CANADIAN ASSOC. OF PALYNOLOGISTS
ASSOC. CANADIENNE DES PALYNOLOGUES

NEWSLETTER

Vol. 10 No. 1 May, 1987

CAP FINANCIAL STATEMENT
(as at 13th May, 1987)

Balance forwarded	$281.17
Other credits:	
Dues and subscriptions	103.00
Total credits:	384.17
Debits:	
I.F.P.S. due	110.66
Postage for Newsletter	133.85
Bank charges	9.01
Total debits:	-253.52
BALANCE:	130.65

1987 EXECUTIVE COMMITTEE

W.W. Brideaux - President
B. van Helden - President Elect
M. Head - Secretary-Treasurer
J.K. Lentin - Editor
% L.I.B. Consultants
Suite 2110
505 - 4th Ave. S.W.
Calgary, Alberta T2P 0J8

ANNUAL GENERAL MEETING

The 1987 AGM will be held in Halifax during the AASP meeting. The exact time and room # for the meeting will be posted.

CAP presently has 80 fully paid up members/correspondents for 1987!

Deadline for articles for November issue: October 1, 1987

INCORPORATION AND THE NEW BY-LAWS

When I took over as CAP secretary-treasurer in 1984, the Canadian palynological community, and especially that segment of it stationed in Calgary, was in the throes of preparing for the sixth I.P.C. The question arose as to whether CAP could be used as a suitable agency through which government and corporation grants might be channeled for I.C.P. We quickly found out that this was generally not possible because C.A.P. had no official status in the eyes of the world - we were just an independent group of loosely amalgamated gentlefolk. (cont. p. 2)

As secretary-treasurer (otherwise known as 'gopher general'), I was directed, at the C.A.P. general meeting at I.P.C., to look into incorporating C.A.P. as a non-profit organization and execute same. Since (at least at the time) the Federal Government did not bestow organizations with non-profit status, I turned to the Attorney General's Department of the Nova Scotia provincial government for guidance. With their help, it soon became apparent that the original 'Constitution' of CAP was not adequate for incorporation purposes and needed substantial revisions. To cut a long story short, the requisite revisions were made and C.A.P. became a 'non-profit' organization in December, 1986 - my last month as CAP secretry-treasurer before handing the society's books over to Martin Head.

What about the new By-Laws, then. For a start, we had to call them 'By-Laws' since 'Constitution is not (apparently) an officially recognized word among bluenose bureaucrats. The By-Laws are subdivided into 10 sections. The first of these sections is imaginatively entitled 'General'; it basically identifies C.A.P., defines a few important terms and states the objectives of the society - all good philosophical stuff. The second section deals with membership. The basics are that if you pay your dues and you are a Canadian resident (citizen or not) or citizen (resident or not), you are eligible to be a full voting member of CAP. Correspondents are also defined in this section of the By-Laws; they are either individuals who wish to receive the Newsletter but who are not Canadian residents or citizens, or Canadian or non-Canadian institutions which wish to receive the Newsletter. Neither sort of correspondents are permitted to vote. The CAP fiscal year is January to December inclusive. The annual meeting will be called by the directors and announced in the Newsletter. The Newsletter will appear in May (allowing time for any necessary balloting on executive positions before the end of each fiscal year). This covers sections 3-5 of the By-Laws.

Amendments to By-Laws and affiliations are covered in section 6. Such amendments require Special Resolutions, and 'proxy ballots' must be included in the Newsletter for voting on such resolutions. At least twenty-five percent of us must vote in order for a binding decision to be made on a special resolution.

Sections 7 and 8 deal with the directors of the society, who are: President (2-year term), President-Elect (2-year term, after which he or she automatically becomes president), Newsletter Editor (1-year term), Secretary-Treasurer (1-year term) and I.F.P.S. Councillor (4-year term between I.P.C.'s).

Section 9 requires that an internal auditor be appointed annually at the annual general meeting or, if necessary, by the directors. The auditor may be a member of the society, but should not be a member of the executive. A copy of the balance sheet, as vetted by the auditor, must be submitted to the Nova Scotia Attorney General's department each year in order to maintain CAP status. Section 10 of the By-Laws covers several miscellaneous points not accounted for elsewhere.

So there you have it - Everyperson's Guide to the CAP By-Laws. The above, of course, is just a `corrupted' resume and in no way replaces the `By-Laws'. (I have to say that so I don't get into trouble.) We still need a volunteer to translate the By-Laws into French, by the way. Keen Francophones please contact Martin Head.

Before closing off, it might be useful to map out the CAP year, based on the fictitious years `dot' and `dot plus 1'.

January of `Year Dot': New executive (including `carry-overs' as well as `new bloods') begin reign.

May of `Year Dot': May Newsletter is published announcing time and location of annual general meeting, which must be held at least two months after publication of said Newsletter.

