Newsletter.
(questionnaire attached). Barbara Whitney a

- 7) AASP Foundation Report. Bob Clarke reported that the AASP Foundation had a balance of \$3,067.85 as of Oct. 23rd. He reported that the income for 1978 totaled \$3,481.00 and resulted from the sale of publications and private donations. Expenses for 1978 totaled \$982.46, primarily for postage

3) Ballot Committee Report. Norm Frederiksen reported that the AASP membership elected the following members to the AASP Board of Directors:

Tresident: Jack D. Burgess
Vice President: Evan J. Kidson
Secretary-Treasurer: John A. Clendening
Editor: Vaudhn M. Bryant Jr.
Councilors: William C. Elsik
John E. Bennett

Jocelyne A. Legault

9) 1979 Mid-year Executive Committee Meeting will be in Houston, Texas on April 19-20. Any member of AASP is welcome to attend and can obtain more specific details on the meeting from President Burgess.

10) Nomination Committee for 1978-1979 consists of:
Chairperson: Carol Chmura
Member: Art Cohen
Don Englehardt
Pay Landin

Ray Landin

Dave Wall 11) The Ballot Committee for 1978-1979 will consist of:

Chairperson: Jocelyne Legault Member: Geoffrey Norris

Member: decirrey worrs
John McAndrews
Reviewed plans for the 12th annual meeting (1979) to be held in Dallas, Texas. Report presented by H.M. (Bud) Simpson
Reviewed plans for the 13th annual meeting (1980) to be held in Denver, Colorado. Reports presented by Karl Newman.
Reviewed discussion of holding the 14th annual meeting (1981) in New Orleans. No formal report was presented.
Planning Brochure for Palynologists. Bill Elsik suggested that AASP produce a brochure which could help explain the field of palynology as a career option. He and Norm Frederickson will begin working on this idea. They would welcome any suggestions.

NOTE OF APPRECIATION

Perhaps it was the climate, but I suspect it was the local meeting committee chairman Jim Canright that was responsible for an atmosphere of efficient organization at the 11th Annual Meeting of the AASP in Phoenix this past October. The meeting and its environment was totally enjoyable, from the poolside chatter to forced marches down the strip for Mexican food. And who will ever forget that memorable evening under the stars, good food, good drink, good music, a roaring fire - and a shootout?

Jim's capable staff consisted of:

Registration: Peggy Canright, Jan Gish, Susan Jacobs and John Shane. Smiling faces all.

Projectionist: Bill Baxendale. Bill, you exhibited remarkable cool under fire. You did a great job.

Session Chairmen: Vaughn Bryant, Don Engelhardt, Bob Kosanke and Manny Nieves. Like clockwork, and some of the lighter side, too.

Student Paper Judges: Bill Benninghoff, Karl Newman, Doug Nichols and Ken Piel. A special thanks for your perseverance.

Symposia Convenors: John Clendening and Jim Schoenwetter. The meeting got off to a great start with the drawing power of Wednesday's symposia

and speakers.

Field Trip Leaders: Doug Brew and Don Elston.

Townehouse Convention and Catering Managers: Harry Westgate and Charlene Frey.

Jim, as immediate past-president of AASP it is a pleasure to acknowledge your efforts and I extend to you the appreciation of the members. Well done.

Thanks also to the members and friends from overseas who attended. Your presence added a special flavor to the meeting,

Basil Balme, Nedlands, Australia Raymonde Bonefille, Marseilles, France Javier Cachan-Santos, Leon, Spain Fritz Cramer, Leon, Spain Catherine Croxton, Copenhagen, Denmark Catherine Croxton, Copenhagen, Denmark
Christopher Denison, Llanrhos, Wales
John Filatoff, Tehran, Iran
Michael Fisher, Glasgow, Scotland
Robin Helby and children, Sydney, Australia
Tseng-Chieng Huange, Taipei, Taiwan
Peter Hochuli and wife, Zurich, Switzerland
Vernon Hunter, Bogota, Colombia
Serne Jadine Rousens France Vernon Hunter, Bogota, Colombia Serge Jardine, Boussens, France Helene Martin, Kinsington, Australia Roger Morgan, Sydney, Australia Jan Muller, Leiden, The Netherlands John and Ann Rowley, Stockholm, Sweden Sukla Sengupta, Calcutta, India Robert Turner, Leeds, England Richard Tyson, Milton Keynes, England Graeme Wilson, Lower Hutt, New Zealand Julie Wiseman, Perth, Australia Volkan Ediger and wife, Ankara, Turkey

Dr. Basil E. Balme, University of Western Australia, received the first annual ROADRUNNER AMARD for traveling the greatest distance to be with us. By only a few miles, however, for the runner-up was Julie Wiseman. Basil received a belt buckle embellished with the southwest's legendary bird the road-runner. Jim, that was a nice addition to the meeting.

A special thanks goes to Bob Clarke. Bob was eminently evident throughout the meeting, setting up the AASP Publications Booth, spreading palynology to interested passers-by, and seeing that all AASP members at the meeting received their copy of PALYNOLOGY II. Bob, you made it look so easy!

My personal thanks to Rick Pierce. My term of office this past year was made easier by Rick's communications. He has served five consecutive terms on the Board and it is hard to realize that he is stepping down - Rick, that pasture is just a mirage and you'll be as involved in AASP just as in the many years past.

Bill Flsik





Norman J. Norton

Robert T. Clarke

RECEIVE SPECIAL AWARDS AT 11TH ANNUAL MEETING

This recognition was accorded Bob and Norm in appreciation of their long and outstanding service to AASP.

In lieu of a presidential address it was my privilege to pay tribute, on behalf of AASP, to two dedicated people, at the 11th annual business luncheon. At the April 1978 Mid-Year Meeting in San Antonio, the Board of Directors, by unanimous vote, charged me with acknowledging, and commending, the outstanding contributions to AASP of Bob Clarke and Norman Norton. Bob and Norm have given meritoriously of their time and talent far above the usual in the furtherance of AASP, AASP Inc., and AASP Foundation literally years of service.

They were both involved in the birth pains of AASP, and our maturation into an international organization. Their continued furtherance of AASP goals has culminated in their respective appointments to the AASP Foundation, but their service is evidenced in many ways.

Did you all get a chance to see Bob setting up the publications table Wednesday? He is truly fulfilling the objectives of AASP, and is spreading the palynologic word to attendees of the agricultural and other functions here this week.

Bob doesn't have enough to do as Mobil's Training Coordinator, or at home independently printing a philatelic newsletter, or with his many personal involvements, so he's having an affair with AASP. Bob Clarke is something special. He has held practically every office in AASP, Inc. Perhaps every office, un officio. As keeper of the mailing list, that horrendous mass of names and addresses that undergoes weekly changes, he has been the linkpin in communications with the membership. Bob is resourceful - once, physically unable to attend an executive meeting, he hung in there via taped messages.

