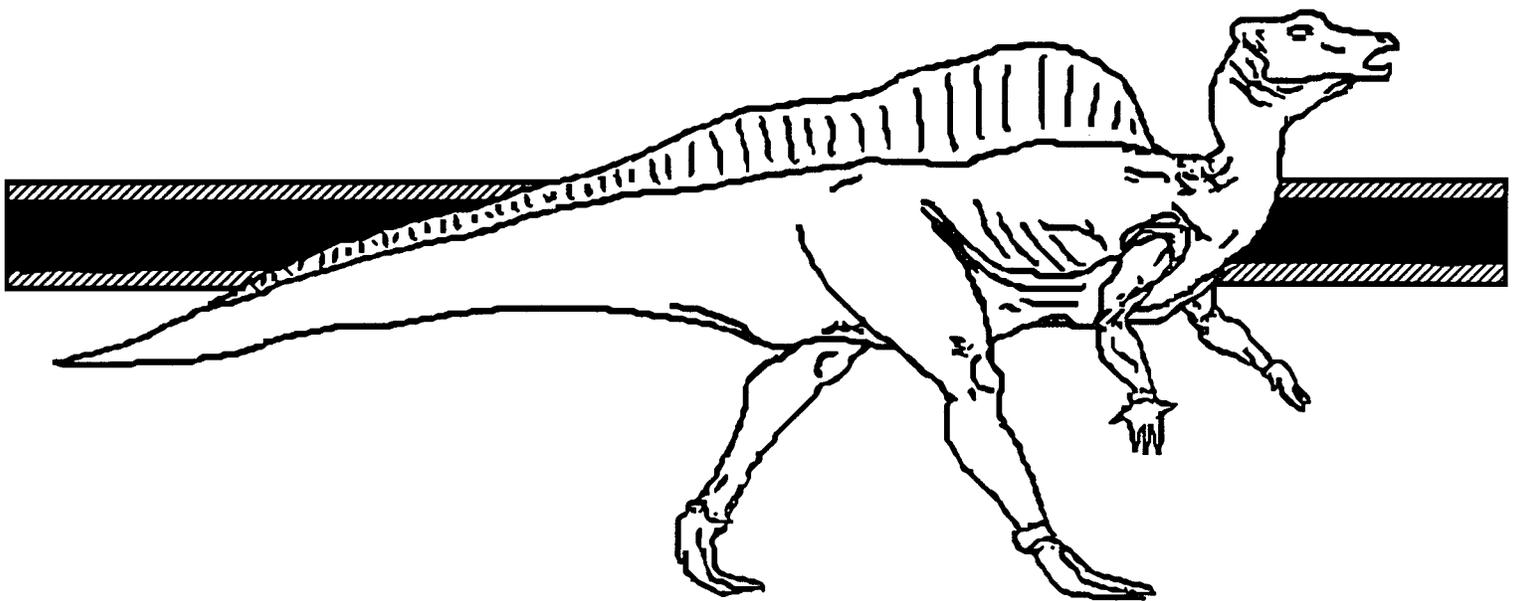


ALBERTA PALAEOLOGICAL
SOCIETY



BULLETIN

VOLUME 2, NUMBER 4
DECEMBER 1987

ALBERTA PALAEOLOGICAL SOCIETY

OFFICERS:	President	Wayne Braunberger	278-5154
	Vice President	Don Sabo	238-1190
	Secretary	Susan Lancaster	228-0773
	Treasurer	Les Adler	289-9972
DIRECTORS:	Editor	Geoffrey Barrett	246-8738
	Education & Programs	Don Sabo	238-1190
	Membership & Fund Raising	Irene Markhasin	253-2860
	Librarian	Karen Weinhold	274-3576
	Curator & Field Trip Co-ordinator	Harvey Negrich	249-4497
	Director at Large	Dr. Michael C. Wilson	239-8289

The Society was incorporated in 1986, a non-profit organization formed to:

- A. Promote the science of palaeontology through study and education.
- B. Make contributions to the science by:
 - 1) Discovery
 - 2) Collection
 - 3) Description, curation, and display
 - 4) Education of the general public
 - 5) Preserve material for study and the future
- C. Provide information and expertise to other collectors.
- D. Work with professionals at museums and universities to add to the palaeontological collections of the Province (preserve Alberta's heritage).

MEMBERSHIP : Any person with a sincere interest in palaeontology is eligible to present their application for membership in the Society.

Single Membership	\$10.00 annually
Family or Institution	\$15.00 annually

OUR BULLETIN WILL BE PUBLISHED QUARTERLY: March 1, June 1, September 1, and December 1 annually

DEADLINE FOR SUBMITTING MATERIAL FOR PUBLICATION IS THE 15TH OF THE MONTH PRIOR TO PUBLICATION.