August-November of `Year Dot': Annual general meeting meeting, at which the following items must be included as ordinary business: a) report of `Year Dot' nominating committee; b) apppointment of `Year Dot Plus one' nominating committee; c) reports of secretary-treasurer and `Year Dot' auditor; d) appointment of auditor for `Year Dot Plus one'.

No more than 14 days after the annual general meeting, an auditor-vetted balance sheet must be filed with Nova Scotia government.

November of `Year Dot': November Newsletter is published including proxy-ballot for election of directors, if necessary.

November-December `Year Dot': Year Dot Plus One' slate of directors names and addresses must be filled with the Nova Scotia Government.

Respectfully submitted,
Dr. Robert Fensome
Gopher General, Retired
Canadian Association of Palynologists

THREE CHEERS FOR ROB!!

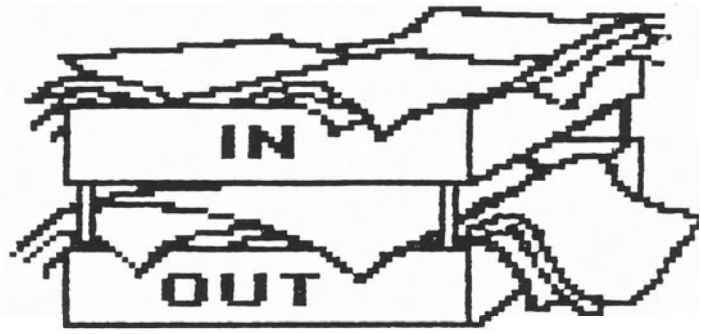
HIP-HIP HORAY!

HIP-HIP HORAY

HIP-HIP- HORAY!

(GREAT JOB, BIG GUY)

FROM THE BUREAUCRATS DESK



On behalf of the CAP executive committee and as CAP's new secretary-treasurer, I take this opportunity to thank my predecessor, Rob Fensome for his stirling work for the Association since 1984. Rob was largely responsible for CAP's granting in January of this year of `incorporation' status, and for the refinement of CAP by-laws. Rob has kindly offered to serve as a "constitutional advisor" to the CAP executive committee. His other activities have resulted in a carefully curated (and voluminous) pile of archival paperwork which dates back to the early days of CAP in 1978. They completely fill one drawer of a filing cabinet here at Toronto and it is not difficult to see how this column became so named!

On behalf of CAP I would like to welcome a new member, Laurent de Verteuil (Dept. of Geology, University of Toronto) whose current interest is in Tertiary dincocysts, and a nnew correspondent, Anna Sadowska (Inst. Geologiczny, Univ. Wroclaw) whose interests include Tertiary palynology and Recent spores and pollen of Poland.

A reminder : would the following members and correspondents please note that their subscriptions for 1987 became due at the beginning of this year: T.W. Anderson, B. Awai-Thorne, P. Binda, M. Boyko Daikonow, C. Coyne, M.-J. Feller-Demalsy, J. Ford, R. Heise, H. Kutluk, J. MacPherson, G. McCourt, S. Piasecki, H. Sullivan, A. Sweet and D. Wall. Subscription fees are Can. $5.00 per year and are payable for up to 3 years in advance. Dues, in Canadian funds, should be sent to:

Martin J. Head (C.A.P. Secretary/Treasurer)
Dept. of Geology
University of Toronto
Toronto, Ontario M5S 1A1

CALENDAR

1987

Aug. 17-20 - Canadian Society of Petroleum Geologists "Second International Symposium on the Devonian System", Calgary, Alberta. Contact: 2nd. Int. Symp. Devonian System, CSPG, #505, 206 - 7 Ave. S.W., Calgary, Alberta, Canada T2P 0W7.

CALENDAR (cont.)

Aug. 9-18 - "Trace Fossils, Small Shelly Fossils, and the Precambrian-Cambrian Boundary" at St. John's, Newfoundland. A section near the village of Fortune, Newfoundland will be proposed as a potential stratotype for the Precambrian-Cambrian boundary. The fieldtrip will provide an overview of the stratigraphy, paleoenvironments, and environmental and diagenetic control on the faunas of the sub-trilobite Lower Cambrian of the Avalon Platform. The fieldtrip also will visit the Ediacaran metazoan locality at Mistaken Point. Contact: Ed Landing, N.Y. State Geological Survey, Albany, NY 12230, phone 518-473-8071, or Guy M. Narbonne, Dept. of Geological Sciences, Queen's University, Kingstone, Ontario K7L 3N6, phone 613-547-2798.