Through the years Bob has coordinated all the legal work for incorporating AASP and establishing the AASP Foundation, of which he is now treasurer. His contributions in retrospect are, and continue to be, overwhelming, and perhaps we should pause for a few moments of shared contemplation.

To you, Bob Clarke, we express our deepest appreciation for your love and care, from the inception of AASP.

Norm has become a devotee of Texas- Mexican food, and we hear that he may move to Texas to indulge his palate. Norm could still be down in Houston eating Friday afternoon cakes with baked-in surprises, but he's chosen rather to have a significant life, and he and Bette are now at Ball State University where Norm has just recently been appointed vice-president.

Norm has kept a low profile in terms of AASP council and board candidacy, but his dedication has nevertheless seen him present at practically every meeting of the board. He has worked staunchly through two by-laws committees, the original, through hammer and forge, and the current revisions for which he is mainly responsible.

Norm just this past year completed the collation and transferral of a decade of AASP paperwork to the Hunt Botanical Library, now AASP's official archive. He is continuing in that capacity. Norman Norton is largely responsible for the evolution of the AASP Foundation, of which he is president, having spent years laying the goundwork as chairman of the financial developments committee.

Both Norm and Bob recieved scrolls with the AASP emblem and the designation as noted in first paragraph above. They are both very deserving of this special recognition.

Bill Flsik

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WORKSHOP ON FOSSIL FUNGAL SPORES

Under the auspices of the AASP Study Group/Stratigraphic Occurrence of Fungal Spores, a WORKSHOP ON THE MORPHOLOGY AND CLASSIFICATION OF FOSSIL FUNGAL SPORES AND RELATED MATERIAL is tentatively planned for April 25-27, 1979. Alan Graham and Kent State University will host the workshop to be held on the Kent State campus in Kent, Ohio. It is planned to have a half day of presentations on the topics of fungal spore morphology, terminology and classification, followed by group discussion towards the objectives of agreeing upon a standardized terminology and classification. Results of the workshop, including an illustrated glossary, will be submitted for acceptance in the AASP Contribution Series. This workshop is in the planning stages. Anyone interested in attending/presentation should contact Bill Elsik, chairman of the study group.

GENERA FILE OF FOSSIL SPORES TO BE AWARDED RECIPIENTS OF AASP OUTSTAND-

ING STUDENT PAPER AWARD

For the next several years Jan Jansonius and Len Hills will give to the recipients of the Outstanding Student Paper Award a copy of their Genera File of Fossil Spores, a special publication of the Department of Geology at the University of Calgary. They will consider the continuation of that award (the card file) after a trial period. The AASP Board of Directors commends their professional spirit.

PROCEEDINGS OF FIRST SEVEN ANNUAL MEETINGS NOW

AVAILABLE FROM AASP FOUNDATION

The AASP Foundation has purchased a number of Proceedings volumes from each of the first seven Annual Meetings. These were published by the Louisiana State University School of Geoscience in their Geoscience and Man series. Many current AASP members have not been members since "year one" and therefore may not have all the back issues of the Proceedings. These Proceedings were our principal publication and its format and quality is similar to Palynology. The Foundation Trustees decided to make them available with our other publications so that it would be easier for you to order from a single source. A detailed description is given in the list of available publications which is included here in the December Newsletter. An order form is also provided. If you want additional information covering these publications just drop a note to: Robert T. Clarke, Treasurer, AASP Foundation, Mobil Research and Development Corp., Field Research Laboratory, P.O. Box 900, Dallas, Texas 75221.

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NEWSLETTER ITEMS

The AASP Newsletter is the primary method of communication between the various members of our society. If you know of a forthcoming important event or meeting let the editor know so it can appear in the next Newsletter. Other items of interest are also welcomed. These include such things as: new developments in the field of palynology, innovative activities being conducted by you or your agency, suggestions on how we could improve some aspect of our society or its published material, reviews of recent books that should be of interest to the membership and other items of general interest to the field of palynology. Deadlines for each Newsletter are:

November 15 for December Newsletter February 15 for March Newsletter May 15 for June Newsletter August 15 for September Newsletter

PALYNOLOGIST NEEDED

We are seeking a qualified palynologist with one or more years experience preferably of both miospores and dinoflagellates of Tertiary to Jurassic age. The position offers a lot of scope in a relatively new area for an enthusiastic palynologist. For further information, interested candidates should contact:

Head: Palaeontology Section Southern Oil Exploration Corporation P.O. Box 3087

JOHANNESBURG South Africa

POSITION WANTED

Dr. Arun Kumar is seeking a position as a palynologist in the United States or Canada. His Ph.D. was completed in 1976 at Michigan State University in the Department of Geology. His dissertation was entitled: "Palynology of the Navarro Group (Maestrichtian) of Texas" and was written under the supervision of Dr. A. T. Cross. Persons wishing more information concerning Dr. Kumar's experience and training should contact him at his current address in India where he is employed as a lecturer in Palynology and Stratigraphy. Send requests to:

Dr. Arun Kumar D-9/1 Paper Mill Colony Lucknow 226006 India

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BOOK REVIEW

W. A. S. Sarjeant: A Guide to the Identification of Jurassic Dinoflagellate Cysts. - 107 pages, 15 fig., 8 tables, \$6.50(U.S.) LSU School of Geoscience Misc Publication 78-1, Baton Rouge, Louisiana. When W. A. S. Sarjeant presented the first of George Hart's L.S.U. Short Courses in 1968 at Baton Rouge, he surveyed the whole field of fossil dinoflagellate cysts and acritarchs. In 1975, the measure of progress in the discipline was such that Sarjeant needed a week to cover adequately Jurassic dinoflagellate cysts assemblages. In this overwhelming proliferation of new information less the seed for the major drawback of this publication. As the volume is based largely on the lecture notes and handouts for the 1975 L.S.U. course, it contains relatively little new material. Most references predate 1976 with the exception of several papers by Sarjeant, with and without co-authors. Yet, since 1975 there has been progress enough to warrant at least a two-day update on Jurassic assemblages, much of this new data having been produced by Sarjeant himself.

But, having said that, I hasten to observe: why quibble? This volume brings together, for the many who may find use for this data, a massive amount of information available previously to the few who were able to attend the short course. Moreover, the volume is authored by the most travelled and encyclopedic authority on Jurassic dinoflagellate cysts. For these reasons alone the publication is well worth a thorough reading and deserves to be on the shelf of every worker who must deal with the growing array of Jurassic dinoflagellate cysts.

There! The most important things have been said. Readers of this review can now leave off for a beer, or they can tag along for some minor observations.

