Palæontological Society Bulletin

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JUNE 2010



ALBERTA PALÆONTOLOGICAL SOCIETY

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Field Trip Coordinator		228-3211
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Fossil Collection	Howard Allen	274-1858
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Social	Paul Dugan	934-9599
Symposium	Philip Benham	280-6283
Website	Vaclav Marsovsky	547-0182

† Alberta Palaeontological Advisory Committee

The Society was incorporated in 1986, as 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
 - 4) Education of the general public
 - 5) Preservation of 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. (Please enclose membership dues with your request for application.)

Single membership \$20.00 annually Family or Institution \$25.00 annually

THE BULLETIN WILL BE PUBLISHED QUARTERLY:

March, June, September and December. Deadline for submitting material for publication is the 15th of the month prior to publication.

Society Mailing Address:

Alberta Palaeontological Society P.O. Box 35111, Sarcee Postal Outlet Calgary, Alberta, Canada T3E 7C7 (Web: www.albertapaleo.org)

Material for the Bulletin:

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NOTICE: Readers are advised that opinions expressed in the articles are those of the author and do not necessarily reflect the viewpoint of the Society. Except for articles marked "Copyright ©," reprinting of articles by exchange bulletins is permitted, as long as credit is given.

UPCOMING APS MEETINGS

Meetings take place at 7:30 P.M. in **Room B108**, **Mount Royal University**, 4825 Mount Royal Gate SW, Calgary, Alberta.

June, July, August, 2010—Field Trips (see Page 5). No meetings.

Friday, September 17, 2010—Annual Open House and Fossil Clinic.

Friday, October 15, 2010—Topic to be announced.

Friday, November 19, 2010—Topic to be announced.

ON THE COVER: Fossil stromatolite (cyanobacterial growth structure) in a boulder at the abandoned Pine Point lead-zinc mine property, east of Hay River, Northwest Territories. The stromatolite structure (top to the left) is heavily recrystallized by white dolomite and calcite. Middle Devonian (Givetian: approximately 385–390 million years old), Presqu'ile Dolomite facies, probably Sulphur Point Formation. Hammer head is 18 cm long. Photo by Howard Allen.

May Election Results

By Wayne Braunberger, President

Here are the results of the elections held at the Annual General Meeting on May 28, 2010:

Position	Elected	Term (years)
President	Wayne Braunb	erger 1
Vice President	Harold Whitta	ker 1
Treasurer	Mona Marsovs	ky 1
Secretary	Cory Gross	1
Membership Director	Vaclav Marsovs	sky 2
Editor	Howard Allen	2
Field Trip Co-ordinator	(Position unfille	d) 2

Fulfilling the second year of a two year term Program Co-ordinator Phil Benham

Committees and their appointed Chairpersons

APAC (in hiatus) Howard Allen Fossil Collection Howard Allen

Library (To be appointed in September)

Public Outreach Social Dan Quinsey Paul Dugan

Symposium (*To be appointed in September*)

Website Vaclav Marsovsky

Please note that the **Field Trip Co-ordinator position was not filled**. If you are interested in this position please contact a member of the Board. \square

Upcoming Events

Alberta Palaeontological Society Open House and Fossil Clinic

Friday, September 17, 2010, 7:30 P.M. Mount Royal University, Room B108

The September program will be an Open House and Fossil Clinic. Please bring along your summer finds for identification as well as any other items

you may need help with. This is an open house and if you are a new member, please visit us. □

Paleo 2010

APS 14th Annual Symposium

By Mona Marsovsky

The 14th Annual APS Symposium on March 13 and 14 was another success. The palaeo and art theme proved to be popular, with most of the ten talks discussing the relationship between art and palaeontology. More than 100 attendees enjoyed the talks, posters and displays on Saturday.

On Sunday morning, **Dr. Jason Anderson** of the University of Calgary showed a variety of Permian vertebrate fossils from north central Texas to the eleven workshop attendees. That afternoon in the *Make-a-Saurus* workshop led by **Brian Coulee** and **Mary Anne Wilson**, the twenty child and adult participants sculpted dinosaur models of *Albertosaurus* and *Triceratops*, some of which looked very life-like.



APS members Doug Shaw and Pete Truch releasing their inner artist as they configure the wire skeletons for their dinosaurs during the *Make-a-Saurus* workshop. Photo by Vaclav Marsovsky.

Thanks go to all of the speakers, poster and display presenters and the workshop leaders, all of whom did an excellent job. This event could not have been held without the support of Mount Royal University (John Cox and Mike Clark) and the Canadian Society of Petroleum Geologists Paleontological Division. Thanks go to the APS volunteers who made this event a success, namely: Philip Benham, Howard Allen, Wayne Braunberger, Mona Marsovsky, Vaclav Marsovsky, Dan Quinsey, Harold Whittaker, Lisa Bohach, Arnold Ingelson, Doug Shaw and Georgia Hoffman. □



Les Adler, Pete Truch and Wayne Braunberger (L–R) sorting Permian vertebrate fossils during the Permian vertebrate fossil workshop. Photo by Vaclav Marsovsky.