Sept. 26-27 - Canadian Paleontology and Biostratigraphy Seminar (under sponsorship of the Paleontology Division, Geological Association of Canada), will be hosted by the Department of Geology, University of Western Ontario, London, Ontario. Talks are to be presented all day Saturday, September 26, and during the morning of Sunday, September 27. It is anticipated that two keynote speakers will be on the program. Papers on any paleontologic/biostratigraphic topic are invited. Graduate students, in particular, are encouraged to participate. A cash award will be given for the best student presentation. Contact: A.C. Lenz, Dept. of Geology, Univ. of Western Ontario, London, Canada N6A 5B7, phone 519-661-3195.

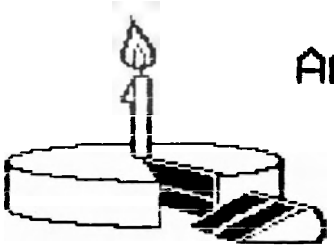
Oct. 7-9 - AASP - Halifax (see propaganda below).

Oct. 19-23 - International Conference on Paleontology and Evolution - Extinction Events" at Bilbao, Basque Country, Spain. Obtain abstract forms from : II World Basque Congress Secretariat, Paseo de la Senda, 15 Bajo, 01007 Vitoria - Gasteiz, Basque Country, Spain. Telephone 34-45-230916. Abstract deadline, May 1, 1987. Limited travel funds available for those presenting papers.

Dec. 8-12 - VI Meeting of Paleobotanists and Palynologists - Brazil The Department of Paleontology and Stratigraphy of the Institute of Geosciences, University of Sao Paulo, announces the VI Meeting of Paleobotanists and Palynologists (Brazil). Contact: Thomas R. Fairchild, Coordinator, Comissao Organizadora - VI RPP, Instituto de Geociencias, USP, Caixa Postal 20.899, Sao Paulo, SP, Brazil - CEP 01498

1988

September - Canadian Paleontology and Biostratigraphy Seminar, Winnipeg, Manitoba. Contact: R.J. Elias, Dept. of Earth Sciences, Univ. of Manitoba, Winnipeg, Manitoba R3T 2N2 Canada.



HAPPY BIRTHDAY
A.A.S.P.

AASP – 87 in HALIFAX

For its 20th Annual Meeting on October 7-9th, 1987, the American Association of Stratigraphic Palynologists Inc. will return to the site of the 9th annual meeting, Halifax, Nova Scotia. The meeting will again take place at the Chateau Halifax Hotel, the prime location in downtown Halifax.

Halifax (pop. 114,594), the capital city of Nova Scotia, is situated on one of the finest natural harbours in North America, making it an important port and naval base. The first British settlement in Canada, it was founded in 1749 and has retained much of the charm of previous centuries while developing the amenities of a modern city. Across the harbour is the smaller city of Dartmouth (pop. 62,277). The metropolitan area has a combined population of about 250,000.

As a city of "firsts", Halifax ranks among the top North American metropolises. It can boast of the continent's first newspaper, Canada's first Post Office, first public school and the first elected public assembly in British North America. It is the home of the oldest university in the overseas British Commonwealth, the University of King's College on which New York's Columbia University was patterned.

Halifax offers an accessible and historic waterfront, museums, art galleries, parks and common playing fields, shaded avenues, a dynamic city core, night clubs, and restaurants which cover the gamut of gourmet tastes.

Anyone attending the meeting is eligible to be invested in the Order of Good Time, the oldest social club in North America, founded by Samuel de Champlain in 1605. Some of you are already members and are urged to return to Nova Scotia to partake of this meeting and the social events associated with it. As you travel Nova Scotia may you be met by the traditional Gaelic greeting - "CIAD MILE FAILTE" - one hundred thousand welcomes.

The program will include: a workshop on living dinoflagellates and a workshop -cum- seminar on the Palaeobotany of Spores and Pollen', both on the 7th October; technical sessions on the 8th and 9th October focussing on Paleozcic palynology, Quaternary palynology and O.D.P.-D.S.D.P. palynology (though, papers and posters on all aspects of palynology will be encouraged and solicited); an enticing slate of invited speakers; the usual business meetings; and an extensive social program.

The field trip will be different from that of 1976, though similar weather has been ordered. It will take in the Triassic/Jurassic shore section near Parrsboro on the Bay of Fundy where the recent, much-publicized vertebrate ('dinosaur') find is located, and the Carboniferous shore section at Joggins. Fossil footprints and fossil tree trunks may be found and a trip down a coal mine will be planned into the itinerary. The Parrsboro - Joggins area is one of the most beautiful parts of Nova Scotia and Fall colors should be at their peak in early October.

The social program will consist of a Hospitality Suite (Tuesday), an Ice Breaker Reception (Wednesday), and Boat Cruise and Historic Feast (the latter being optional - but who wants to miss surf and turf) (Thursday), and banquet and photo (Friday). The town-crier and a piper will again feature in the program.