The volume is published through the School of Geoscience at L.S.U. and its format will be familiar to those readers of the old Geoscience and Man series of A.A.S.P. Proceedings. The layout of the volume is practical as can be without resorting to foldouts and pocket enclosures. Sections follow stratigraphically and cyst taxa are grouped morphologically and essentially from lesser to greater complexity. Species treated on the eleven range charts are either named below their diagramatic representation, or, are numbered and keyed to an extensive listing in seven tables forming the latter part of the publication. These tables contain condensed descriptions of the morphological characteristics of the species on the range charts under the headings: shape, ornamentation of cingular crests, ornamentation of other crests, surface ornament, tabulation and special features. Sarjeant's attempt to arrange many of the Jurassic species within groups by shape is one feature of his publication that many users of the reference will debate. I view it as a crutch to help the practical worker arrive in the vicinity of the truth. The geographic application of the charted ranges is not specified, but presumably includes Britain and northwest Europe, North America, and in appropriate instances, Australia.

Selected genera and individual species are given extended comment. Sarjeant's views are sometimes controversial (his belief that Lithodinia is not a senior synonym of Meiourogonyaulax, his continued defense of the cavate nature of Netrelytron), often illuminating (witness his Section III on "Species excepted from consideration"), and always useful. Sarjeant proposes four new combinations and is careful to assure their validity. However, the new nomenclature is unfortunately not reflected in the captions on Figure 10. Sarjeant also includes a welcome discussion of certain genera proposed by Pocock (1972). * Finally, an Appendix lists the 155 colour transparencies of Jurassic dinoflagellates assembled by Sarjeant and available through the L.S.U. Department of Geology.

*POCOCK, S. A. J., 1972, Palynology of the Jurassic sediments of Western Canada. (Part 2, Marine Species): Palaeontographica, B., v. 137, p. 85-153.

Wayne W. Brideaux

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1.2 TH ANNUAL A.ASP MEETING

The Dallas Committee would like to alert the membership that the "call for papers" for the 1979 AASP meeting will go out with the March Newsletter. In addition to formal presentations, a "poster session" is planned that will accommodate subject matter that one finds interesting and wishes to share and discuss with the attendees. More details will be included in the March Newsletter.

Thanks for your support and cooperation.

H. M. Simpson

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VIALS FOR SALE

Flint glass vials with black molded screw caps suitable for storing pollen residue. Capacity: 1 dram(4ml.), 15x45mm. @ \$11.00 per gross. Contact:

Jerome V. Ward Dept. of Botany & Microbiology, ASU Tempe, AZ 85281 U.S.A.

Telephone: 602-965-3414.

CONTRIBUTIONS VOI. 2A. REVISED DINOFLAGELLATE

GLOSSARY, NOW AVAILABLE

The revision of the long out of print Contributions No. 2, A Glossary of the Terminology Applied to Dinoflagellate Amphiesmae, Cysts and Acritarchs, has been completed and is now available from the AASP Foundation as Contribution No. 2A. The volume contains 122 pages, 165 figures and one plate illustrating 4 specimens in stereo pairs. The following information gives a brief summary of this new work:

This glossary, first published in 1973, has been updated to include the numerous terms recently proposed and to assist the worker in this specialized field. The earlier edition contained 668 terms of which 511 were defined; the present issue includes 946 terms of which 809 are defined. This represents an increase of approximately one-third in fewer than six years, a startling rise by any standards.

Terms included in the glossary apply to dinoflagellate cysts and acritarchs, together with those used in the description of the amphiesma, and some terms used in discussions of the life history and ecology of these organisms. Additional terms, such as popular names and taxonomic categories other than those recognized by the International Code of Botanical Nomenclature, are also listed and defined where necessary. Fifteen plates of line drawings supplement and clarify the meanings of particular terms.

Contribution No. 2A costs \$5.00 and may be ordered from: Robert T. Clarke, Treasurer, AASP Foundation, Mobil Research and Development Corp., Field Research Laboratory, P.O. Box 900, Dallas, Texas 75221.

An order form is provided in this December Newsletter.

TAX DEDUCTIBLE ITEM IRS

The following item is reprinted from the Dec. '77 Mycological Society of America Newsletter with the permission of Newsletter editor Henry C. Aldrich. The original letter from Allen Press is unavailable.

A letter recently came to Mycologia from Allen Press, in which a recent tax ruling on deductibility of publication costs was summarized. Both the letter from Allen Press and the tax opinion summary they sent are too lengthy to print in their entirety. However, I will try to summarize the summary, with the disclaimer that I am not a lawyer and this is presented solely for the benefit of the readers of this learned publication and does not represent a legal opinion of any sort whatsoever.

The case in question, Robert E. Drury vs. Commissioner (of IRS), involved a research associate at an agricultural experiment station who was required to publish as a major duty of his appointment. He did no teaching. He submitted a lengthy manuscript, which was rejected several times after several revisions, by the same journal. The article was critical of one of the major workers in the field, who happened to be one of the reviewers of the paper. In order to publish the manuscript anyway, the researcher had it printed by a private printer and distributed it himself. He then deducted the costs of this printing from his income tax as a business-related expense. IRS rejected this deduction, but a court later upheld the researcher's claim, as long as these conditions held:

1. The author was expected to publish as part of his job responsibilities.
2. He cannot obtain cost-free publication in a scientific journal.
3. He needs to publish for the purpose of obtaining job advancement.
The judge decided that the researcher's only viable alternative to discharge his reasonably perceived responsibility to disseminate the results of his work was to finance personally the publications thereof. His deduction of the mailing expenses was disallowed, however. Allen Press feels that this can be a basis for an author's deducting page changes that he pays himself from his income tax as a business related expense, providing that the conditions above are met.

conditions above are met.

MANUSCRIPTS FOR PALYNOLOGY

Vol 2 of Palynology should be used as your guide for the preparation of manuscripts for our journal. When preparing manuscripts please make sure you:

1) include a short biographical sketch for the "authors" section, 2) that the references are cites as they are in volume 2, 3) that you include plates that are based on the same size as those in volume 2 (6.7 x 8.6 inches) and 4) that illustrations are drafted at a size that can conveniently be reduced to fit the format of our journal. Also, please remember to submit 3 double-spaced copies of the manuscript to the Assistant Editor. The extra copies are used for the review process. Send your manuscripts to:

Raymond Christopher USGS 971 National Center Reston, Virginia U.S.A.

NEWSLETTER PALYNOMORPH

The winning palynomorph suggestion for the December Newsletter was submitted by Bill C. Elsik. The palynomorph is Marypiletes cretaca Robertson 1973 emend. As Bill stated in his letter on the palynomorph, "it is an important marker for the Maestrichtian of Montana, Saskatchewan and surrounding areas. The monosulcate pollen has hollow apical auriculae, and regular evaginations of the exine over the proximal surface (Robertson & Elsik, Palaeontographica B. 165(4-6):85-88).

