Palæontological Society Bulletin

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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:

OFFICEDO

- 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.
- 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 OUARTERLY:

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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, 2012—No monthly meetings. Summer field trips (see Page 6).

Friday, September 21, 2012—Dr. Alan Ingelson, University of Calgary. Palaeontological Resources Law. (see Page 3).

Friday, October 19, 2012—Dr. Mike Newbrey, Royal Tyrrell Museum of Palaeontology. *Fossil Fish of Alberta*.

Friday, November 16, 2012—Scott Persons, University of Alberta.

Dragon Trails: An Asiatic Dinosaur Expedition and
a Study of the Convergent Evolution of Winged Archosaurs.

ON THE COVER: A dinosaur bone fragment in the Devil's Coulee badlands, Oldman Formation (Upper Cretaceous: Campanian), Milk River Ridge, west of Warner, Alberta. Photo by Howard Allen.

Meeting dates for 2012 and 2013

By Wayne Braunberger, President

General and Executive meetings have been scheduled for the following dates.

| | Executive* | Genera | ıl |
|-----------|------------|---------|------------|
| 2012 | | | |
| September | 12 | 21 | |
| October | 10 | 19 | |
| November | 7 | 16 | |
| December | 5 | 14 | |
| 2013 | | | |
| January | 9 | 18 | |
| February | 6 | 15 | |
| March | 6 | 16 & 17 | Symposium |
| April | 10 | 19 | |
| May | 15 | 24 | |
| June | | 22 & 23 | Field trip |
| July | | 20 & 21 | Field trip |
| August | | 17 & 18 | Field trip |
| September | 11 | 20 | |
| October | 9 | 18 | |
| November | 6 | 15 | |
| December | 4 | 13 | |

^{*} Executive meetings are normally attended only by Board Members.

In Memoriam

We are sad to report the passing of longtime APS Member Mrs. Helga Routledge on October 22, 2011. Helga joined the Society in 1993. She was well-known for bringing goodies to the general meetings, and especially the Christmas socials. An obituary, with her photo, can be read at www.legacy.com/obituaries/calgaryherald/obituary.aspx?n=helgaroutledge-frank&pid=154260902&fhid=14841

Donation Thanks

The Society gratefully acknowledges the generous donation of a number of items from the collection of Mr. Kurt Seel, through his family members Kelly and Greg Skeavington, of Calgary.

Mr. Seel was an employee of Parks Canada for thirty-six years, holding the positions of Park Warden (1956–1957); Kootenay National Park Naturalist (1956–1964); Chief Park Naturalist, Waterton Lakes National Park (1965–1970) and Interpretive Specialist in the Calgary office and Acting Chief of Resource Conservation, Western Regional Office (1970–1992). He currently resides in Calgary.

Donated items include a collection of fossils and minerals, along with a small metal storage cabinet. The fossil and mineral specimens have been used for education at the CRLC annual show; the cabinet will be put to use in the APS fossil collection.

Upcoming Events

September

Allan Ingelson

University of Calgary

Canadian Palaeontological Resource Laws

Friday, September 21, 2012, 7:30 P.M. Mount Royal University, Room B108

Canada has international treaty obligations to protect Canadian palaeontological resources and the heritage resources of those nations that have ratified the conventions to which Canada is a party. Federal, provincial and territorial governments have enacted legislation to protect and preserve Canadian palaeontological resources.

In some areas where significant palaeontological resources have been identified, fossil collecting is carefully monitored. Provincial and territorial laws regulate the excavation, surface collection, sale and export of fossils. Dealers and amateur collectors have been prosecuted for contravening provisions in federal and provincial legislation.

In light of the importance of some palaeontological resources to Canada's national heritage, the Federal Government has created tax incentives for fossil collectors to donate significant fossil specimens to public institutions.

Biography

Professor Allan Ingelson taught geology in the Department of Earth Sciences at Mount Royal University, worked in the Geology Department at the Provincial Museum of Alberta (now the Royal Alberta Museum) and was an Associate Curator of Mineralogy, Glenbow Museum. He has been a member of the Law Society of Alberta since 1991 and is an Associate Professor in the Faculty of Law at the University of Calgary. On July 1, 2012 he was appointed as the Executive Director of the Canadian Institute of Resources Law, University of Calgary. \square

The Rewards of Volunteering

By Dan Quinsey

s some of you may have heard, the Rock 'N' Fossil show held October 22, 2011 at the Signal Hill Public Library was a huge success (*Bulletin*, December 2011). The show is held annually at a pre-selected branch of the Calgary Public Library and hosted by the Calgary Science Network, Geological Survey of Canada and Natural Resources Canada and the Alberta Palaeontological Society. The tables are manned with volunteers from the above groups and occasionally by students from the University of Calgary.