A flat-rate of Can. $88. per room all inclusive (single, double or more? occupancy) has been negotiated and registration will be about Can. $70. (US $65. and $52. respectively). There will be a nominal fee for the workshops to cover materials. Field trip will cost about Can. $20.

Daily flights to Halifax from New York, Boston, Toronto, Montreal with worldwide connections through all these gateways. Direct flights are also available from London and Amsterdam.

Contact: Sedley Barss, Canadian Geological Survey, P.O. Box 1006, Dartmouth, Nova Scotia, B2Y 4A2.

FOURTH INTERNATIONAL CONGRESS ON PACIFIC NEOGENE STRATIGRAPHY
Berkeley, California July 29, 30 and 31, 1987

Theme: Pacific Neogene Event Stratigraphy and Paleoceanographic History. Presentations will be held on:

- Oxogen and carbon isotope stratigraphy as a signal of paleoceanographic events.
- Neogene sedimentary cycles, hiatuses, and sea level changes.
- Neogene tectonic history of the circum Pacific.
- Pacific and Mediterranean Neogene events and stratigraphy compared.
- The Monterey Formation of California and Pacific analogs.
- Climatic and Paleoceanographic effects on foraminifer evolution.
- Neogene stratigraphy and paleoenvironments of Peru, New Zealand, the People's Republic of China, Japan, the subarctic North Pacific, and the west coast of North America.

For registration and for the third circular you should contact: Charlotte Brunner, Department of Paleontology, University of California, Berkeley, CA 94720 USA.

IV International Conference on Dinoflagellates: First Announcement

The IV International Conference on Dinoflagellates will be held April 16-20, 1989, at the Marine Biological Laboratory, Woods Hole, Massachusetts (USA). The tentative program consists of four days of formal presentations by invited speakers, a morning session of contributed poster presentations and a mid-week afternoon excursion. Evening sessions, small-group workshops on specialized topics, and a field trip are also being planned. Partricipants will be housed and fed at the Swope Center, and sessions will be held at the Whitman Auditorium, both on the MBL campus.

Organizing committee members are:

Chairman, David R. Goodman, ARCO Oil and Gas Company, Researrch and Technical Services, 2300 West Plano Parkway, Plano, TX 75075

Leonard N. Ford, UNOCAL, Science and Technology Division, P.O. Box 76, Brea, CA 92621

Sarah Pierce Damassa, 3 Ridge Street, Winchester, MA 01890

CALL FOR PAPERS

Methods of Kerogen Analysis for Hydrocarbon Exploration

This symposium will be held as part of and during the 7th International Palynological Congress, Brisbane, Australia, August 28 - September 3, 1988.

Successful analysis demands a synergistic approach and contributions are sought from: Palynologists, Geochemists and Explorationists, within Industry, Government and Academia.

It is proposed to publish a Congress volume of papers and details of format will be available later this year.

Contact: Dr. Clintin Foster, Convenor, C/-Western Mining Corporation, Petroleum Division, 168 Greenhill Road, PARKSIDE, S.A. 5063, AUSTRALIA.

- ITEMS OF INTEREST -

PALAEONTOGRAPHICA CANADIANA has published three monographs concerning Canadian paleontology. Order from: GAC Publications, c/o Business and Economic Services, 111 Peter St., Suite 509, Toronto, Ontario M5V 2H1, Canada. For postage, add $3.00 Cdn for Canadian orders, $5.00 Cdn. for orders outside of Canada.

Silicified Silurian ondontopleurid trilobites from the Mackenzie Mountains. B.D.E. Chatterton & D.G. Perry, 1983. No. 1, 126 p., 36 pl., $21.00 Cdn.

Sponges of the Burgess Shale (Middle Cambrian), British Columbia. J.K. Rigby. 1986. No. 1, 105 p., 20 pl., $25.00 Cdn.

Trilobites of the Upper Cambrian Sunwaptan Stage, southern Canadian Rocky Mountains, Alberta. S.R. Westrop. 1986. No. 3, 179 p., 41 pl., $25.00 Cdn.

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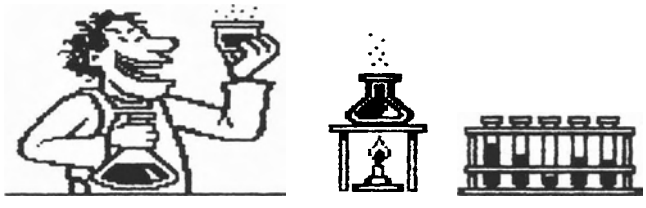
ATLAS OF THE PALAEOGEOGRAPHY OF CHINA, chief compiler Wang Hongzhen, editorial board - Institute of Geology, Chinese Academy of Geological Sciences, Wuhan College of Geology, People's Republic of China; Order from China National Publications Import and Export Cor., P.O. Box 88, 137 Chao-Nei St., Beijing, China. $155.00 U.S. (Editors note: I purchased this book during my recent visit to China and can cheerfully tell you that it is very well worth the money. The text, captions and all map notes are in both English and Chinese. For anyone working in China or who is interested in palaeogeography the book is a must. Incidentally, the book costs geologists in China approximately $22.00 U.S. in Beijing, so if you happen to be in the area.....)