The palynomorph was drawn by our artist Ms. Edie Schaffer. Other suggested palynomorphs are always welcome.

CAP

The first Newsletter of CAP (Canadian Association of Palynologists) was published in the late summer of this year. The Newsletter is informative, well prepared and printed at a reduced type size that is still easy to read. According to the Newsletter, membership in CAP is limited to palynologists working in Canada. However, for the bargain rate of \$2.00 (Canadian) per year any palynologist outside Canada will be put on the mailing list and sent copies of their Newsletter. Those interested in subscribing to CAP should send their checks to: Jonathan P. Bujak, Atlantic Geoscience Centre, Bedford Institute of Oceanography, P.O. Box 1006, Dartmouth, Nova Scotia, Canada B2Y-4A2

On the Table of Contents page the author of the article entitled "A Review of Cymbosphaeridium pilar and comparison with Multiplicisphaeridium pach ymusum sp. nou from the Llandovery and Wenlock of Shrophire, Great Britain," is listed correctly as Paul J. Hill. However, on page 181 it is incorrectly listed as Peter J. Hill. How the name "Paul" transformed into "Peter" 181 pages later is still a mystery to me. Please excuse this oversight. I'm sure that there are other errors for which I apologize. However, I don't plan to list each error in the Newsletter but did want to correct the major one mentioned above.

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COSUNA (CORRELATION OF STRATIGRAPHIC UNITS

OF NORTH AMERICA)

At the annual meeting in Phoenix, it became clear to me that AASP members need and want to know more about the COSUNA project. This is particularly true for those members who contemplate responding to my COSUNA questionaire, published in the AASP Newsletter of last June. Consequently, I am providing some background information as a review of the nature and goals of the COSUNA Project.

For several years preceding the inception of COSUNA. The Research Committee of AAPG recognized the need to update the correlation charts of the United States and neighboring countries. Early discussions regarding such a project included input from a number of geological societies. The Project objective, established in the early discussions, is to produce correlation charts generated on a region-by-region basis, rather than on a continent-wide, system-by-system basis. It was anticipated that the new correlation charts would make greater use of subsurface data than the old ones have done.

AAPG took the lead in organizing the COSUNA Project, securing a research contract with the USGS in March, 1977. Work was actually started before funding began; two years of the six allotted to the Project have now clapsed. Orlo Childs of Texas Tech University was selected as Project Director. A Steering Committee, chaired by Grant Steele of Gulf Oil, was constituted for the Project; its members represent AAPG, USGS, AASP, ACSN, SEPM, JOIDES Planning Committee, GSA, GSC, AASG, and the Institute de Geologica UNAM (Mexico) (see member list attached to this report). The Committee meets twice a year, at the GSA and the AAPG national meetings.

The correlation charts are being modeled after the Canadian Correlation Chart III, which presents the stratigraphic sections on a region-by-region basis. The AAPG-CSD* Geological Provinces Code Map (1968), which identifies the geological provinces and subprovinces of the United States, provides the basis for the geographic break-down for the charts. Each province will be represented by a Province Committee, which gathers the stratigraphic data. The provinces have been grouped into 16 regions, each headed by a Regional Coordinator. The Regional Coordinators, representing industry, universities, and state surveys, will be responsible for compiling the stratigraphic data. Each coordinator will obtain composite stratigraphic sections (one or two as needed) for each of his CSD provinces, along with a data sheet for each stratigraphic unit represented in a section. The data sheets, modeled after the data cards of the USGS Lexicon Project. have been designed for computerization of data on each stratigraphic unit of the correlation charts. Groups and individuals will be recruited by the coordinators to assemble the draft charts. The 16 Regional Coordinators serve on the Operations Committee of COSUNA. (A list of coordinators is appended to this report.)

COSUNA's Technical Stratigraphic Committee, headed by Amos Salvador, is charged with providing guidelines for construction of the charts, particularly with respect to the chronostratigraphic scale to be used.

All charts should contain a common chronostratigraphic (and geochronologic) scale that permits comparison between regions. The scale should consist of the Standard Global Chronostratigraphic (and Geochronologic) units: eonothems, erathems, systems, series, and stages (eons, eras, periods, epochs, ages), the Committee reports. The selection of stages (and ages) has required a great deal of deliberation. In addition to the European stages, it may be most appropriate on some charts to include local stages in common usage in certain regions, such as the Tertiary stages of California, or the stages based on vertebrate faunas in nonmarine sequences. The Technical Stratigraphic Committee intends for the COSUNA charts to be consistent with the International Stratigraphic Code. Through this committee, COSUNA will contribute to the new AGI glossary of geologic terms.

COSUNA's Data Bank and Chart Committee will receive data from the Regional Coordinators and will supervise the entry of the data into retrieval systems.

At this time, charts are being constructed for the conterminous United States and its continental margins, Mexico, and the Caribbean islands; Canada had declined to participate in the project, at least for the present.

As soon as the draft of each correlation chart is completed, it will be distributed to Review Boards for comments, suggestions, and /or modifications. Each geological society** represented on the Steering Committee is entitled to choose members to serve on such a board. I find it difficult to envisage a single AASP Review Board prepared to deal with all portions of the stratigraphic column represented in each of the 16 regions of the United States. The nature of the review service provided by AASP will be determined by the AASP Executive Committee.

COSUNA provides a major opportunity for us, as stratigraphic palynologists, to use the data collected in our own work to help resolve stratigraphic problems. The correlation charts, to be published by AASP, will be in widespread use over the continent. If we do not speak up, there will be very little chance for our palynological data to be incorporated in the correlation charts. I am therefore running the COSUNA questionnaire again, and I urge you to respond to it. I will submit your completed questionnaires to the appropriate Regional Coordinators if you are offering stratigraphic palynologic data. If you are volunteering to serve on the AASP Review Board, however it is to be constituted, I will ensure that you are contacted when it is time for the review process to begin. My thanks go to all of you who have already responded to the questionnaire.

 ${}^{\star}\text{Committee}$ on Statistics of Drilling

**The USGS prefers to call upon its stratigraphers and stratigraphic paleontologists in the review stage of the Project, rather than in the datagathering stage.

