

Alberta

*Palaeontological
Society
Bulletin*

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ALBERTA PALAEOLOGICAL SOCIETY

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THE SOCIETY WAS INCORPORATED IN 1986

as a non-profit organization formed to:

1. Promote the science of palaeontology through study and education.
2. Make contributions to the science by: discovery; responsible collection; curation and display; education of the general public; preservation of palaeontological material for study and future generations.
3. Work with the professional and academic communities to aid in the preservation and understanding of 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

SOCIETY MAILING ADDRESS:

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THE BULLETIN WILL BE PUBLISHED QUARTERLY: March, June, September and December. Deadline for submissions is the 15th of the month prior to publication. Material for the *Bulletin* should be sent to:

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Requests for missing *Bulletin* issues should be directed to the Editor. Send changes of contact information to the Membership Director.

NOTICE: Readers are advised that opinions expressed in the articles are those of the authors and do not necessarily reflect the viewpoint of the Society. Except for articles marked "Copyright ©," reprinting of articles by exchange newsletters 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.

Friday, April 12, 2019—Dr. Terry Poulton, Geological Survey of Canada:

Ammonites witnessed the growth of Canada (see Page 6).

Tako Koning, Senior Geologist, will start with a 15-minute presentation,

Algal Stromatolites — From Precambrian to Present Day (see Page 4).

Friday, May 10, 2019—David Terrill, University of Calgary:

You are what you eat: Using dietary trace elements to examine the life histories of dinosaurs and other fossils (see Page 7).

Watch the APS website for updates!

ON THE COVER: Alberta(?) fossils—a silicified colonial rugose coral, probably Carboniferous. APS collection, catalogue number APS.1999.031, an anonymously donated specimen with no provenance data. Similar specimens are found in the Alberta Rocky Mountains. Width of specimen is 8.7 cm. APS file photo.

Notice of Annual General Meeting of Members

To the Members of the Alberta Palaeontological Society:

Take notice that the Annual General Meeting (AGM) of the Members of the Alberta Palaeontological Society (Hereinafter called “the Society”) will be held at Mount Royal University, Room B108, on Friday the 10th day of May, 2019, at the hour of 7:30 o'clock in the evening, local time, to deal with the following business to be brought before the Meeting:

1. **Adoption of agenda.**
2. **Minutes of 2018 AGM.**
Members will be asked to adopt the minutes of last year's (2018) AGM, which may be reviewed at the APS website: <http://www.albertapaleo.org/agm.html>
3. **Treasurer's presentation of the audited statement of the financial position of the Society.**
4. **Appointment of the auditors.**
5. **Election of Officers and Directors to the Board of the Society.**

All APS members 18 years and older are entitled to vote. Executive positions are 1 year terms and directorships are 2 year terms. Nominations are being solicited for the following positions:

Officers	Directors
President	Program Coordinator
Vice-President	Field Trip Coordinator
Secretary	
Treasurer	

Continuing directorships are Editor and Membership, which are currently held by **Howard Allen**. Both positions are entering the 2nd year of a 2 year term.

In addition to the elected positions the APS has a number of committee chairs which are appointed by the board:

Committee	Current Chairperson	Term
Fossil Collection	Howard Allen	Unlimited
Library	Georgia Hoffman	Unlimited
Public Outreach	Cory Gross	Unlimited
Social	Michèle Mallinson	Unlimited
Website	Vaclav Marsovsky	Unlimited

Terms for positions begin September 1. If you would like more information about Board positions or are interested in chairing or participating on a committee, please contact Past President **Wayne Braunberger** at (403) 278-5154 or by e-mail, pastpres@albertapaleo.org. All inquiries will be kept confidential if requested.

6. **New Business.**

- Directors and Officers Liability Insurance with coverage up to 1 million dollars.
- General Liability Insurance with coverage up to 5 million dollars.
- Award for non-professionals (Hope Johnson Award; see article, below).