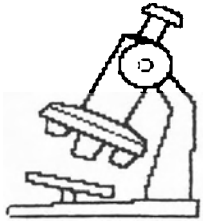
PALEONTOLOGICAL METHODS AND TECHNIQUES



The following are commercially available materials that represent acceptable for standard chemicals used in paleontologic work that are no longer available or are highly toxic:

Miramine is an excellent and relatively inexpensive substitute for the surfactant Quaternary O (no longer available), commonly used to disaggregate shale samples. Tests at the Univewrsity of Tennessee have shown equally satisfactory results with Miramine, which is less viscous than Quaternary O, but is used in the identical manner. Miramine is available from Miranol Chemical Co., 68 Culver Rd., Dayton, N.J. 08810, phone 201-329-3900.

Sodium Polytungstate is considered to be a safe, effective, and comparably priced substitute for the highly toxic heavy liquid, tetrabromethane, commonly used in heavy mineral separations, including conodont and microvertebrate recovery from acid residues. Sodium Polytungstate is available from Sometu, Falkenried 4, D1000 Berlin 33 West Germany, phone (030) 8-31-19-50, telex 0-185-443.



KEEPING HOLOTYPES IN CANADA

CONSERVATION OF TYPES

A long standing and continuing problem exists in Canada concerning the conservation of palynological type and reference specimens. In the past many specimens have been temporarily misplaced, lost forever or destroyed because of sloppy curatorial techniques and facilities. We all realize (or should realize) the importance of types and illustrated specimens as a data base of immense significance to the science and to other researchers. Free and continuing access to materials is a legacy we should all strive for. This is a plea for careful documentation and safe storage of all palynological type specimens and reference material.

An author has a responsibility to deliver all type material and pertinent reference material into the hands of a reputable curator working for a safe respository. It is essential that all relevant documentation, both geographic and stratigraphic, should accompany the samples. Microscope slides should be well labelled and specimens located accurately on the slide. SEM specimens should be well labelled and adequately protected.

The repository of the specimens has the responsibility of safe guarding the samples. It does this by maintaining good records, keeping the specimens in a controlled environment and allowing valid researchers access to the samples but not the general public. In the past, repositories have included geological surveys, museusm, universities, private companies, private homes and probably other localities too embarassing to name.

It has been appparent that universities, private companies and private homes are unsatisfactory as repositories. The reasons are that the collections in these places are generally not well curated and they are unstable settings for samples. When the palynologist who is usually in charge of this material leaves, for whatever reasons, the specimens are left in limbo if he is not replaced by another worker in the same field. Managers and scientists in other disciplines do not have the appreciation or understanding of the value of type material a typical palynologist has.

The Geological Survey of Canada and museums such as the National Museum of Canada and the Tyrrell Museum of Palaeontology are much better suited respositories for this material. They have active palynological programs, professional curators in charge of collections, provide safe storage environments and try to carefully document the specimens under their control. They also provide a long term security because even if the palynological programs terminate, there are still going to be professional curatorial staff available and facilities to care for the material.

We strongly recommend utilizing the offered facilities for any of your type or referred material from Canadian sources. The specimens are a fitting legacy that will be greatly appreciated by future palynological workers and they deserve continued care and upkeep in a recognized institution.

Dennis Braman
Tyrrell Museum of Paleontology
Drumheller, Alberta
(403) 823-7707

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POLLEN PROGRAM FOR THE IBM PC

A new, easy to use, interactive program to create pollen percentage, influx and concentration diagrams is available. The program runs on an IBM PC (or compatible) with CGA graphics and an Epson (or compatible) dot matrix printer. The program is distributed with a manual, as shareware: use it, and if you like it, pay a user's fee of $100. Downloading arrangements may be made at (519) 578-7599. Additional information and program diskettes ($10) are available by mail from: Michael Jones, 92 York Street, Kitchener, Ontario CANADA N2G 1T7.

"SHOW AND TELL" OF COMPUTER TECHNOLOGY

Many palynologists are now using computers, especially personal computers and other technological gadgets, to increase work efficiency and to enhance the visual appeal of their output. With the blessing of the local organizing committee, an opportunity will exist for us to exchange ideas involving mainframe/personnal computer applications in palynology. This will take the form of a `show and tell' event run in conjunction with the poster session at this years AASP Annual Meeting, Halifax, N.S. A small selection of personal computers will be available so that contributors may demonstrate their software, though participates are strongly encouraged to also submit their contributions, including samples of output (range charts, graphics, etc.) as poster displays.