> Barbara L. Whitney AASP delegate to COSUNA Steering Committee

 ${\tt Members} \ \ {\tt of} \ \ {\tt the} \ \ {\tt Steering} \ \ {\tt Committee} \ \ {\tt of} \ \ {\tt COSUNA} :$

Grant Steele (Gulf Oil Company, U.S.), Chairman; represents The American Association of Petroleum Geologists
Thomas C. Buschbach (Illinois Geological Survey), representing the Society of Economic Paleontologists and Mineralogists
William W. Hay (University of Miami), representing the JOIDES Planning Committee
Joseph E. Hazel (Branch of Paleontology & Stratigraphy, U.S. Geological Survey), representing the USGS
Robert K. Jull (University of Windsor), representing the Geological Association of Canada
Frank Kottlowski (New Mexico Bureau of Mines), representing the Association of American State Geologists
Richard V. McGehee, representing the Instituto de Geological JONAM (Mexico)
Nitchell W. Reynolds (USGS), representing the Geological Society of America
Forman F. Sohl (USGS), representing the American Commission of Stratigraphic Momenclature
Barbara L. Whitney (University of Washington), representing the American Association of Stratigraphic Palynologists

Regional Co-ordinators for COSUNA:

Frank J. Adler (Phillips Petroleum Co.) - Mid-continent Region.
Jules Braunstein (Shell Oil Co.) - Mid-Gulf Coast Basin/Warrior Basin/Upper Mississippi Embayment.
Robert Erwin (West Virginia Geologic and Economic Survey) - Appalachian Basin/Piedmont-Blue Ridge Province.
John Hills (University of Texas - El Paso) - Southwest Region (Permian Basin/Palo Duro Basin/Amarillo Arch/Anadarko Basin).

Lehi Hintze (Brigham Young University) - Basin and Range Province/Columbia Plateau.

J. P. D. Hull, Jr. (Impel Corp.) - Southern Rocky Mountains/Colorado Plateau.

Robert Jordan (Delaware Geological Survey) - Atlantic Coast Basin.

Frank Kottlowski (New Mexico Bureau of Mines) - Southern Basin & Range Province/Pedregosa Basin/Orogrande Basin.

V. S. Mallory (University of Washington) - Pacific Northwest Region (Western Columbia Basin-Puget Lowland/Bellingham Basin/North Cascades).

Charles Mankin (Uklahoma Geological Survey) - Uklahoma-Fexas Folded Belt.

M. Dane Picard (University of Utah) -Northern and Central Rocky Mountains.

Sam Pickering (Georgia Department of Natural Resources) - Southern Georgia-Florida Peninsula.

Robert Shaver (Indiana Geological Survey) - Illinois Basin/Michigan Basin/Cincinnati Arch.

James Skehan (Weston Observatory) - New England Province/Adirondack Uplift.

Matt Walton (Minnesota Geological Survey) - Wisconsin Arch-Sioux Uplift.

Donald Weaver (University of California - Santa Barbara) - Oregon & California Coast Ranges/coastal and inland basins/Sierra Nevadas.

A SHORT NOTE OF THANKS TO AASP MEMBERS

This is a short note of appreciation expressed to the members of AASP for presenting me a certificate in recognition of past service to the Association. I prefer to look on it as continuing service because there are still many things to be accomplished in the years ahead.

It was a pleasure to again see so many familiar faces at Phoenix and to renew old acquaintances. It was also encouraging, and a sign that AASP is on firm ground for the future, to see so many younger people participating in the symposium, technical sessions and other meeting functions.

Perhaps this note will also serve to explain the reason why I disappeared, under cover of darkness, from the podium after the presentations. The timing on that aspect was almost perfect. After the presentations had been made the banquet room was immersed in darkness about 1:35 p.m. (divine providence or a well tipped bell boy ??) and I could unobtrusively make my exit for a 2:10 p.m. airplane flight to Dallas. Why leave so soon? A previous commitment to my nine year old to go on an Indian Guide campout that weekend took precedent. So, Darrell, alias Straight Arrow, thanks you; and I, alias "T.R." (my full Indian name is known only to a few of you!) apologize for leaving before the end of the Annual Luncheon. In any event, I made the plane connection with a few minutes to spare and Straight Arrow and I shivered out under the stars that evening.

Again, Thank You for presenting the certificate to me at the Phoenix meeting. I am honored to accept it.

Robert T. Clarke

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AASP LOGO STICKERS

At the llth annual meeting Jim Canright prepared a large number of self-adhesive AASP logo stickers for sale. The attractive logo stickers were a great success and most have already been sold. However, a few still remain and for you who missed the meetings, I encourage you to send your order in quickly. The logo stickers are $3\frac{1}{2}$ inches (9cm) in diameter, are tricolored and made of plastic. The adhesive is excellent and the logo's stick easily to wood, paper, glass, and other type surfaces. At the annual meeting I noticed that members were putting the logos on briefcases, notepads, ring binder notebooks, suitcases and on car windows. The stickers can be obtained by sending 75¢ each or \$2.00 for 4 of them to:

Jim Canright
Department of Botany
Arizona State University
Tempe, Arizona
U.S.A. 85281

All profits from sticker sales will go to AASP, Inc.

MICROPALEONTOLOGY SHORT COURSE

The University of Nebraska will hold its second annual short course in micropaleontology on June 4 - June 15, 1979. Illustrated lectures will be presented twice a day by each specialist followed by a two hour laboratory session using compound and binocular microscopes. Each specialist will provide actual materials for examination and study, and essential literature will be available in the laboratory. Notes on salient portions of each specialist's presentation will be included in the bound course volume. Course tuition is \$800.00 and includes all required instructional materials. Register by sending a non-refundable \$50.00 tuition deposit to Paul R. Krutak, Professor of Geology, 418 Morrill Hall, Lincoln, Nebraska 68588. Balance of tuition payable to University of Nebraska upon confirmation of enrollment. Graduate or advanced undergraduate students may arrange to receive 203 sem. hrs.

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PUBLICATION NEEDED

I am trying to locate an individual with an extra copy of: "Studies on Mesozoic and Cainozoic Dinoflagellate Cysts", by Davey, Downie, Sarjeant, & Williams (1966). The volume is out of print at present, and I want to purchase a copy for personal use. I would therefore appreciate hearing from anyone willing to part with one of his or her extras.

Dave Goodman Exxon Production Research Co. P.O. Box 2189 Houston, Texas 77001

ERROR NOTED

In the "letter to the Editor" section of the last AASP Newsletter I accidently omitted the last portion of Satish K. Srivastava's letter. I apologize for that error and assure you it was not done on purpose. Here is that portion of the omitted letter:

(cont'd)

Professor Traverse objected vehemently over the word "his" in the following sentences of my letter; " . . . the ICP President's visit to Toronto (Canada) for discussions with his Secretary". He feels that I have slighted Dr. G. Norris and owe an apology to Dr. Norris because of the use of "his" rather than the official title of the Secretary-Treasurer of ICP.

Dr. Norris is one of the best palynologists and has earned for himself an admiration and respect from all fellow palynologists, including me, for his homesty, ability, cooperation and kindness. I have considered him a very good personal friend for the last several years. I had no in tention of showing any disrespect to him on any account or to convey that Dr. Norris is Professor Traverse's personal secretary. I would have been more careful in choosing my words had I known that "his secretary" could be interpreted as slanderous. However, if Professor Traverse's interpretation of my use of "his" produced any anguish to Dr. Norris, I tender my sincere apologies to him.