A separate document detailing the motions to be voted on accompanies this issue of the *Bulletin*.

If you would like to bring forward any other items of New Business, contact the Society President, **Cory Gross** at (403) 617-2079 or by e-mail, president1@albertapaleo.org.

Proposed Award for Non-professionals

An award is proposed to recognize non-professional palaeontologists for contributions to western Canadian palaeontology. At the present time no formal award or recognition is given to non-professionals.

Name

The Hope Johnson Award. Named in honour of the late Hope Johnson (1916 – 2010).

Purpose

To recognize significant contributions by those not professionally employed in palaeontology.

Criteria

- At least one of the following:
- Compilation of fossil collections from an area or formation at a public institution.
 - Curation and conservation of collections at a public institutions.
 - Volunteer work at a museum or research institute (long term, more than 5 years).
 - Published studies (author, co-author) in recognized journals.
 - Outreach activities bringing palaeontology to the

public (e.g. school and public presentations) for more than 5 years.

A nominee would be entitled to the award once in their life. Currently sitting APS Board members cannot be nominated and do not qualify. Ordinarily, a nominee must be an APS member, though a non-member would be considered if their contribution was significant.

Nomination

- Must be nominated by at least one APS member other than the applicant.
- A short citation outlining the nominee's accomplishments must be submitted.
- One or more letters of support must be submitted.
- Nominators should be prepared to write an illustrated profile of the nominee for inclusion in the *Bulletin*.
- Deadline for nominations will be December 31 so that they can be reviewed and a presentation made at the March symposium.

Frequency

No more than one award will be given out in a year. If no suitable nominations are received, no award will be given.

Selection

By the APS Board or a special committee.

Award

A framed certificate and cash award of \$250. Money for the award will be taken from the fundraising account.

Presentation

To be made at the annual symposium. The name of the winner and a short profile will be published in the *APS Bulletin*. □

Fossils in the News

“Duck-billed” marine reptile found in China.
www.nytimes.com (search “Eretmorhipis”).

New map of Beringia drawn from seafloor data.
www.cbc.ca (search “new map of Beringia”).

Ground sloth bones found in Belize cenote.
www.cnn.com (search “ground sloth tooth”)

[More news items on Page 10.]

Upcoming Events

April

Tako Koning

Senior Geologist, Calgary, Alberta

Algal Stromatolites — From Precambrian to Present Day

Friday, April 12, 2019, 7:30 P.M.
Mount Royal University, Room B108

[This 15-minute presentation will precede our main speaker, Dr. Terry Poulton.]

The author of this presentation was first exposed to outcrops of Precambrian stromatolites in the summer of 1971 while working on a mining exploration program in the East Arm of Great Slave Lake, Northwest Territories. The stromatolites have been dated at 1.8 billion years old. This left him with an abiding interest in stromatolites. In 2005 while working in Angola, West Africa he visited 1.1 billion-years-old Precambrian stromatolites in the interior of the country. In the fall of 2018, he studied Ordovician stromatolites that outcrop in Gatineau, Quebec, along the northwest shore of the Ottawa River, directly across from Ottawa. This presentation is based on those observations and also reviews some select global occurrences of stromatolites.



Figure 1. Precambrian stromatolites outcropping in East Arm of Great Slave Lake. Photo from nwtgeoscience.ca

Stromatolites (strom = layer, lithos = rock) are layered mounds, columns and sheets of rock built through microbial activity. Cyanobacteria, which are single celled organisms, formed slimy, gelatinous algal mats on the shallow seafloor or on the floors of saline lakes such as Great Salt Lake in Utah. These mats built upwards layer by layer by the trapping and binding of sediments in their sticky slime. This resulted in structures ranging in size from a couple of centimetres to more than 10 m across. Indeed, in the Belcher Islands, eastern Hudson Bay, middle Precambrian, 1.8 billion-years-old stromatolites form bioherms that are tens of metres in size.