Mailing Address: Alberta Palaeontological Society
P. O. Box 7371, Station E
Calgary, Alberta, Canada T3C 3M2

PRESIDENT'S MESSAGE**Wayne Braunberger**

December 31, 1987 marks the end of the Alberta Palaeontological Society's second complete year of operation. Those of us on the executive and board of directors have learned much over the past two years about operating a society. I trust that we are providing you, the member, with the type of leadership and programs that you wish. If not please let me know. Our membership has grown at a steady but slow rate over the last two years. The Society does not have a major recruitment program for new members but relies on word of mouth. So tell your friends about us.

I think the Society has met one of its major objectives, that being to bring together palaeontologists of all levels to share and exchange information and ideas. As well I think all of us are more aware of government legislation and programs and how they affect our activities. Only by joining together to combine ideas and resources will we be effective in our efforts to fight inequalities within the system.

The success of the Society depends on the contributions made by individuals and organizations. I think a few of them deserve special recognition. Jon Greggs and Wayne Haglund of Mount Royal College for their efforts. Jon has been our instructor at the class nights and Wayne has fully supported the Society. It is through Wayne's efforts that we are able to meet at Mount Royal. Dr. Koster and staff of the Tyrrell Museum have fully supported the Society and over the past two years many of the staff members have made presentations to us. Geoff Barrett of our Society has been editor for the past two years. Geoff has done an excellent job working under difficult circumstances (a chronic lack of articles for the bulletin) . Many others have worked hard as well, but everything depends on the participation of you the members in Society activities.

As we move into our third year I think we are faced with two major challenges. These are: to increase membership and to increase membership participation. An effort is being made to increase membership by way of more advertising. Membership participation can only come if you the member get more active. I appreciate that people have other activities they are involved with and do not have much spare time. However the more people that become involved, the less work there is for everybody to do and the more projects that can be done.

The Alberta Palaeontological Society can accomplish a great deal if everyone (professional and amateur) work together rather than against each other. Much remains to be done in this area of mutual cooperation. The next year promises to be exciting as we should be able to further refine and expand our programs and activities.

EDUCATION**Don Sabo**

The last three of our workshop evenings will now have been held by the time you read this.

October's workshop dealt with home and field photography of fossil's. Jon Greggs, our instructor went through the various aspects of these situations the produce high quality photographs.

November's workshop dealt with something new to most of us which was a method of producing molds and casts of two dimensional specimens. Jon had samples for us to practice on as well as experimenting on some of our own specimens.

December's workshop will deal with a variety of short subjects such as using a personal computer for your record keeping.

A follow up series of workshops has not at this time been planned. If you have any comments or suggestions dealing with these classes please feel free to contact me at 238-1190.

PROGRAMS**Don Sabo**

Programs which have been presented thus far for the 1987/88 session are as follows :

September: Three short programs were presented that included; slides of the APS field trips to the fossil plant localities of Betty Spiers near Red Deer, Alberta and the tours through Dinosaur Provincial Park, Alberta which were shown by Les Adler, geology and palaeontology of selected areas in England by Geoff Barrett, and microvertebrate sites and associated fossils from Southern Alberta by Don Sabo.

October: The evening program was a group participation 'show and tell' which was an experiment in trying something a little different. Members that did bring something for the program helped make it an interesting evening.

November: This program was presented by our president, Wayne Braunberger which featured the general geology and palaeontology as well as some of the major geological features from the Upper Cretaceous of the Drumheller, Alberta area.

Upcoming Programs: December: our annual informal Christmas Party will be held in the Rock Lab at Mount Royal College. January: Dr. W. Byrne, Assistant Deputy Minister in Alberta Culture will explain Bill 11, the changes to the Alberta Historical Resources Act. February: Dr. Dave Mundy will present a program on Stomatoporoids, affinities, ecology and use. March: Darren Tanke from the Tyrrell Museum will present an overview on Upper Cretaceous Theropods.

CANYON CREEK FIELD TRIP

Percy Strong

The July 18187 field trip to the Persian Gulf had to be postponed until September 19/87. This was mainly due to the scaring off of participants by renewed mining of the Gulf ! Hopefully the Love Boat will have been refloated for the trip next year. Luckily however, an ancient analog of the Persian Gulf "ramp type" continental margin could be seen in the Mississippian formations at Canyon Creek.

The trip featured sedimentary structures typical of the supratidal, intertidal, lagoonal, outer shelf and deep marine depositional environments. The sedimentary structures were well exposed in the Mount Head, Shunda, Pekisko and Banff Formations. The trip also demonstrated how faunal diversity increased from the supratidal to the shallow shelf depositional environments before decreasing again in the deep marine environment.