LETTERS TO THE EDITOR

Dear Editor:

I have today received my copy of AASP Newsletter No. 4, not having yet received No. 3.

The postal system between the USA and Britain by sea mail appears to be erratic. Several of us over here have noted this. It's no use having information

Can I suggest that you bring together all the letters with British addresses, place them in one large envelope addressed to myself air mail, and I will post them around Britain with British Micropalaeontological Society information which I circulate regularly already. In that way, air mail to British members should cost no more to you per person than in the U.S.A.

COMMENT! We realize that sea mail is a problem in terms of late delivery. For that reason please note on the membership dues notice page that we are offering a special new rate for those people who want their mail sent by air rather than by sea. We will also take into consideration your suggestion about putting all mail in one packet addressed to you. However, we are not set up to do the combined method as yet, if in fact we decide it might be easier in the long run.

This is in response to the query on publishing abstracts. I like the publication of abstracts. 1) Botanically speaking, an article isn't published unless it is in a universally recognized form. 2) The USGS publications divisions raises a stink whenever I try to cite something in your Abstracts with Programs. They do not consider the abstracts on xerox paper a publication. 3) Normally, when I write an abstract and give a paper, I expect to write a full paper sometime following this event. However, sometimes I may not get it done for years - other commitments, fighting with co-authors, write a full paper sometime following this event. However, sometimes I may not get it done for years - other commitments, fighting with co-authors, the points I want published and that I want to get across to my readers. I need this information in a format someone can find readily accessible.

Eleanora I. Robbins

COMMENT! Thank you for your response. The only reason we raised the question in the first place was to try and save money. If we don't include abstracts in the journal, then we could publish someone else's paper instead and not have to spend more money to do it. I understand your points and will discuss this with the AASP Foundation (who pays for the journal) and with the AASP Roard of Directors who sets the policies.

Dear Editor:

Printing of abstracts for AASP meetings only in the Newsletter is tantamount to saying that they have no permanent value. As the Newsletter is an ephemeral publication, one is saying that the abstracts have only ephemeral value, which I don't believe is true. Therefore, I think they should continue to be printed in Palynology.

Norm Frederiksen

 $\frac{\text{COMMENT1:}}{\text{cost)}} \text{ Your point is well taken yet remember that anyone may obtain copies of past abstract by sending either $1.00 or $2.00 (depending on what they cost) to Bob Clarke. I think the real issue is whether or not our journal is really a journal or still a proceeding volume. Most journals do not publish meeting abstracts. Volume 3 of <math display="block">\frac{\text{Palynology}}{\text{Palynology}} \text{ will still carry the abstracts.} \text{ No decision is yet made about Vol 4 of } \frac{\text{Palynology}}{\text{Palynology}}.$

Dear Editor:

The Notice to Authors for Palynology states that the effective page size of the journal is 7 x 9 inches, and in making up the plates for our papers in Vol. 2, Ray Christopher and I assumed that this meant the size of the plate should be 7 x 9 inches. In fact, the plates were reduced to 6.7×8.6 inches, which means that the photos are not x 1000 as stated in the plate explanations but are x 956. This is not a catastrophic difference for people who will measure grain sizes directly from the plates, but it is annoying and unnecessary. So people need to be warned that the plate explanations for Vol. 2 are inaccurate as to magnification, and the Notice to Authors needs to be changed; in fact, letters should be sent to people making up manuscripts for Palynology. However, alternatively, it looks to us as though there were plenty of room on the page for plates of the full 7 x 9 inch size. Why were they so stingy with the size of the plate, leaving unnecessarily wide margins?

Norman Frederiksen

COMMENT!: The effective page size for volume 2 was suppose to be 7 x 9 inches. It was slightly reduced to 6.7 x 8.6 inches by the people in production not by the editor. In fact, when trying to check the many other aspects of the journal for accuracy I overlooked the minor detail of double-checking the actual effective page size of the plates. I talked with the people at Hart Graphics (where the journal is published) and they have assured me that Vol 3 will be a carbon copy of Vol 2. Thus, the new effective page size for plates is now 6.7 x 8.6 inches. If you have any question about this please use Vol 2 as a guide.

Dear Editor:

Are abstracts of papers presented at the 11th annual meeting available? If so, I would appreciate having one sent to me.

It was painful, literally, to read Newsletter 4 because of the micro-print. Next time I shall have to use the microscope.

Svein B. Manum

COMMENT!: Yes, abstracts can be obtained from Jim Canright or Bob Clarke (see item in this Newsletter). As for the "micro-print" we have tried to correct that by going to a slightly larger size in this newsletter. I hope it is easier on your eyes!

DIRECTORY CHANGES

The following AASP members have notified the editor that their addresses have been changed. These include the following individuals:

- 1. Coste, Lucy I., Phillips Petroleum Co., Room 285, F.P.B., Bartlesville, Uk, /4004, Telephone # 918-661-6201.
- 2. Alley, Neville F., Soil Conservation Authority, 378 Cotham Rd., Kew, Victoria, Australia, 3101, Telephone # 801381.
- Harker, Stuart David, Paleontology Unit, ARAMCO, Dhahran, Saudi Arabia, Telephone # Dhahran 45545.
- 4. Robertson, Eddie B., Robertson Research (US) Inc., Greenbriar Square, 16730 Hedgecroft Suite 306, Houston, Texas, 77060, Telphone # 713-445-4587.
- 5. Dorhofer, Gunter G., Kurze Str. 22, D-316 Lehrte, Fed. Rep. of Germany, Telephone # 05132-4362.
- 6. Bourn, O. Ben, Farrell Ranch, Rt. I, Meridian, Texas, 76665.
- 7. Gunther, Paul R., Petro-Canada, P.O. Box 2844, Calgary, Alberta, Canada, T2P 2M7, Telephone # 232-8000.
- 8. Don G. Benson Jr., Telephone # 504-586-5975.
- 9. Clendening, John A., Telephone # 713-652-2280.
- 10. Fenton, James Peter, Robertson Research International LTD, TY'N-Y-COED, Llanduono, N. Wales, LL301SA, Telephone # 0492 81811.
- 11. Raymonde, Bonnefille, Laboratoire De Geologie Du Quaternaire, C.N.R.S. Centre Universitaire LUMINY, 13288 Marseille, Cedex 2 France, Telephone # 41-01-90.
- 12. Morbey, Sidney Jack, Paleoservices LTD., Unit 2, Sandown Rd., Watford, U.K., Telephone # 0923-25678.
- 13. Logan, Dennis R., Phillips Petroleum Co., Exploration Projects Section, 236 F.P.B., Bartlesville, Ok., 74004, Telephone # 918-661-5649.
- 14. Zavada, Michael, Biological Sciences Group, U-43, University of Connecticut, Storrs, Connecticut 06268.
- 15. DeBord, Phillip L, 27370 Hemet St., Hemet, Ca. 92343.
- 16. Kumar, Arun, D-9/1 Paper Mill Colony, Lucknow 226006, India.
- 17. Waanders, Gerald L., Anderson, Warren & Assoc. Inc, 11526 Sorrento Valley Road, Suite G, San Diego, Ca. 92121, Telephone # 714-755-1524.
- 18. Sanden, Anthony T. von, Nederlandse Aardolie, Hertshooistraat 16, Assen, The Netherlands.
- 19. Khan, Asrar M., 6-B, Liaquat Medical College, <u>JAMSHORO</u>, Sind, Pakistan.
- Hart, George F., 644 Leeward Drive, Baton Rouge, La. 70808. Telephone # Home: 504-769-1805 or 504-766-1240 Office: 504- 388-2780 or 504-388-3353.
- 21. Srivastava, Satish K., Telephone # (213) 694-7230.