Figure 2. Precambrian stromatolite from near Meridian Lake, East Arm of Great Slave Lake. Diameter 11 cm. Photograph by Tako Koning.

Stromatolites were the dominant form of life on Earth for 2 billion years. The oldest known stromatolites are found in Western Australia and are approximately 3.5 billion years old. However, recent field work in southwestern Greenland by Australian palaeontologists has discovered 3.7 billion-years-old stromatolites, thereby pushing back the oldest known life on Earth by 200,000 years (*Nature*, 2016). Subsequent field work in Greenland by American researchers are disputing these findings as described in *Nature*, 2018.

Great Slave Lake is the deepest lake in North America with a maximum depth of 614 m (2,014 ft). The East Arm of Great Slave Lake has been described as a world-class scenic and geological wonder. This area consists of deep channels and bays extending some 240 km into the Precambrian Shield. The subsurface consists of an aulacogen containing unmetamorphosed Precambrian (Early Proterozoic) sandstones, conglomerates, gabbro sills and stromatolite-bearing limestones. The limestones are 175



Figure 3. Ordovician stromatolites. Ottawa skyline is seen on the horizon. Photo by Bruce Starling, OttawaRiverKeepers.ca

– 350 m in thickness. The stromatolites (Figures 1, 2) are marine, not lacustrine, and vary in shape from bulbous to elongated and reflect the tidal conditions at the time of deposition.

A section of Ordovician-age stromatolitic limestones in the Ottawa River (Figures 3, 4) is one of the best-known displays of stromatolites in Canada and certainly in an urban area. The stromatolites flourished in a shallow marine environment and are concentric, with diameters of 1.0 – 1.5 m.

The best-known and most-visited location for present day stromatolites is in Hamlin Pool, Sharks Bay, Western Australia. These were first discovered in 1956. The stromatolite forming cyanobacteria are able to flourish in the restricted marine Hamlin Pool because the water is twice as saline as the regular



Figure 4. Stromatolites near Champlain Bridge, Gatineau, Quebec. Photo from OttawaVeloOutaovais.

sea water, which excludes competition and potential predators such as shellfish.

The sediments trapped by stromatolites can contain effective porosity which can store oil and gas. Cyanobacteria are known to be a source of hydrocarbons, thus making stromatolites of interest to oil and gas explorers. Microbial carbonates termed microbialites includes stromatolites, thrombolites, oncolites and laminites. Recent oil and gas exploration discoveries in microbialites, including lacustrine stromatolites, have been reported in the offshore pre-salt Santos Basin and in the offshore Lower Cretaceous Kwanza Basin, Angola. Significant oil and gas is produced from microbialites in Brazil's Santos Basin, giant-size oil fields in the South Oman salt basin, the Tengiz oil field in Kazakhstan, the Eastern Siberia basin in Russia and the Bohai Bay and Sichuan basins in China. The oil and gas-bearing strata range in age from Precambrian (Proterozoic) to Lower Cretaceous.

Biography

Tako Koning graduated in 1971 from the University of Alberta with a B.Sc. in Geology and in 1981 with a B.A. in Economics from the University of Calgary. Much of his career was outside of Canada and consisted of a combined thirty years of living and working in Sumatra, Indonesia, later in Lagos, Nigeria, and finally in Luanda, Angola. During this time, he worked primarily for Texaco and later for Tullow Oil and Gaffney, Cline & Associates. □

Dr. Terry Poulton

Geological Survey of Canada, Calgary

Ammonites witnessed the growth of Canada

**Friday, April 12, 2019, 7:45 P.M.
Mount Royal University, Room B108**

A major role of palaeontologists in a geological organization is to interpret the age and depositional characteristics of sedimentary rocks as aids to mapping, sedimentary basin analysis, and resource exploration activities. Ammonites are of exceptional value for understanding Mesozoic marine strata because of the many morphological features they exhibit, their rapid evolution and the widespread distribution of many of them.