Jan Brigden of the Calgary Science Network (CSN) asked Sharon Wirzba of the Signal Hill Public Library for some comments that CSN could use in grant applications, and here's what she sent, dated December 8, 2011.

Rock and Fossil Show at Signal Hill Library

Because we had such a positive experience with the Rock and Fossil Show at the Shawnessy Library several years ago when I was the manager there, I was delighted when two geologists involved with this program came to Signal Hill Library soon after our renovations were complete in early 2011 to offer us the chance to host this fall's Rock and Fossil Show.

It was a success from start to finish and a much appreciated open-space program for customers of all ages on a busy Saturday in October. It was great to have the display case for a few weeks leading up to the show itself. We placed it in our vestibule

just outside our program room, where it piqued customers' interest and raised awareness of the coming event.

On the day of the show, the geologists from the Geological Survey of Canada estimated that, over the course of the five hours, 300 customers of all ages stopped to view the specimens on display on tables set up in front of our fireplace. Several customers also brought rocks and fossils to be assessed by the geologists. Customers were delighted with the fun take-away items from the geologists, the Library's displayed books on rocks and fossils flew off the shelves, and many customers entered a draw for posters supplied by our Library's Children's Department.

A few days after the show, the Library realized that The Rock and Fossil Show had made a significant positive impact on a special needs child. When his mom came in to collect the family's draw prize, she told staff that her autistic son was really drawn to the subject of this special event. For the weeks leading up to the show, whenever they came into the library, he would stop and pore over the glass display case with the rock and fossil samples inside. On the day of the event, he was enthralled with the poster and all the rocks and fossils on display. She said that all the volunteers from the Geological Survey of Canada were patient and kind, allowing her son to experience the event in his own way. It was very gratifying for her to see her son so engaged and actually talking about it, as it is hard to find things to motivate him to communicate. She was thrilled that their family won a prize because the poster will be a concrete reminder of an experience that was special and meaningful for her son.

We look forward to welcoming The Rock and Fossil Show back to Signal Hill Library as soon as our turn comes again—soon, we hope!

Sharon Wirzba Manager, Signal Hill Library

www.albertapaleo.org

Paleo 2012 Symposium Summary

By Mona Marsovsky

he 2012 APS Symposium, held March 17–18, was a great success. The efforts of Reg Spratley to advertise the symposium to radio stations and newspapers resulted in more people visiting the symposium and a significant number of new faces. The unofficial theme "Dinosaurs, Dinosaurs, Dinosaurs" seemed to attract more families with young children than in previous years. At times there were over 100 people enjoying the talks in the Jenkins Theatre and those staffing the displays noticed steady traffic throughout the day, even during the talks.

On Saturday, there were seven talks, twenty posters and six display booths. The APS Public Outreach fossil display brought by **Cory Gross** was a big hit with the kids, as was the Dinosaur Research Institute's two dinosaur displays.

The seven talks all related to the dinosaur theme. **Darren Tanke**, Senior Technician at the Royal Tyrrell Museum of Palaeontology, described his investigation of a hadrosaur quarry in Dinosaur Provincial

Park and how that quarry may be connected to a hadrosaur skull of unknown provenance at the University of Alberta in Edmonton. Victoria Arbour, a Ph.D. student at the University of Alberta, talked about her study of ankylosaurs in Korea, China and Mongolia. **François Therrien**, of the Royal Tyrrell Museum of Palaeontology, vividly showed how X-ray technology was being used to study fossils. Phil Bell, of the Pipestone Creek Dinosaur Initiative, showed how hadrosaur skin impressions might be used in identification. **Jessica Theodore**, of the University of Calgary, discussed engineering models which indicate that pachycephalosaurs (dome-headed dinosaurs) were constructed such that they could have head butted without major injury. Cory Gross, of the APS Public Outreach Committee, challenged the audience to think about the future of public natural history education in Calgary, and possible ways to ensure that future. **David Evans**, of the Royal Ontario Museum, described the fossil record of the Pachycephalosauria (dome-headed dinosaurs) in Alberta.