WELCOME NEW MEMBERS

 $\ensuremath{\mathsf{AASP}}$ is happy to welcome the following new members:

Ibe, Ralph Anthony, Rockaway Beach, P.O. Box 23, Rockaway Beach, New York, 11693, Telephone # 945-6292.

Jahnke, Philip A., Geology Department, Derring Hall, V.P.I., Blacksburg, Virginia, 24061, Telephone # 961-6700 (3rd floor) 552-0700 (Home).

Gottesfeld, Allen Saul, P.O. Box 726, Terrace, B.C., Canada, V8G4C2, Telephone # 604-635-6511.

Muller, Jan, Ryksherbarium, Schelpenkade 6, Leiden, Netherlands, 2404.

Archer, Vivienne Suzanne, 78 Cole Street, Gardervale, Victoria, Australia, 3185, Telephone # 5961637.

Oestby, Kirsten Lorange, P.O. Box 300, N-4001 Stavanger, Norway, N-4001, Telephone # (045) 33180.

Baxendale, R. William, Department of Botany, Arizona State University, Tempe, Arizona, 85281, Telephone # (602) 965-3698.

Shane, John Denis, Department of Botany & Microbiology, Arizona State University, Tempe, Arizona, 85281, Telephone # (602) 965-3698.

Wright, Robert Paul, Ohio State University, Department of Geology & Mineralogy, Marion, Ohio 43302, Telephone # 614-389-2361.

Mahaffy, James, 289 Morril Hall, Department of Botany, University of Illinois, Urbana, Illinois, 61820, Telephone # 333-0653.

Murry, Phillip Anthony, Department of Geological Sciences, Southern Methodist University, Dallas, Texas, 75275, Telephone # 915-821-4455.

Danielle, Lobreau-Callen, Arboretum de Chevreloup, Museum National D' Histoire Naturelle, 1 Route De Maule, Rocquencourt, 78150 Le Chesnay, France Telephone # 455 50 90.

Costa, Lucy I., Phillips Petroleum Co., Room 285 F.P.B. Bartlesville, Ok. 74004 Telephone # (918) 661 6201.

Huang, Tseng-Chieng, 1512 Lincolnwood Dr. Urbana, Illinois 61801.

Nambudiri, E.M.V., Department of Earth Sciences, University of Manitoba, Winnepeg, Manitoba R3T 2NZ, Canada, Telephone # (204) 474-9492

Sengupta, Sukla, Palynological Section, Bose Institute 93/1 Acharya Prafulla Chandra Road, Calcutta 700 009 India.

Banerjee, Debashis, Oil & Natural Gas Comm., Geology Office, Sibsagar, Assam, India 785640.

Warrington, Geoffrey, Institute of Geological Sciences, Ring Road Halton, Leeds, England LS15 8TQ, Telephone # 0532-605343.

Roberts, Bryan H., Department of Geological Sciences, Virginia Polytechnic Institute, Blacksburg, Virginia 24061, Telephone # (703) 951-6521.

McPherson, Constance, Geology Department, Kent State University, Kent, Ohio 44242, Telephone # (216) 672-2680.

Barnett, Jeanie Carol, Department of Geological Sciences, University of Washington, Seattle, Washington 98195, Telephone # (206) 543-1166.

COSUNA QUESTIONNAIRE

Name of AASP member:
Current mailing address:; Phone: _()
Stratigraphic unit(s) on which you can provide data:
Age of unit(s)
Type(s) of palynomorphs used in your investigation of the above-named unit(s)
General geographic area(s) in which above-named unit(s) was/were investiga- ted:
Are there any boundary problems you are particularly concerned with, and if so, what are they?
Would you consider serving on AASP's Review Board?
Even if you cannot take an active role in the project, would you still like to follow its progress? If so, I will send you periodic bulletins.

Thank you for your assistance!

Barbara L. Whitney Department of Geological Sciences, AK-20 University of Washington Seattle, WA 98195

AMERICAN ASSOCIATION OF STRATIGRAPHIC PALYNOLOGISTS FOUNDATION

LIST OF AVAILABLE PUBLICATIONS

The AASP Foundation has now assumed the responsibility of handling all requests for publications by AASP Inc. and AASP Foundation. Requests for publications which previously had been directed to the Sec.-Treas. or Editor of AASP Inc., should now be directed to Robert T. Clarke, Treas. of the AASP Foundation. A list of currently available publications follows.

Geoscience & Man

The AASP Foundation has obtained back issues of the Proceedings from the first seven Annual Meetings of the Association. These were published by the School of Geoscience, Louisiana State University in their Geoscience and Man series.

- Proceedings First Annual Meeting Baton Rouge (October, 1968). Issued October, 1970. 8 articles, 18 photographic plates, 152 pages. Cost \$7.50.
- Proceedings Second Annual Meeting Penn State (October, 1969). Issued October, 1971. 9 articles, 12 photographic plates, 104 pages. Cost \$7.50.
- Proceedings Third Annual Meeting Toronto (October, 1970). Issued October, 1972. 12 articles, 16 photographic plates, 142 pages. Cost \$7.50.
- Proceedings Fourth Annual Meeting Tucson (October, 1971). Issued October, 1973. 12 articles, 18 photographic plates, 134 pages. Cost \$9.50.
- Proceedings Fifth Annual Meeting Kingston (October, 1972). Issued September, 1974. 8 articles, 9 photographic plates, 84 pages. Cost \$9.50.
- Proceedings Sixth Annual Meeting Anaheim (October, 1973). Issued April, 1975. 14 articles, 30 photographic plates, 168 pages. Cost \$16.00.
- 7. Proceedings Seventh Annual Meeting Calgary (October, 1974). Issued August, 1976. 15 articles, 25 photographic plates, 152 pages. Cost \$16.00.