Whether your contribution is a humble off-the-shelf business package that you've found a palynological use for, or a self written program, or a small piece of useful hardware - you are encouraged to bring it along. It will hopefully (hardware compatibility permitting) be possible to exchange data (such as literature reference files for example?) as well as ideas.

If you are interested in contributing to this `show and tell' event, please write to me listing your hardware needs so that I may optimise resources within the limited space available.

Write to: Martin Head.

COMPUTER TECHNOLOGY
"SHOW & TELL"

RESEARCH IN CANADA IS.....
LESS EXPENSIVE THAN FOREIGN
RESEARCH BUT IS NEGLECTED.

DISCOVER CANADIAN
PALYNOLOGY

DINOCYSTS FROM THE JURASSIC OF SASKATCHEWAN AND ALBERTA: AN OPEN FIELD FOR RESEARCH

B.G. van Helden Chevron Canada Resources Limited, Calgary

Although the Jurassic system from the Western Interior is relatively well documented through ample well control and outcrop sections, geologists from time to time still face the challenge to unravel local complicated stratigraphic squences, particularly in areas where clastic sequences of Jurassic age are unconformably overlain by similar units of early Cretaceous age. In addition, the environment of deposition of the Jurassic clastic sequences is not always fully understood and consequently it can be easily misinterpreted.

Biostratigraphy (palynology, micropaleontology) is a significant aid in the unraveling of such complicated stratigraphies by age-dating and by interpreting their depositional environment. Both aspects are important factors for the correct interpretation of the stratigraphy and thus, eventually, for the discovery of hydrocarbon reservoirs.

The author had the opportunity to study palynological residues from core samples in wells from Alberta and Saskatchewan. Extremely rich and often diversified Jurassic dinocyst floras were recovered from the Nordegg, Poker Chip, and Rock Creek Formations in Alberta and from the Shaunavon and Vanguard Formations in Saskatchewan. A general Jurassic age assignment was often sufficient to preclude correlation with early Cretaceous units. It remained an intriguing challenge, however, to provide a more detailed age assignment for these units, based on their often prolific dinocyst diversity.

Studies on the nature and relative abundance of organic matter including plant fragments, spores, dinocysts, "microforaminifera," scolecodonts and algae (Botryococcus) provided information on the depositional environments.

Extensive literature search provided the following major sources of information on the biostratigraphy of the Jurassic in the western Interior:

Bjaerke, T. (1980) A Toarcian dinocyst species from Spitsbergen, first recorded in this paper occurs common in the Poker Chip Formation of Alberta.

Brooke, M.M.; Braun, W.K. (1972); Christopher, J.E. (1964); Wall, J.H. (1960) Excellent references for the biostratigraphy (micropaleontology, macropaleontology) of the Jurassic system in Saskatchewan and in other parts of the Williston basin. If one can afford the luxury of both palynological and micropaleontological studies, these references would be a perfect source of complimentary information!

Buffin, J.H. (1970) Abstract only. (Never published?)

Drugg, W.S. (1978) Many of the species first published in this paper were recorded in the Jurassic from Saskatchewan. Very useful reference!

Guliov, P. (1970) Reference is made in passing to the dating of a Jurassic sequence from the Yarbo borehole, based on palynology: "pollen-analysis carried out by Dr. M. Steeves...." .

Woollam, R.; Riding, J.B. (1983) Detailed palynostratigraphy of Jurassic dinocysts from Great Britain. Excellent reference. However, even if Britain and Saskatchewan were in close geographic proximity, invaded by the same sea in Jurassic times, subtile, distinctive differences in dinocyst assemblages and successions can be observed.

To me it is surprising, if not frustrating that so few of these dinocyst floras from Canada have ever been fully documented in the literature! Our Canadian Universities have knowledgeable, highly qualified and reputable teachers in the field of palynology (even in the field of Jurassic dinocyst stratigraphy!). Palynological and biostratigraphic thesis subjects can easily and readily be found in our own territory!

There is no doubt that comparative studies of the palynostratigraphy of Portugese and East Coast Offshore sections for instance or, for that matter, studies on ill-defined taxa from older literature are extremely useful contributions to the science of geology and palynology. Considering our current economic climate however, the above mentioned CANADIAN projects could be regarded as valid alternatives: no extensive (read: expensive) travelling is required to obtain suitable material from Saskatchewan where Jurassic sections, abundantly represented in cores, are available at the G.S.C. in Regina and from Alberta, where cores are stored in Calgary. In addition, well-dated Jurassic outcrop sections are known from the Williston basin (mainly from the Little Rockies and Bearpaw Mountains in Montana). Such studies, where observations on palynostratigraphy, dinocyst morphology, dinocyst paleoecology, taxomony and lithostratigraphy can be combined (or studied as separate projects!) would form excellent thesis material both on Ph.D. or lower levels! These studies would not only present interesting and challenging thesis subjects but would directly benefit explorationists working on this part of the Canadian stratigraphic column! There even exists an appropriate outlet for publications of this nature in the form of our Paleontographica Canadiana, a journal for monograph studies!