A wide range of interesting posters, discussing a variety of subjects, were displayed.

If you missed picking up your copy of the abstracts volume which describes the talks and posters, contact **Mona Marsovsky** at **giftshop@albertapaleo.org** or (403) 547-0182, to pick up one of the few remaining copies.

At lunch time and during the poster session, **Vivien Lougheed** was available to sign her new book, *Sidetracked: the Struggle for BC's Fossils* (reviewed



The crowd takes in a symposium lecture. Photo by Vaclav Marsovsky.

elsewhere in this issue). Vivien graciously donated a copy to the APS Library.

Both workshops held on the Sunday were filled to capacity. Unfortunately for those on the waiting list, there were no last minute cancellations.

During the morning workshop, aptly named Ankylosaur Fan Club, Victoria Arbour (Ph.D. student at the University of Alberta) described the physical characteristics of ankylosaurs. Participants had a chance to rate the accuracy of the ankylosaur descriptions in the various toys and books and to compare those descriptions to the casts of actual ankylosaur fossils which Victoria provided. Michael Burns and Angelica Torices, also of the University of Alberta, helped during the workshop. To read Victoria's take on the workshop, see http://pseudop-locephalus.blogspot.ca/2012/04/waking-up-from-hibernation.html

During the Sunday afternoon workshop "Microvertebrate Material from the Cypress Hills, Eocene of Saskatchewan," **Brian Rankin**, Ph.D. student at the University of Calgary, described the importance of the microfossils of his Eocene study area in the Cypress Hills Formation. He then provided some matrix and vials for each participant to use to search for microfossils. **Christian Barron** and **Joshua Ludtke**, fellow students at the University of Calgary, helped identify our finds.

Without the support of the following, this event could not have been held at its very low cost (Saturday session for free!):

- Canadian Society of Petroleum Geology (CSPG)
 Paleo division provided funds to offset some of the speaker expenses.
- Mount Royal University provided all of the facilities.
- APS provided the volunteers and organized the event
- The speakers, poster presenters and those providing displays.

Thanks go to volunteers organizing the event:

Vaclav Marsovsky (chair), Wayne Braunberger
(displays and posters), Mona Marsovsky (speakers, workshops and sales table), Howard Allen
(abstracts volume), Reg Spratley (advertising),
Harold Whittaker (advertising), Dan Quinsey, and
Mount Royal University's Mike Clark and John Cox.
Sales table volunteers included Lisa Bohach, Cory
Gross, Georgia Hoffman, Mona Marsovsky, Vaclav
Marsovsky, Keith Mychaluk, Doug Shaw, Pete
Truch and Harold Whittaker.

If you are interested in giving a talk at next year's symposium (March 16–17, 2013), please contact Mona Marsovsky (giftshop@albertapaleo.org) or 403-547-0182. □

2012 Field Trips

By Wayne Braunberger

egistration deadlines for the first two field trips of 2012 (see March *Bulletin*) will have passed by time you read this. An August trip is scheduled, described below. For more information or to register, contact **Wayne Braunberger** at (403) 278-5154 or by email, **fieldtrips@albertapaleo.org**. Information will also be available on the APS website (**www.albertapaleo.org**). A field trip registration form was included with the March *Bulletin* or can be downloaded from the website.

Please note that all fees are due at the time of registration. Fees for trips are now \$10.00. This is to cover increased costs as guides will be featuring more colour photographs and diagrams. Unfortunately guides are only produced in small numbers and volume discounts are not available.

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 1, 2012 will not be reviewed and voted on by the Board of Directors until September, 2012. All field trip participants will be required to read and sign a release form (waiver). Details 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 2012 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 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 be sure to 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 that 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 2012-3, August 18 & 19, 2012 Cardium Formation biostratigraphy

Two day trips from Calgary will be taken to sections of the Cardium Formation along the Bow, Kananaskis, Sheep, and Highwood rivers. Day 1 will start at the classic Cardium outcrop below Kananaskis Dam at Seebe. If possible we will make travel eastward into the basin to sections downstream from Seebe and along Jumping Pound Creek. Besides the outcrop, subsurface stratigraphy and the relationship between surface and subsurface will be reviewed.