During Jurassic time, North America was actively growing by accretion of oceanic terranes to its

western margin; associated east-west compression initiated the ancestral Rocky Mountains and affected the Western Canada Sedimentary Basin in the plains. The Jurassic also saw the early stages of the opening of the western portion of the Arctic Ocean, and its precursor in the Sverdrup sedimentary basin in Canada's Arctic archipelago.

Since the earliest discoveries in Canada in the 1850s, ammonites have enabled correlations of strata over long distances and provided precise ages by comparison of their sequences with the international standards, which have been mainly established in Europe. However, the identification of ammonites, and therefore the determination of their ages, is not always straightforward, in part because of the re-appearance of superficially similar forms at different times and in different lineages. Additionally, the occasional development of distinct marine faunal provinces was sometimes extreme, with few or no species in common with Europe at certain times during the Jurassic.

This presentation will discuss some of the challenges and the geological contributions from several previous and on-going studies of Canadian Jurassic ammonites.

Biography

After completing a B.Sc. at University of Calgary in geology (1968) and field experience with the Geological Survey of Canada (GSC) during the summers, Terry was offered an opportunity to study for an M.Sc., with University of Calgary professor **Dr. Philip Simony** to document the sedimentary sequence and palaeoenvironments in late Precambrian low-grade metamorphic rocks west of Golden, B.C. As this was being completed (1970), he also worked with PanArctic Oils Ltd, mapping and analyzing Mesozoic strata on western Ellesmere and Axel Heiberg Islands prior to the expansion of their hydrocarbon drilling program eastward from the discovery wells on Melville Island. By agreement, the fossils collected were studied by GSC's long-time mollusc specialists **Hans Frebold** and **George Jelezky**. Canada was still in the post-WWII growth spurt, and GSC was actively exploring its resource potential and terrane, which included large areas of Mesozoic sandstones, mudstones and volcanics in the Arctic and the Cordillera frontiers. These strata of different ages are superficially similar, and unravelling them required knowledge of the ages derived from their fossils. To this end, GSC supported a Ph.D. project at Queens University, which led to a

full-time job in early 1975 after Dr. Fربولd retired. After years of undertaking specific research projects and contributions to several regional syntheses, as well as stints in lower and “middle” management in GSC, Terry continues to pursue topical research at GSC in Calgary. □

May

David Terrill

University of Calgary

You are what you eat: Using dietary trace elements to examine the life histories of dinosaurs and other fossils

**Friday, May 10, 2019, 7:30 P.M.
Mount Royal University, Room B108**

When considering the nature of palaeontological remains, the first images that come to mind are usually those of preserved skeletons, which can include vertebrate bones, the exoskeletons of arthropods such as trilobites, the hard shells of molluscs and brachiopods, the calcitic skeletons of corals, and many others. These hard tissues often form the basis of our understanding of life in the distant past, as we use them (sometimes with the help of exceptionally preserved soft tissues like skin and feathers) to reconstruct the animals from which they came. We then combine this with information obtained from the rock record such as fossil tracks and traces, pollen, and geological information to help us understand what the environment was like and how these animals may have lived during that time.

One often overlooked source of information that has been gaining traction in the last two decades is chemical data. While the process of fossilization often replaces original biological tissues with other minerals, certain fossils retain at least a small portion of their original composition. Of all the fossils known, perhaps the best source of original biological materials is the enamel of vertebrate teeth. Enamel is incredibly hard and resistant, to the point where it is virtually unchanged in fossils dating from several hundred million years ago. The primary components of enamel include elements such as phosphorus, calcium, carbon and oxygen; however, a number of

other elements can be found in trace amounts.