To summarize this research proposal:

- The stratigraphy and depositional environment of the Jurassic system in the Canadian Western Interior is by no means fully understood.

- Jurassic dinocyst floras are rich, diversified and well preserved in this basin.

- These floras are not (or at best poorly) documented in the literature.

- The dinocysts, spores and other organic matter provide information on the environment of deposition.

- A well documented basic framework for biostratigraphic (palynostratigraphic) studies is available from micropaleontological publications. These publications provide initial timestratigraphic data and information on the interpretation of the depositinal environments in the Jurassic.

- Explorationists would benefit from data provided by such detailed biostratigraphic studies.

- A suitable publication outlet is available through Palaeontographica Canadiana.

- Sampling from cores is relatively inexpensive.

Conclusion: "A FIELD FOR THE TAKING"!

Selected References:

Bjaerke, T. (1980) "Mesozoic palynology of Svalbard IV, Toarcian dinoflagellates from Spitsbergen." Palynology Vol. 4.

Brooke, M.M., Braun, W.K. (1972) "Biostratigraphy and microfaunas of the Jurassic system of Saskatchewan." Dept. Min. Resources of Saskatchewan. Report #161.

Buffin, J.H. (1970) "Paleoecology (via palynology) of the Upper Shaunavon, Southwestern Saskatchewan." Abstract. Meeting at College Station, Texas. Geol. Soc. of America, vol. 2 no. 4.

Christopher, J.E. (1964) "The Middle Jurassic Shaunavon Formation of Saskatchewan." Dept. Min. Resources of Saskatchewan. Report #95.

COMMENTS ON "SCIENCE"

In Mark Twain's book, LIFE ON THE MISSISSIPPI, the author discusses the tendency of the Mississippi to shorten its course by cutting off ox bows and flowing directly across the narrow neck instead of the long distance around the full course of the bow.

> Since my own day on the Mississippi, cut-offs have been made at Hurrican Island, at Island 100, at Napoleon, Ark., at Walnut Bend, and at Council Bend. These shortened the river, in the aggregate, sixty-seven miles. In my own time a cut-off was made at American Bend, which shortened the river ten miles or more.
>
> Therefore the Mississippi between Cairo and New Orleans was twelve hundred and fifteen miles long one hundred and seventy-six years ago. It was eleven hundred and eighty after the cut-off of 1977. It was one thousand and forty after the American Bend cut-off. It has lost sixty-seven miles since. Consequently, its length is only nine hundred and seventy-three miles at present.
>
> Now, if I wanted to be one of those ponderous scientific people, and 'let on' to prove what had occurred in the remote past by what had occurred in a given time in the recent past, or what will occur in the far future by what has occurred in late years, what an opportunity is here! Geology never had such a chance, nor such exact data to argue from! Nor "development of species," either! Glacial epochs are great things, but they are vague--. Please observe:
>
> In the space of one hundred and seventy-six years the Lower Mississippi has shortened itself two hundred and forty-two miles. That is an average of a trifle over one mile and a third per year. Therefore, any calm person, who is not blind or idiotic, can see that in the Old Oolitic Silurian Period, just a million years ago next November, the Lower Mississippi River was upward of one million three hundred thousand miles long, and stuck out over the Gulf of Mexico like a fishing rod. And by the same token any person can see that seven hundred and forty-two years from now the Lower Mississippi will be only a mile and three-quarters long, and Cairo and New Orleans will have joined their streets together, and be plodding comfortably along under a single mayor and a mutual board of aldermen. There is something fascinating about science. One gets such wholesale returns of conjecture out of such a trifling investment of fact.

Though written nearly 100 years ago Mark Twain's moral point is just as keen as if it were written today. The blind following of any given line of reasoning can lead to an end result that is truly ridiculous. Or, to state it more plainly, wholesale returns of conjecture from a trifling investment of fact do not always produce the correct answer.

BOOK REVIEWS

Numerical Methods in Quaternary Pollen Analysis, by H.J.B. Birks and A.D. Gordon, 1985, Academic Press, Orlando, Florida, 32887, 317 + viii pages, $59.00.

Historically, pollen analytical results have been presented using relative frequency distributions. For the most part, these simple statistical methods have been satisfactory during the development of the field of pollen analysis. With the development of computer accessibility during the past 20 years, and especially within the past decade, high powered statistical analysis has become commonplace. The authors of this particular volume have been the leaders in enhancing the use of statistical methods within the field of paleoecology.