Day 2 will be spent on the Sheep and Highwood rivers. This will give participants an opportunity to view Cardium sections that are not normally visited on most field trips. By completing both transects changes both basinward and along strike can be observed, compared and contrasted.

Access to the sections along the Sheep River involves a strenuous climb on unmarked trails.

The registration deadline is August 3, 2012. □

Fossils in the News

Edited by Howard Allen

CTV News online April 25, 2012

450 million-year-old fossil stumps experts

DAYTON, Ohio (AP)—Amateur palaeontologist Ron Fine, fossil hunting in northern Kentucky, stumbled on a gigantic "thing" embedded in the Upper Ordovician rocks near Cincinnati, Ohio (Cincinatti is next to the Kentucky border). In a more detailed article (www.uc.edu/news/NR.aspx?id=15649), Fine describes his 2 m long find as looking like "a saguaro cactus with flattened branches and horizontal stripes in place of the usual vertical stripes." Its surface is covered with a regular pattern of small bumps. Fine collected the entire specimen in fragments, over a course of twelve trips and brought it to the attention of palaeontologists at the University of Cincinnati, who have so far been unable to divine its identity.

National Post online April 17, 2012

Dinosaur eggs found in Chechnya

GROZNY, Russia (Reuters)—Oops. The only real egg in this story is on the faces of geologists who announced the discovery of "about 40 eggs" in a highway construction road cut. The ovoid objects, ranging in diameter from 25 cm to 1 m (!) are clearly (continued on Page 11)

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Contact Wayne Haglund, (403) 288-0296, wayne.haglund@shaw.ca



Book Review

By Vaclav Marsovsky

Sidetracked: The Struggle for BC's Fossils. By Vivien Lougheed

Creekstone Press, Smithers, BC, 2011. Price CDN\$21.00. Paperback, 192 pages. ISBN 978-0-9783195-5-7.

his book is a must-read for anyone from the palaeo community, particularly from the western Canadian provinces. It is written for the general public in common language, with no technical jargon.

Sidetracked describes the events surrounding fossil discoveries, mainly in British Columbia, but also in other Canadian provinces, the USA and other places around the world. The focus is on vertebrate fos-

vertebrates. The book describes the relationships between amateur and professional palaeontologists, provincial governments, provincial parks staff, local community museums and palaeo societies. Most of the book focuses on the struggles and conflicts between these parties. There are also a few stories of positive outcomes.

sils including traces left behind by

The front cover shows several dinosaur footprints of the Monroe Dinosaur Trackway in Kakwa Provincial Park, BC. Bryan Monroe is credited with the discovery. He spotted the tracks in the distance through his binoculars while scoping bighorn sheep on a hunting expedition with Garnet Fraser. Garnet Fraser is the main character of this story.

On the back cover is a photo of a beautiful alpine landscape with two hikers, presumably taken in Kakwa, but it isn't labeled. The book has a dozen or so black and white photos throughout the book, in the right places to help the reader identify the main characters and the landscapes. A small map of Brit-

ish Columbia is included near the beginning of the book, but only some of the fossil localities discussed in the text are marked. It would have been nice if they were all identified and if the map was bigger.

The book is broken into ten chapters. The first six chapters, roughly 104 pages, set the scene: describing the legislation, the history of amateurs working with professional palaeontologists and commercial fossil enterprises in Canada, the USA and the UK.

The story of Mary Anning, as the first amateur palaeontologist, is included. Lougheed goes on to describe the Black Hills institute and their run-in with the law over "Sue The T-rex", and Nate Murphy's run-in with the law over dinosaurs in Montana. But these are just side stories. The focus of the book is clearly on the interior of British Columbia. Lougheed describes the controversy over plant and insect fossils from McAbee, and summarizes the discovery of dinosaur tracks by two local boys in the vicinity of Tumbler Ridge.

The Tumbler Ridge discovery has led to further exploration of the region and the founding of the Tumbler Ridge museum and the Peace Region Paleontological Research Centre (PRPRC).