For my work, I primarily focus on strontium, a substitution element for calcium in bones and teeth. Similar to calcium, strontium in the body primarily comes from dietary sources. This means the isotopes of strontium and overall abundances preserved in fossil enamel reflect the diet of the animal. As strontium in the environment is strongly linked to the eroding bedrock in a given area, the isotopes preserved in the enamel can be linked through the animal’s diet back to the location where the animal had been feeding. Using this property of strontium, I have attempted to reconstruct the migratory behaviours of hadrosaurs from the Late Cretaceous of Alberta. The relative abundance of strontium preserved in the enamel can also be used to estimate where approximately an animal may fit into the food chain. I have applied this to a separate project on Silurian conodonts, which are small eel-like fish fossils. Though well-studied, little is known about the ecology of these animals; through strontium analysis, I hope to be able to show how different conodont species may have exploited different types of food sources. Finally, I will present a few ideas for future palaeontological studies using similar techniques.

Biography

Growing up in Calgary, David had many opportunities to visit the Royal Tyrrell Museum in Drumheller and was an avid fan of dinosaurs. After beginning a B.Sc. in astrophysics at the University of Calgary, David picked up a summer job working at the museum, where he rekindled his fascination with all things palaeontological. A few summers later, David began leading hikes to the Burgess Shale fossil beds in the Field, BC area. He graduated in 2010 with undergraduate degrees in astrophysics and geology.

From 2010 to 2017, David worked seasonally as an interpreter at Dinosaur Provincial Park, where he had many opportunities to join scientists from the Tyrrell Museum and University of Alberta on field excursions in and around the park. He completed an M.Sc. in 2015 studying sulphur preservation in conodonts, attempting to clarify the relationship of the mysterious group of fossils as they relate to other vertebrates. Currently he is a Ph.D. candidate at the University of Calgary, studying dinosaur migration and conodont ecology. He will once again be guiding hikes to the Burgess Shale this coming summer. □

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2019 Field Trips

By Wayne Braunberger

Planning is underway for this year's trips. For more information please contact **Wayne Braunberger** at (403) 278-5154 or by email at **fieldtrips@albertapaleo.org**. A field trip registration form is included with this issue of the Bulletin and can also be downloaded from the APS website (www.albertapaleo.org/fieldtrips.html). Information will also be available at the monthly meetings. All fees are due at the time of registration. Fees for trips are \$10.00.

Starting this year you will be able to pay field trip fees by Interac E-transfer (Canada only). Follow directions on your bank's online banking site or mobile app. Bank fees may apply. Payee is **giftshop@albertapaleo.org**. Please state in the message field: "Field Trip Fees for 2019". Email a scan or photo of your completed registration form to **fieldtrips@albertapaleo.org**.

Non-members and unaccompanied minors will not be allowed to attend field trips. All participants are required to have their membership in good standing. Any membership applications received after May 6, 2019 will not be reviewed and voted on by the Board of Directors until September, 2019. Therefore, if you are a non-member and would like to join be sure your application is received prior to May 6, 2019. All participants will be required to read and sign a release form (waiver). Detailed information will be provided to all those registered shortly after the registration deadline. After the registration deadline no refunds will be given; however, you will receive the guide for the trip. No late registrations will be accepted. Registrations are accepted on a first-come-first-served basis. Sign up early to avoid disappointment.

For the 2019 field trips I will be sending you the waiver and medical forms along with the trip information. This information will be sent to you via email 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. All participants are required to have fully completed all waiver and medical forms in order to attend the trip. There will be no exceptions. All personal information is held in confidence and ultimately destroyed.

Trip Participant Responsibilities

It is understood that risk is inherent to some degree in outdoor activities. Before registering for a trip please ensure you understand the risks involved and are prepared to accept them.

As a participant you are responsible for your own safety and equipment at all times.

Inform the trip leader of any medical conditions they should be aware of in an emergency.

Ensure that your previous experience, ability and fitness level are adequate for the trip.