CRLC Annual Show

Public Outreach Report

By Dan Quinsey Public Outreach Chairperson

The Calgary Rock and Lapidary Club (CRLC) Annual Show was held on May 1 and 2, 2010 at the Hillhurst Community Center in Calgary. This was their 50th Anniversary Show.

The event attracted a very strong crowd on the first day, possibly due to the weather being just a bit too cold to work on gardens outside but still nice enough to get out of the house.

The author looked after setting up the APS Booth and CRLC Showcase. The booth featured various items such as: two 2'x4' wooden boxes used for our give-away fossils and minerals; activities for children of all ages; about fifty various fossils used for show-and-tell; and an area for identification and APS advertising.

During the two days we took in three new family memberships, sold some APS books, and moved twenty-five 2½ gallon buckets of fossils and minerals from our give-away boxes to the general public (that's a lot of weight) and interacted with at least a few hundred people.

Special thanks go out to Les Adler, Geoff Barrett, Mike Clark, Robert Mason, Dan Quinsey, and Guy Santucci for donations to the give-away box. Your contributions are very appreciated.

Volunteers deserving recognition for manning

the booth and interacting with the general public are: Les Adler, Geoff Barrett, Wayne Braunberger, Lyle Hartwig, Jake and Fiona Jakielaszek, Harvey Negrich, and Dan Quinsey.

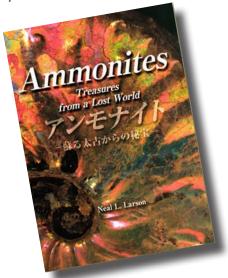
Thanks to everyone for making this important event a great success. □

Book Review

By Dan Quinsey

Ammonites: Treasures from a Lost World. By Neal L. Larson, 2009. Ammolite Laboratory, Japan. Paperback, 256 pages. Available from Black Hills Institute. Price US\$39.99 (approximately CDN\$42.00).

Trecently acquired a signed copy of Neal L. Larson's new book, *Ammonites, Treasures from a Lost World.* This is a soft-bound book printed in Japan with 256 pages featuring more than 300 colour photographs and text in both English and Japanese. The text is large (for some of us getting on in years) and very easy to follow.



Most of us are familiar with Larson's earlier identification guide, *Ammonites and the Other Cephalopods of the Pierre Seaway* published in 1997. *Ammonites, Treasures from a Lost World* not only continues from the earlier work, but is spectacular in its presentation of ammonites from around the world. From the inside cover:

This book was created to fill the need for an easy identification guide to some of the more

common ammonites available to amateurs, collectors, students and professionals. It is filled with pictures of some of the most beautiful ammonites in the world, their natural history, their scientific name and where they are found.

The foreword is written by Kazushige Tanabe, Professor at the Department of Earth and Planetary Science, University of Tokyo. The book begins with a look at the natural history of ammonites, their origins and relatives. Topics covered in detail include environment, anatomy, sexual dimorphism, predation, pathologies, and deformities, as well as ammonite extinction events, fossil preservation, and their importance.

The world's most beautiful ammonites are featured by continent. Included are the ammonites of Africa (Madagascar, Morocco, Nigeria); Asia (Japan, Indonesia, Kazakhstan); Australia (Queensland); Europe (England, France, Germany, Hungary, Italy, Poland, Greece, Russia); North America (Canada/Alberta, Bearpaw Shale, Western Interior, Fox Hills, Pierre Shale); the Gulf Coastal Region (Tennessee, Texas, Oklahoma, Mexico); and finally South America (Argentina, Peru).

At the end of the book are acknowledgements, bibliography, indices (of scientific names and of locations), a geological time scale and glossary.

This is not an ammonite treatise but it is the next best thing for anyone interested in ammonites. It is a must for your library. If you cannot find the book on the shelf of your local book store, visit the website of the Black Hills Institute of Geological Research, www.bhigr.com/store/home.php. □

2010 Field Trips

By Keith Mychaluk

Our 2010 field trip lineup should have something for everyone: fossil vertebrates, invertebrates and plants. Below are brief descriptions of each trip. Further details will appear on the APS website. If you have any questions, contact me by e-mail at events@ albertapaleo.org.

Trip 2010-01, June 26 & 27, 2010 Medicine Hat area, Alberta Registration for this trip closed on June 4. If you registered, you should already have received details by email or post. If not, contact Keith.