There are close to a dozen short stories about recent vertebrate fossil discoveries in BC, each a few pages long. Lougheed tells how the sites were found, by whom, what happened to the fossils, what happened to the sites after discovery and whether the amateurs were recognized for their contributions. The message Lougheed delivers is that amateurs try to work cooperatively with professionals, but outcomes can be less than satisfactory. Included

is a story of the discovery of a large ichthyosaur at Pink Mountain. Many APS members have seen a portion of the skeleton on display at the Tyrrell Museum in Alberta. The discoverer was never recognized and still may have a vertebra from this specimen which he collected when he first discovered the skeleton.

The second half of the book, chapters 7 to 10,

The Struggle for BC's Fossils

Vivien Lougheed

focuses on the story of Garnet Fraser and his obsession with a dinosaur trackway in BC's remote wilderness in Kakwa Provincial Park. A person can only get there in reasonable time in a float plane or helicopter. Due to its remoteness, the site has limited tourism potential. The public will only see it in a publication like *National Geographic* magazine, especially now that landing near the site is off limits.

The Monroe trackway is located on the side of a mountain in steeply dipping beds. Fraser wanted to see the trackway studied before it collapsed. Recently, another tracksite in the general area had collapsed before it could be studied. The trackway is important because of its Early Cretaceous age.

The amateurs pondered whether they should publicize their discovery. Eventually, they decided

to notify the authorities. Initial interest soon fizzled out and action was progressing more slowly than Fraser would have liked. He launched his own website, "Theropodic Adventures," advertising for a palaeontologist, or for a philanthropist to fund the research work. Fraser even offered his own money to have the Monroe trackway studied. Animosity developed early. Fraser's biggest sin was that he tried to obtain funding on his website to help with exploration and research, a move the professional community did not appreciate. Also, it wasn't

helpful that Fraser would not disclose the exact location of the tracksite to the professionals.

A palaeontological advisory committee was struck to study what approach to take with the Monroe trackway. The advisory committee determined that the research should be done by professionals so that no harm was done to the trackway.

Fraser submitted procedures and documentation to BC Provincial Parks staff, showing how his study would not cause any harm to the trackway. Using the power of the press and public pressure to expedite an aircraft landing and research permit, he acquired the permit and carried on with the work.

Fraser's permit was pulled just before the expedition was to begin but the research party felt that the permit was pulled illegally so they went ahead anyway. Conservation officers flew to the site and confiscated Fraser's research materials, which included notes, casts, photos, cameras and tracings.

Upon his return to Prince George, Fraser went to the press with his story about the illegal cancellation of the permit and confiscation of his research materials. The BC Parks department capitulated, confirmed that the permit was cancelled illegally and returned Fraser's research material to him. In the end, not the Tumbler Ridge museum, Exploration Place museum in Prince George, nor BC Parks received the truckload of research material from Fraser.

[Garnet Fraser's article about the discovery of the dinosaur trackway in Kakwa Park appears in the APS Bulletin, December 2004, p. 13–14.]

In 2006, Dr. Rich McCrea of the PRPRC signed a five-year agreement with BC Parks to have exclusive rights for research in Kakwa. McCrea eventually began research on the Monroe trackway and that

research is ongoing.

Rich McCrea's article about the ongoing research at the Monroe tracksite can be found in the abstracts volume of the APS 2008 Symposium (pages 37–43). This article does not credit by name the discoverers of the trackway, without whom the study would not have been possible.

In 2010, the British Columbia government developed a management plan, removing fossils from the Mineral Tenure Act and transferring them to the Land Act. The definition of a fossil changed from "mineral" to "preserved remains

of organisms from the remote past." Now, fossils on Crown land are the property of the Province. The Crown retains ownership of fossils collected by amateurs. Amateur collectors may retain possession of the fossils as long as they do not sell them or export them from the Province without permission. The permission to collect for recreational purposes does not apply to the removal of vertebrate skeletal fossils or fossil tracks. The removal of these fossils must be undertaken by qualified permit holders. For the latest update on the status of the BC legislation, see www.for.gov.bc.ca/land_tenures/fossil_management/in-dex.html.

The APS thanks author Vivien Lougheed for donating a copy of her book to the APS library. It was donated during her book signing at the APS Symposium held at Mount Royal University in March 2012. Members may borrow a copy from the APS library.

"The book describes the relationships between amateur and professional palaeontologists, governments, parks, local museums and palaeo societies."