Trip 2019-1, June 15 & 16, 2019

St. Mary River Formation, SW Alberta

This trip will focus on Late Cretaceous (Maastrichtian) plant fossils. We will be exploring outcrops and talus of the St. Mary River Formation (Horseshoe Canyon Formation equivalent) below the St. Mary River dam near Cardston in southwestern Alberta. It is a scenic area with good camping and good views of the mountains, lake, and river. Reservations for the St. Mary Lower Campground, which is adjacent to the fossil locality, can be made online at <https://reserve.albertaparks.ca> and participants should probably book a campsite as soon as they can. Contact Mona at **giftshop@albertapaleo.org** or (403) 547-0182 for a list of nearby campgrounds and hotels.

Registration deadline is June 1, 2019.

Trip 2019-2, July. Dates to be announced.

Southeastern Alberta

Arrangements are currently being made to access the grazing reserves in southeastern Alberta. At this time a date for the trip has not been determined. As updates become available they will be announced on the APS website and in the June *Bulletin*.

Registration deadline: To be announced.

Trip 2019-3, August 17 & 18, 2019

Cranbrook, British Columbia

We will be touring the Cranbrook History Centre to view the fossil galleries and tour the backrooms. After the tour we will visit some local fossil sites. More information to come on the APS website and in the June *Bulletin*.

Registration deadline: August 2, 2019. □

Earth Science for Society Exhibition

By Dan Quinsey,
APS Public Outreach Committee Member

The Earth Science for Society (ESfS) held their 9th Annual Earth Science for Society Exhibition at the Big four Building, Stampede Park, Calgary, March 17–19, 2019. The event was hosted by the Canadian Society of Exploration Geophysicists (CSEG) Foundation.

ESfS is a fun, educational and dynamic geoscience outreach event in which students, families, youth groups and the public are given an opportunity to explore the wonders of Earth science.

Cory Gross and **Dan Quinsey** attended the event Sunday, March 17th, representing the Alberta Palaeontological Society. On display at the APS table was an exhibit showcasing Alberta's First Fossil

Hunters, a Timeline of Ancient Alberta activity, a “mouthful” of fossils from Pine Point and Hay River, NWT to give away, opportunities for fossil identification and the usual APS advertising. Cory did a fantastic job assembling the complete exhibit.

At least nineteen school groups signed up to bring 1737 students and 217 chaperones to the event. In addition, approximately 450 youngsters aged 7–15 and 88 chaperones from Sparks, Brownies, Girl Guides, Pathfinders, Cubs and Scout groups also attended.

The general public was also invited to attend the event. A scavenger hunt booklet was provided to participants to help guide them through the exhibition. Exhibitors stamped the booklets for those participants who were actively involved at each exhibit.

Presentations took place on Sunday and Monday morning. **Dr. Martyn Unsworth**, Professor,



President Cory Gross mans the APS table at the Earth Science for Society show. Photo by Dan Quinsey.

Department of Physics, University of Alberta gave two presentations titled *Using Geophysics to Understand Volcanoes and Earthquakes*. **Dr. Benoit Beauchamp**, Professor, Department of Geoscience, University of Calgary also gave two presentations titled *The Arctic is Hot!*

This was a free, family-friendly event which showcased in four themed pavilions including Energy for Us, Resources and You, One Dynamic Earth and Our Future! Features were hands-on and interactive exhibits demonstrating the importance of the Earth Sciences in our everyday lives. Geoscience volunteers actively guided youth groups and students through the exhibits providing opportunities to learn about Earth Sciences and about potential career opportunities. At least thirty-five exhibitors attended the event.

The event was generously sponsored by several organizations, including: Parex, CSPG Foundation, Canadian Natural Resources Limited, APEGA Foundation, CSEG Foundation, Chevron, Repsol, GLJ Petroleum Consultants, Sproule, Tourmaline Oil Corp., Inter Pipeline Ltd., Paramount Resources Ltd., Canadian Rockies Earth Science Resource Centre, Pulse Seismic, Society of Petroleum Engineers (SPE), Petrel Robertson, Explor Geophysical, Lafarge Canada Inc., AGAT Laboratories, Earth Signal, SeisWare International Inc. and geoLOGIC. Several individual donors also made the event possible.