Palynology

- Vol. 1 Proceedings of the Eighth Annual Meeting Houston (October, 1975). Issued May, 1977. 14 articles, 188 pages, 20 photographic plates, one in color. Cost \$15.00.
- Vol. 2 Proceedings of the Ninth Annual Meeting Halifax, Nova Scotia (October, 1976). Issued October, 1978. 16 articles, 242 pages, 23 photographic plates. Cost \$15.00.

Contributions Series

- No. 1 A Bibliographic File for Computer Analysis of Permian Palynological Data (1933-1969) by George F. Hart. Issued September 1970. 40 pages. Xerox offset copies available. Cost \$2.00.
- No. 2A A Glossary of the Terminology Applied to Dinoflagellate Amphiesmae and Cysts and Acritarchs by Graham L. Williams, William A. S. Sarjeant, and Evan J. Kidson. Revised edition, October, 1978, 122 pages. Cost \$5.00.
- 3. No. 3 Statistics in Stratigraphic Palynology: An Annotated and Indexed Bibliography by Norman 0. Frederiksen. Issued June, 1974. 65 pages. Cost \$2.50.
- 4. No. 4 Proceedings of a Forum on Dinoflagellates held at Anaheim, California, 1973. Edited by W. R. Evitt. Issued January, 1975. 76 pages; 12 text-figures; 19 charts. Cost \$7.50.
- 5. No. 5A Contributions of Stratigraphic Palynology (with emphasis on North America), Cenozoic Palynology, edited by W. C. Elsik. Issued November, 1977. 169 pages, 18 plates. Cost \$5.00.
- No. 6 An Annotated Bibliographic and Geographic Review of Pleistocene and Quaternary Dinoflagellate Cysts and Acritarchs by Martin R. Bradford. Printed January, 1978 (received for distribution June 1978).
 192 pages. Cost \$5.00.

Field Trip Guidebooks

Years that are not listed are either out of print or no specific guidebook was prepared.

- 1. 1971 Annual Meeting Lehner Site, Pleistocene. Cost \$1.00.
- 2. 1973 Annual Meeting
 - a. Sequoia and Kings Canyon National Parks, illustrated. Cost \$5.00.
 - b. Torrey Pines La Jolla illustrated. Cost \$2.00.
- 3. 1977 Annual Meeting Tulsa, Oklahoma Area. 21 pages, illustrated. Cost \$2.00.
- 4. 1978 Annual Meeting East-Central Arizona. 36 pages, illustrated. Cost \$2.00.

Abstracts of papers presented at Annual Meetings

1. 1968 - Baton Rouge - \$1.00.	5. 1972 - Kingston - \$2.00.	9. 1976 - Halifax - \$2.00.
2. 1969 - Penn State - \$2.00.	6. 1973 - Anaheim - \$2.00.	10. 1977 - Tulsa - \$2.00.
3. 1970 - Toronto - \$2.00.	7. 1974 - Calgary - \$2.00.	11. 1978 - Phoenix - \$2.00.
4. 1971 - Tucson - \$2.00.	8. 1975 - Houston - \$2.00.	

Miscellaneous

- 1. Sample booklet 25 pages. Accompanies either Set No. 1, Cretaceous, or Set No. 2, Lower Tertiary, palynology samples from Texas. Cost \$15.00/set or \$25.00 for both.
- 2. Syllabus Symposium on Thermal Maturation of Organic Materials as Related to Hydrocarbon Generation and Migration, Houston, Texas, October 29, 1975. Compiled by Jack Burgess. 26 pages. Cost \$2.00.

Checks should be payable to: AASP Foundation

Mail orders to: Robert T. Clarke

Treasurer, AASP Foundation

Mobil Research and Development Corp.

Field Research Laboratory

P. O. Box 900 Dallas, Texas 75221

AMERICAN ASSOCIATION OF STRATIGRAPHIC PALYNOLOGISTS FOUNDATION ORDER FORM

Geoscience and	Man		
-	Proceedings of the First Annual Meeting	@ \$ 7.50	\$
And the second s	Proceedings of the Second Annual Meeting	@ \$ 7.50	\$
	Proceedings of the Third Annual Meeting	@ \$ 7.50	\$
WOODSHIP TO SERVED A SERVED A	Proceedings of the Fourth Annual Meeting	@ \$ 9.50	\$
-	Proceedings of the Fifth Annual Meeting	@ \$ 9.50	\$
	Proceedings of the Sixth Annual Meeting	@ \$16.00	\$
MANAGEMENT TO ANGEL T	Proceedings of the Seventh Annual Meeting	@ \$16.00	\$
Palynology			
***************************************	Vol. 1, Proc. of the Eighth Annual Meeting	@ \$15.00	\$
Antipology	Vol.2, Proc. of the Ninth Annual Meeting	@ \$15.00	\$
Contributions S	Series		
#Milandi hake bases of the law recognises on	No. 1 Permian Bibliographic File	@ \$ 2.00	\$
***************************************	No. 2A Revised Dinoflagellate Glossary	@ \$ 5.00	\$
	No. 3 Bibliography, Statistics in Paly.	@ \$ 2.50	\$
	No. 4 Dinoflagellate Forum	@ \$ 7.50	\$
	No. 5A Cenozoic Palynology	@ \$ 5.00	\$
-	No. 6 Bibliography Pleistocene Dinos	@ \$ 5.00	\$
Field Trip Guide	ebooks		
	1971 Pleistocene Lehner Site	@ \$ 1.00	\$
	1973 Sequoia-Kings Canyon	@ \$ 5.00	\$
	1973 Torrey Pines-La Jolla	@ \$ 2.00	\$
	1977 Tulsa, Oklahoma Area	@ \$ 2.00	\$
	1978 East Central Arizona	@ \$ 2.00	\$
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(all abstra	cts are \$2.00 per year except 1968, which is \$1	. 00)	
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***************************************	1969 Penn State <u>\$</u>	1975 Houston	\$
	1970 Toronto <u>\$</u>	1976 Halifax	\$
	1971 Tucson <u>\$</u>	1977 Tulsa	\$
-	1972 Kingston <u>\$</u>	1978 Phoenix	\$
was programmed and the state of	1973 Anaheim <u>\$</u>		

Miscellaneous	Publications					
	No. 1 - Cretaceous I	Palynology Samples	@ \$15.00	\$		
	No. 2 - Lower Tertia	ry Palynology Samples	@ \$15.00	\$		
	Combined sets, Cret.	& L. Tert.	@ \$25.00	\$		
	Thermal Maturation Syllabus		@ \$ 2.00	\$		
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