Winter 2011–2012 Microfossil Sorting Summary

By Mona Marsovsky

Photos by Dan Quinsey

 $\mathbf{F}^{ ext{or}}$ two and a half hours on Saturday, November 26, eight APS members sorted microfossils for **Emily Frampton**. The Late Cretaceous (78 million vear old) matrix from the Foremost Formation of the Pinhorn Ranch in the Milk River Valley, southeastern Alberta, yielded a huge number of oyster and clam shells, indicating that it was a brackish lagoon (back-barrier island complex, to be exact). We also found a lizard jaw, shark teeth, various fish vertebrae and teeth (including Paralbula teeth), sturgeon skull bones and gar scales. We are hoping that some Myledaphus teeth we found

were from the new species which Emily is in the process of describing (Frampton, 2009).

The five sorting sessions spread over January, February and March were particularly well attended, with an average of sixteen volunteers per day. The highest attendance was on February 11 when twenty people came to sort fossils. During the 2.5 hour sessions on each of January 14, January 28 and February 11, 2012, we searched through matrix of the early Paleocene Epoch (perhaps within the first 200,000 years after the dinosaur extinction event in the early and mid-Puercan age; the fossils are being used to date the rock) for **Dr. Don Brinkman** and **Dr. Craig Scott** of the Royal Tyrrell Museum of Palaeontology.

The matrix was collected in October of 2008 near Wintering Hills, which is east of Drumheller and south of the Red Deer River. In addition to fish vertebrae, fish teeth, fish skull bones, crocodile teeth, champsosaur teeth, turtle shell, and salamander vertebrae, we found several mammal teeth, including those from multituberculates and placentals (including some insectivores). This was the time when primates were diversifying which meant that the primate tooth, which someone found during the February 11 session, was particularly important to understanding the history of evolution of primates.

On the final two sessions held February 25 and March 10, we worked on the Dinosaur Park Forma-



Dr. Brinkman puts in some eyeball time at the microscope.

tion of the Late Cretaceous, sorting the matrix from the Car Park East location near Onefour in southeastern Alberta. This mud-filled channel produced lots of *Myledaphus* teeth, fish vertebrae, fish skull parts and fish scales. Rarer finds included a multituberculate mammal incisor, ceratopsian tooth, salamander vertebra, lizard vertebra and teeth from the shark *Hybodus*.

As thanks for their efforts during the January, February and March 2012 sorting sessions, Don generously gave one family pass to the Royal Tyrrell Museum to each volunteer.

This year's volunteers (in alphabetical order) were Les Adler, Judith Aldama, Wade Bittle, Dave Frishman, Rej Desjardins, Jay Guidos, Georgia Hoffman, Mona Marsovsky, Vaclav Marsovsky, Don Murchison, Sue Murchison, Harvey



Mammal tooth from Paleocene rocks of east-central Alberta.



Another Paleocene mammal tooth found during one of the sorting sessions.

Negrich, Maria Newberry, Dan Quinsey, Al Rasmuson, Cam Reed, Bill Spencer, Jenny Spencer, Doug Shaw, Reg Spratley, Pete Truch, Beverley Ulmer and her granddaughter Natalia Eiaz, Harold Whittaker and Conrad Wilson.

Thank you **Mike Clark** and **John Cox** for allowing us to use Mount Royal University's lab and microscopes. Without this support from Mount Royal University, these microfossil sorting sessions would not be possible.

Thanks go to Don Brinkman and Emily Frampton for allowing us to do, in the dead of winter, one of our favorite things: search for fossils. □

Reference

Frampton, E. 2009. Tooth morphology and placement of a new species of *Myledaphus* from the Milk River Valley, Foremost Formation (Campanian), Alberta, Canada, with comparison to *Myledaphus bipartitus*. Alberta Palaeontological Society, Thirteenth Annual Symposium, Abstracts Volume, Mount Royal College, Calgary, Alberta, p. 44.

Fossils in the News

(continued from Page 7)

mudstone concretions (inorganic sedimentary structures), as can be seen in the accompanying photo at http://news.nationalpost.com/2012/04/17/dinosaur-eggs-found-in-russias-chechnya/. According to Chechen State University geologist Said-Emin Dzhabrailov, "There could be many more laying [sic; no pun intended?] under the ground." The Chechen state government is thinking of developing a nature preserve in the area, which unfortunately has seen more than its share of armed conflict.