Educator resources were donated by: Women in Science and Engineering (WISE), AirTerra Inc., Geoscientists Canada, Engineers and Geoscientists BC, Journey 2050, CSEG Foundation, Canadian Association of Geophysical Contractors (CAGC), Inside Education, Royal Astronomical Society of Canada, Mining Matters, Ocean Networks Canada, Alberta Geological Survey, Natural Sciences and Engineering Research Council of Canada NSERC-CRSNG, Natural Resources Canada-Geological Survey of Canada, and Caring for our Watersheds.

Door prizes were donated by AirTerra Inc., Frank Slide Interpretive Centre, Burgess Shale Geoscience Foundation, Canadian Association of Geophysical Contractors (CAGC), AGAT Laboratories, Alberta Paleontological Society, Journey 2050, Ocean Networks Canada, Canadian Rockies Earth Science Resource Centre (CRESRC), Bow Habitat Station, Calaway Park, Map Town, TELUS Spark, Laser City, Theatre Calgary, Natural Sciences and Engineering Research Council of Canada NSERC-CRSNG, Drumheller Rocks GeoTourism, Caring for our Watersheds, and the Royal Astronomical Society of Canada. □

APS now payable With E-Transfer

By Vaclav and Mona Marsovsky

For years members have had to renew memberships, pay for books, T-shirts, field trip and workshop fees with cash or cheque. Welcome to the electronic age! Starting immediately, APS will accept payment via e-Transfer, through online banking.

Interac e-Transfer is a quick and secure way to send money. The service is limited to our Canadian members because the service has to be in Canadian funds within Canada using Canadian Banks and Financial Institutions. Here are the steps to follow.

Step 1

Sign up with your bank for online banking.

Step 2

Log into your bank account, select Transfers, then select e-Transfers. When prompted to set up the e-Transfer, you will be asked to enter the email address to which payment(s) will be made. To pay APS, enter **giftshop@albertapaleo.org**. Be sure to include a comment including your name and the item to be purchased. Follow the remaining steps required by your bank to complete. Depending on your bank account, you may be charged a fee for each e-Transfer.

Step 3

When APS receives notification of your payment, we will send you the merchandise and/or process your registration. If you are applying for or renewing your membership or signing up for a field trip or workshop, scan or photograph the renewal slip or signup form and email it to the appropriate address as stated on the form. □

Fossils in the News

New Burgess worm found at Marble Canyon, BC.
www.ctvnews.ca (search “Kootenayscolex”).

Oldest trace fossils evidence of 2 b.y.o. critters.
www.cbc.ca (search “slimy hungry blobs”).

[Thanks to Phil Benham and Evelyn Wotherspoon] □

Motions to be put forward to Members of the Alberta Palaeontological Society at the May 10, 2019 Annual General Meeting

Adoption of agenda

Motion to adopt the agenda of the 2019 Annual General Meeting, as presented/amended.

Moved by: _____ Seconded by: _____ Motion passed: Yes/No

Adoption of minutes

Motion to approve and adopt the minutes of the previous (May, 2018) Annual General Meeting.

Moved by: _____ Seconded by: _____ Motion passed: Yes/No

Background

Minutes of the May, 2018 Annual General Meeting are available for review at <http://www.albertapaleo.org/agm.html>
A copy will be also made available for review at the May 10, 2019 Annual General Meeting.

Approval of audited balance sheet and revenues and expenses summary for 2018

Motion to approve the audited Balance Sheet for 2018, and Statement of the Society's Financial Position detailing the Revenues, Expenses, and Inventory of the Society at Dec 31, 2018 as presented.