In this volume, Birks and Gordon present a critical review of specific problem areas in paleoecology which have been subjected to numerical treatment of the data. The first two chapters present an excellent overview of the types of data collected and basic statistical concepts. The authors then present methods useful in numerically zoning pollen statigraphic data. The concept of pollen zones has recently been questioned, but this may be due more to the subjective methodology of previous zonations rather than to inconsistencies within the zone concept. In any event, Birks and Gordon have ably demonstrated the utility of numberically separating stratigraphic sequences and have provided the mathematical back ground for this analysis.

The more important contributions of this book lie in the latter three chapters. In these chapters, the uthors examine methods of comparison regional and local pollen sequences. This type of approach should be of immediate value in establishing regional correlations. Numberous examples of varying methods are provided which allow the reader to judge for himself the appropriateness of the various techniques. Additionally, the algorithms used are presented in a clear and concise manner enabling researchers to adapt them to their specific needs.

Numerical methods are extremely beneficial in analyzing modern pollen data. The methodologies employed clearly show the utility of numerically separating these assemblages and then using the derived data to model modern pollen-vegetational relationships. The mathematical foundation of the techniques employed is very clearly explained in this chapter, and this should go a long way in making the technique more universally applied.

Finally, the computer programs utilized and written by the authors to conduct these analyses are provided in the Appendix. The programs are available for use and can be easily and quickly adapted for use with individual mainframes or personal computers. The availability of the programs in one place is, in itself, worth the price of the volumes.

In general, the information is presented logically and concisely, in a straight forward manner. The diagrams are very clear and illustrate the point they are making. The pricing of this volume is certainly competitive with other important volumes. Statistical analysis of large data sets is becoming common place and as such, the procedures involved must be completely understood by the field. This volume is extremely useful for those of us trying to catch up as well as for incoming students. The book is well worth the price and should be a welcome addition to the libraries of all palynological laboratories.

Reviewed by: Richard G. Holloway and Vaughn M. Bryant, Jr. Palynology Laboratory, Department of Anthropology, Texas A&M University, College Station, TX 77843.

FROM THE (OVER WORKED — UNDER PAID)

SPRING AND SUMMER

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DEADLINE FOR NEXT ISSUE: October 1, 1987

My dear friends, here it is 2:00 on a beautiful, sunny, Sunday afternoon, and here I sit at the computer trying to finish this newsletter. You needn't feel sorry for me, however. The reason I am quite behind in completing many of the tasks that I have set up for this month was a wonderful, delightful, exhausting, financially ruinous (but who cares), fantastic trip to China. I would like to tell you all about it, but there simply isn't enough time - the new bi-laws say this newsletter must be published in May. It is now June. With any luck I will be fired as editor of this newsletter.

CAP is a rather funny organization because it is a newsletter organization. We don't hold scientific meeting or special events. We have a secretary - treasurer to keep track of the money to pay for postage and reproduction (if an oil company doesn't). We have a president who we can honor and lastly, a newsletter editor. It may seem like it doesn't take much effort to keep such a little organization on its tracks but it does. Rob Fensome is living proof. I hope each of you recognizes the level of personal effort that Rob put into the creation of our bi-laws. When you see him in Halifax - buy him a beer!

That's it, guys. I'm off to ride my bicycle in the sunshine. Have a wonderful summer. I look forward to seeing you at the Annual General Meeting in Halifax (at AASP) this fall. Please send articles for the next NEWSLETTER. I need your help.

7th INTERNATIONAL PALYNOLOGICAL CONGRESS

(Editors note: This information was passed on to me by John Utting. By publishing it here, I intend no endorcement by CAP for the travel agents involved.)

28th August - 2nd September, 1988 - Brisbane, Australia

1988 is a year of excitement in Australia. Not only are they celebrating their Bicentennary, but Brisbane is also hosting Expo 88. Brisbane is also the host city of the International Palynological Congress.

ANZA TRAVEL LTD., Canada's largest retail agency specializing exclusively in the South Pacific, have, in conjunction with QANTAS AIRWAYS, the Australian airline and Official International Airline for the Congress, arranged a group fare and departure date from Vancouver.Depart Vancouver on Thursday, August 25, 1988 on Qantas Airways' direct Brisbane flight. The special Congress fare on this departure at the present levels, will be, from Vancouver return, $1,410.00 per person. This fare will allow you another 3 stops on Qantas Airways' routes. There are also low-cost add-on fares from most major Canadian cities.

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MANUSCRIPTS WANTED FOR BOOK ON PALYNOLOGY OF ORE DEPOSITS

You are invited to write a paper for a book entitled: Palynology of Ore Deposits. Elsevier has expressed an interest to publish such a book in their "Ore Geology Reviews" series. The final deadline for manuscripts will be May 1, 1988.

Please contact Eleanora I. Robbins, U.S. Geological Survey, National Center MS 956, Reston, VA 22092 (USA) (Telephone 703-648-6527) for details.