A slight digression in the trip itinerary found the field trip participants collecting Jurassic cigars (belemnites) in the Fernie shales . The best fossil collecting was the Banff-Pekiska transition beds where an excellent example of the rare coral *Cleistopora sp.* and an echinoid were collected.

Special thanks go to Geoff Barrett for helping make the fossil collecting a success by directing us to the more fossiliferous sections at Moose Mountain.

To all that missed it - c'est la vie, maybe we can try it again next year.

Fund Raising

Two volunteers are needed to man the raffle booth during the meetings. Donations of material (books, fossils,etc.) are also needed for the raffle table. A progressive raffle of an **Ichthyosaur cast** is being held. Draw date is April 15/88. Tickets are .50 cents each and available at the meetings.

ELECTIONS

The election for executive and directors of the Society will be held on January 15, 1988 at Mount Royal College. The following positions are open:

Executive:	President
	Vice-President
	Secretary
	Treasurer
Directors :	Program
	Education
	Membership
	Fund Raising
	Public Relations
	Field Trip
	Curator
	Librarian
	Editor
	Director at Large

The executive positions are for a period of one year and the directors for two years. Anyone may stand for election provided they meet the requirements set out in the by-laws of the Society.

BOOK REVIEW

Les Adler

Vertebrate Paleontology and Evolution By Robert L. Carroll
W.H. Freeman and Company, 4419 West 1980 South
Salt Lake City, Utah, 84104, U.S.A.

(The following review includes data and opinions from the book's slip-cover.)

Dr. Carroll is professor of biology at McGill University, Montreal and is director of the institution's Redpath Museum where he has been curator of vertebrate palaeontology since 1965. He studied under A.L. Romer at Harvard University and has published many papers on vertebrate fossils excavated from many countries.

Romer's " Vertebrate Palaeontology " appeared in three editions, 1933, 1945 and 1966. Carroll's book is the first detailed , authoritative review of the fossil record of vertebrates to be published in 20 years.

The book is clearly written, comprehensive and detailed, well-researched, up-to-date and scholarly. Where as Romer's 3rd edition contains about 480 pages, this volume is a 700 page book and involves about 12,000 genera. The work features more than 1700 illustrations including 500 newly drafted line drawings of the representative members of the major vertebrate groups. Forty special diagrams depict relationships among major groups.

Chapter 1 is concerned with fossil relationships, chapter 2 with Vertebrate Origins, chapter 3 to 8, Fishes and Sharks, chapters 9 and 10, Amphibians, chapters 11 to 15 Reptiles with 14 and 15 specifically on Dinosaurs, chapter 16, Flying Creatures, chapters 17 to 21 on Mammals and chapter 22 with Evolution. These chapters are followed by a Classification of Vertebrates and an Index similar to the one in Romer's volume, but extended and updated.

The book is introduced by Ogden Nash's " Carnival of the Animals". Dr. Carroll then provides complete, current data on all fossil vertebrate groups which he examines in the context of evolutionary processes and functional anatomy. The skeletal structure and way of life of the major groups are discussed as are their inter-relationships and distribution in time and space so as to provide a coherent analysis of the history of vertebrates through 600 million years of evolution.

Newly discovered forms of jawless fish, sharks and amphibians are described in full detail, as are the major transitions between amphibians and reptiles , reptiles and mammals, and dinosaurs and birds. Dr. Carroll discusses alternative hypotheses such as the origin of vertebrates, the emergence of each of the major groups and the cataclysmic extinction at the end of the Mesozoic. He also demonstrates the importance of functional anatomy in providing a deeper understanding of the nature and relationships of extinct organisms and he comments on the methodology of classification. Each chapter is concluded with a summary and an extensive list of references. Professional vertebrate palaeontologists and students of geology, biology and evolutionary theory will enjoy themselves turning over the pages, examining the illustrations, reading sections of particular interest and wondering at the extraordinary amount of relevant information provided.

Approximately \$ 70.00 Canadian

Membership

As of December 1, 1987 the Society now has 77 members. The majority of members reside in Alberta, but many are in other Canadian provinces and several American states.

You are reminded that your 1988 membership is now payable. We would like to receive all dues money by February 15, 1988 at the latest. If you joined the Society after September 1, 1987 your membership is good until the end of 1988.

Address Change:

New Members:

Names and contact information removed
to protect members' privacy.

THE COVER:

Jeff Doten

Naturally, for my first cover for the Alberta Palaeontological Society I chose an African dinosaur. I think the animal had a certain elegance. The dinosaur is *Ouranosaurus*, an Iguanodontid to which the usual heat exchange debates are attached via it's sail.

I have two years at the Alberta College of Art behind me and am planning on pursuing palaeontology at the University of Alberta.

To those of you who thrive on invertebrates, don't worry, I'll be doing those too (what, I don't know ...).