Trip 2010-02, July 17 & 18, 2010 Lethbridge area Ammolite mines, Alberta

We plan on visiting at least one active open-pit mine at which Cretaceous ammonites and the gemstone Ammolite are found. There may or may not be an opportunity to collect from the mine's waste piles; we will be strictly following our hosts' rules. As well, we have permission of the land owner to hike along St. Mary River for marine fossils that may have weathered out along the river banks (note, this could be a long hike). At this time, no activities are planned for Sunday, but expect a full day on Saturday. This trip will also include a tour of Korite International/ Canada Fossils' preparation lab in Calgary on a separate date (likely to be in **July**; details to follow). Plan on meeting in Lethbridge by 9:00 A.M. on Saturday. There are a number of motels/hotels and campgrounds in the area. As it can be quite busy during the summer months you are advised to book your accommodations ahead of time. The registration deadline is July 2, 2010.

Trip 2010-03, August 21 & 22, 2010 Grassy Mountain, Blairmore, Alberta

This trip will revisit the Grassy Mountain coal mine just north of Blairmore, in the beautiful Crowsnest Pass. On our first visit, a decade ago, club members found a variety of nice fossil plant remains from exposures of the Jurassic-Cretaceous Kootenay Group. This is a long, steep hike up an abandoned mine road in bear country; the climb will take 2 – 3 hours and should only be attempted by those in good physical condition. Formal activities are planned for Saturday only, but expect a long day. Numerous motels/hotels and campgrounds are available in the Crowsnest Pass area. Plan on meeting in Blairmore at 9:00 A.M. The registration deadline is July 30, 2010.

Please note that all fees are due at the time of registration. Non-members and unaccompanied minors will not be allowed to attend field trips. All participants will be required to sign a release form

(waiver). Detailed information will be provided to all those registered shortly after the registration deadline. I will be sending you the waiver and medical forms along with the trip information, via e-mail or Canada Post. Please ensure that your addresses are correct and legible when sending in registration forms. When you arrive at the meeting place please have the forms completed so that less time will be spent on paper work prior to the trip. All participants are required to have their membership in good-standing and have fully completed all waiver and medical forms in order to attend the trip. All personal information is held in confidence and is ultimately destroyed. □

Red Deer River Scow Expedition Launches June 29

Darren Tanke's much-anticipated 100th Anniversary reenactment of the 1910 Barnum Brown scow expedition on the Red Deer River is to cast off from the city of Red Deer. Scheduled to last five weeks, team members will be doing palaeontological exploration in the badlands along the way to their final destination of Dinosaur Provincial Park, in early August. You can keep up-to-date on the expedition's progress by following Darren's blog, http://2010dinohuntingbyboat.blogspot.com/

An impromptu APS field trip may be arranged to meet the expedition at one of their stops, probably at or near Drumheller, in mid-July. Watch the APS website for announcements.

Fossils in the News

Edited by Chris Marion

Science Daily—Absence of evidence for a meteorite impact event 13,000 years ago www.sciencedaily.com/releases/2009/12/091208132734.htm

BBC—Rotting fish yield fossil clues news.bbc.co.uk/2/ hi/science/nature/8488179.stm

Edmonton Journal—Yukon fossils reveal earliest traces of animal life www.edmontonjournal.com/technology/Yukon+fossils+reveal+earliest+traces+animal+life/2548781/story.html

CBC—Four-footed animals emerged earlier than thought: researchers www.cbc.ca/technology/sto-ry/2010/01/06/science-fossil-four-footed-animals. html

Science Daily—Antarctica served as climatic refuge in Earth's greatest extinction event www.sciencedaily.com/releases/2009/12/091202205621.htm

BBC—Jurassic tree* survives big chill in trust garden news.bbc.co.uk/2/hi/uk_news/scotland/highlands_and_islands/8452506.stm

*The Wollemi Pine is one of the plant specimens in Tyrrell Museum's Cretaceous Garden collection.

Science Daily—New fossil plant discovery links
Patagonia to New Guinea in a warmer past www.sciencedaily.com/releases/2009/11/091110171750.htm

Science Daily—Fossils show earliest animal trails www.sciencedaily.com/releases/2010/02/100203085914.htm

Science Daily—Learning from climate's sedimental journey www.sciencedaily.com/releases/2010/01/100129123611.htm

CBC—Fossil fish were filter feeders www.cbc.ca/technology/story/2010/02/18/tech-fossil-fish-filter.html

CBC—Fossils could derail potential Arctic coal development www.cbc.ca/canada/north/sto-ry/2010/01/21/ellesmere-weststar-fossils.html

Science Daily—Paleontologists find extinction rates higher in open-ocean settings during mass extinctions www.sciencedaily.com/releases/2009/11/091119194128.htm

Thanks to Georgia Hoffman, Phil Benham, Mike Dooley and Vaclav Marsovsky for sending links. These links and more can be found on the APS website at www. albertapaleo.org thanks to Vaclav. □