National Post online February 28, 2012

Giant penguin fossil found in NZ

WELLINGTON, New Zealand (Agence France-Presse)—Bones of an extinct penguin, larger than the modern emperor penguin, have been found on New Zealand's South Island. Fragments were initially found in 1977. More recently, additional material was uncovered and fossil penguin expert Dr. Dan Ksepka of the University of North Carolina was invited to study the fossils. A reconstruction of the extinct bird (dubbed *Kairuku*) shows that it was taller and slimmer than the emperor, but nearly twice the weight, with a long, narrow bill and short, thick legs and feet. See http://news.nationalpost.com/2012/02/28/giant-fossil-penguin-found-in-new-zealand/. Read more about this and other fossil penguins at Dr. Ksepka's blog: http://fossilpenguins.wordpress.com/.

Bloomberg.com February 20, 2012

32,000-year-old plant reborn from ancient fruit found in Siberian ice

PUSHCHINO, Russia—Biologists have propagated a living plant from fruit tissue found in an ancient ice-age rodent burrow, under 38 m of permafrost. The plant, a campion, was transferred to potting soil after it sprouted roots in a test tube tissue culture. See www.bloomberg.com/news/2012-02-20/32-000-year-old-plant-reborn-from-ancient-fruit-found-in-siberian-ice.html?cmpid=otbrn.sustain.story

Thanks to Phil Benham, Vaclav Marsovsky and Chris Sowden for sending in links. □

APS Balance Sheet for 2011

| Revenues | | Expenses | |
|--|------------------------------|---------------------------------|----------|
| Memberships | 1939,05 | Bulletin Printing | 388,23 |
| US\$ Exchange | 2.70 | Bulletin Postage | 190,58 |
| T-shirts | 45,00 | Speaker Expenses | 102.99 |
| Pins | 3.00 | PO Box Rental | 141.75 |
| Field Trip Guides | 12.00 | Membership Printing | 34.91 |
| Abstract Volumes | 10,00 | Membership Postage | 59.90 |
| APS Book | 1670,00 | Field Trip Expenses | 417.00 |
| Shipping and Handling | 96,20 | Workshop Expenses | 261,17 |
| Misc. Sales | 9,00 | Symposium Speaker | 0.00 |
| Refreshments | 125,97 | Symposium Abstract Printing | 319.33 |
| Field Trip Fees | 430.00 | Postage for Sales 7 | |
| Workshop Fees | 375.00 | Website Expenses 377 | |
| Donations | 30,00 | Refreshments | 87.46 |
| Symposium Abstract Sales | 336.00 | Bank Charges | 136,80 |
| Symposium Donations | 547.12 | Miscellancous | 137,34 |
| Library Book Sales | 0,00 | APS Book print/promotion | 1310.14 |
| • | | 25th Anniversary Expenses | 1513.30 |
| Subtotal Revenues | 5631,04 | Subtotal Expenses | 5554,60 |
| Plus Revenue Received in 2010 for 201 | .1 | Plus Expenses paid in 2010 for | 2011 |
| 2011 Membership Fees | 680,00 | | |
| 2011 Workshop Fees | 150.00 | | |
| Savings for 2011 Symposium | 799.00 | | |
| 25th Anniversary Fund fr Fund raising | 1513.30 | | |
| Subtract Revenue Received in 2011 for | Minus Expenses paid 2011 for | 2012 | |
| 2012 Memberships Fees | 410.00 | | |
| Donations for 2012 Symposium | 1587.00 | | |
| 2012 Symposium Workshop fees | 30.00 | | |
| Excess allocated to 2012 Refreshments | 88.51 | | |
| Total Revenues | 6657.83 | Total Expenses | 5554,60 |
| Excess of Revenues over Expenses = \$1 | 1103.23 | For Years 2002 to 2011 | |
| | | Total Fund Raising Proceeds | 3,723.50 |
| Inventory Sale Value | \$2,203.00 | Total Fund Raising Costs | 1,868.27 |
| Values Current to Date: 2 | 8-Jan-12 | Net Fund Raising | 1,855.23 |
| Audited by APS Members Printed Nome | : Signa | iture Date | |
| 1. Pete Truch | | I July Feb | 4/2012 |
| 2. Doug Shaw | | April April | 15/2012 |

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