Moved by: Mona Marsovsky. Seconded by: _____ Motion passed: Yes/No

Background

These documents are available for review at <http://www.albertapaleo.org/agm.html>

Appointment of Auditors for 2019 Treasurer Books and Minutes

Motion to appoint the following APS members as auditors for the 2019 APS Treasurer Books and Minutes.

Gulnara Machitova
Anita Reilander

If, for some unforeseen reason, either person cannot perform this function, the APS Executive will appoint another APS member to audit the 2019 APS Treasurer Books and Minutes.

Moved by: Mona Marsovsky. Seconded by: _____ Motion passed: Yes/No

Background

The APS bylaws state:

The financial accounts and records of the Society shall be audited annually by either a qualified accountant or independently by two Members appointed by the Board at a properly Constituted Board Meeting. A complete and proper audited statement of the standing of the books for the previous year shall be submitted by the Treasurer at the Annual General Meeting of the Society.

Election of Officers and Directors

Motion to forego voting by secret ballot for those positions where only one nominee is running and proclaim those Members elected by acclamation.

Moved by: _____ Seconded by: _____ Motion passed: Yes/No

Motion To approve the APS Election results as voted upon and proclaimed by the Members present.

Moved by: _____ Seconded by: _____ Motion passed: Yes/No

Insurance

- Directors and Officers Liability Insurance with coverage up to 1 million dollars. This will cost \$600.00 per year. The deductible is \$0.00. This insurance would be obtained from Jardine Lloyd Thompson Canada, Inc.
- General Liability Insurance with coverage up to 5 million dollars. This will cost \$1200.00 per year. The deductible is \$1000.00. This insurance would be obtained from Partner's Indemnity.

The total annual cost is anticipated to be \$1800.00 per year; however, there is a small chance that the fees may increase.

The cost for this insurance coverage will be paid by the combination of:

- Field trip fees will be raised to \$20.00 per person (rather than \$10.00 per membership) starting for the 2020 field trips. Any field trip fees exceeding field trip expenses will go towards payment for the General Liability Insurance.
- General revenue, as budgeted annually. This will cover the fee for the Directors and Officers Liability insurance.

Motion to purchase the Directors and Officers Liability Insurance, starting January 1, 2020:

Moved by: Mona Marsovsky. Seconded by: _____ Motion passed: Yes/No

Motion to purchase the General Liability Insurance, starting January 1, 2020:

Moved by: Mona Marsovsky. Seconded by: _____ Motion passed: Yes/No

Background

To avoid the financial vulnerability of APS and the APS directors and officers themselves (i.e. their own assets), the APS Executive would like to buy liability insurance. It is common for non-profit societies to buy this kind of insurance.

Directors and Officers Liability Insurance covers financial loss to the organization due to Directors and Officers negligence proven in court. This provides coverage for defence costs and damages (awards and settlements) arising out of wrongful act allegations and lawsuits brought against an organization's board of directors and/or officers. This covers errors and omissions of the directors and officers, but excludes property damage and bodily injury to third parties (which is covered by the General Liability Insurance). This insurance does not cover intentional fraud by the Directors and Officers.

General Liability Insurance covers legal liability for bodily injury or property damage to third parties, excluding board members and volunteers. For example, if a wild fire is accidentally caused during an APS field trip, this insurance would cover the resulting property damage and any bodily injury. This insurance does not cover professional services and thus does not cover the errors and omissions covered by the Directors and Officers Liability Insurance.

According to the APS bylaws, any expenditures over \$100.00 require approval by the membership. Therefore the decision to purchase this insurance will be voted on by the APS Members at the 2019 Annual General Meeting.

Award for non-professionals

Motion to approve the creation and funding of an annual award for non-professional palaeontologists.

Moved by: _____ Seconded by: _____ Motion passed: Yes/No

Background

Please refer to the article on Page 3 of the March, 2019 APS *Bulletin* for details of the proposed award.