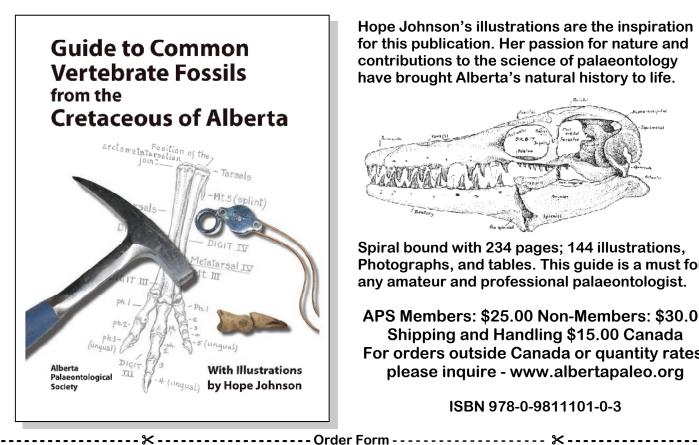
APS Balance Sheet for 2009

Revenues		Expenses	
Memberships	2745.00	Bulletin Printing	287.59
US\$ Exchange	11.25	Bulletin Postage	305.18
T-shirts	375.00	Speaker Expenses	100.57
Pins	3.00	PO Box Rental	131,25
Field Trip Guides	10.00	Membership Printing	222,46
Abstract Volumes	12.00	Membership Postage	119.67
APS Book	12785.00	Field Trip Expenses	112.11
Shipping and Handling	561.97	Workshop Expenses	0.00
Misc. Sales	6,00	Symposium Speaker	188.69
Refreshments	0.00	Symposium Abstract Printing	212.42
Field Trip Fees	340,00	Postage for Sales	440.91
Workshop Fees	490.00	Website Expenses	377.40
Donations	81.00	Refreshments	0.00
Symposium Abstract Sales	306,00	Bank Charges	199,57
Symposium Donations	600.00	T-shirt purchase	1575,00
Library Book Sales	97.75	Miscellaneous	327.07
,		APS Book print/promotion	9971.14
		Library book purchases	0.00
Subtotal Revenues	18423,97	Subtotal Expenses	14571.03
Plus Revenue Received in 2008 for		Plus Expenses paid in 2008 for	
2009 Membership Fees	1605.00	APS book expenses 2006 6200	% 186.11
2009 Workshop Fees	120.00		
Savings for 2009 Symposium	650.00		
Savings for T-shirt purchase	1500.00		***
Subtract Revenue Received in 20		Minus Expenses paid 2009 for	2010
2010 Memberships Fees	1590.00		
Donations for 2010 Symposium	1720.00		
2010 Symposium from Workshop	40.00		
Savings for T-shirt purchase	2000.00		
Total Revenues	16948,97	Total Expenses	14757.14
Excess of Revenues over Expense	es = \$2191.83	For Years 2002 to 2008	
		Total Fund Raising Proceed:	3,723.50
Inventory Sale Value	\$1,884.00	Total Fund Raising Costs	354,97
Values Current to Date:	Dec. 31, 2009	Net Fund Raising	3,368.53
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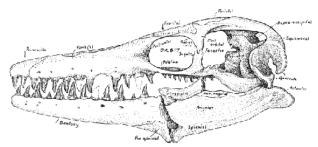
The Alberta Palaeontological Society **Proudly Presents**

A Guide to Common Vertebrate Fossils from the Cretaceous of Alberta. Assembled by the Alberta Palaeontological Society (APS) with illustrations by naturalist Hope Johnson; Foreword by Dr. Donald Brinkman, Director of Preservation and Research, Royal Tyrrell Museum of Palaeontology.

Contents include: Geology of the Vertebrate Fossil Bearing Formations in Alberta; Collecting Regulations; Curation; Skeleton Terminology; Fishes; Amphibians; Turtles; Champsosaurs; Crocodiles; Lizards; Mosasaurs; Plesiosaurs; Tyrannosaurids; Ornithomimids; Hadrosaurs; Ceratopsians; Ankylosaurs; Pachycephalosaurs; Mammals; Index; and much more.



Hope Johnson's illustrations are the inspiration for this publication. Her passion for nature and contributions to the science of palaeontology have brought Alberta's natural history to life.



Spiral bound with 234 pages; 144 illustrations, Photographs, and tables. This guide is a must for any amateur and professional palaeontologist.

APS Members: \$25.00 Non-Members: \$30.00 Shipping and Handling \$15.00 Canada For orders outside Canada or quantity rates, please inquire - www.albertapaleo.org

ISBN 978-0-9811101-0-3

Guide to Common Vertebrate Fossils from the Cretaceous of Alb

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