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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:
 - 1) Discovery2) Collection3) Description4) 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
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UPCOMING APS MEETINGS

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

Friday, December 10, 2010—Vaclav Marsovsky, Alberta Palaeontological Society: Mammal Trackways in Toadstool Geological Park, Nebraska.

Friday, January 21, 2011—Laura Roskowski, FMA Heritage, Inc: *An Overview of Archaeology in the Athabasca Oil Sands, Alberta* (see Page 4).

Friday, February 18, 2011—Dr. Chris Jass, Royal Alberta Museum: Quaternary Cave Palaeontology.

Saturday and Sunday, March 19 and 20, 2011-Paleo 2011: APS 15th Annual Symposium (see Page 12).

Friday, April 15, 2011—Annie Quinney, University of Calgary: Paleosols as a proxy for climate change in the Horseshoe Canyon Formation (Late Cretaceous) and ties to faunal turnover within the formation.

ON THE COVER: Alberta fossils! A Late Cretaceous wasp preserved in amber. Left and right profiles; length of specimen is 3 mm. Upper photo was enhanced by Anthony Patmore using a manual "focus stacking" technique which increases the depth of focus by layering multiple images. Photos courtesy of David Patmore.

Your Help is Solicited on a Hope Johnson Research Project

By Darren H. Tanke

Royal Tyrrell Museum Drumheller, AB **dtanke@hotmail.com**

A s we all know, Albertan amateur palaeontologist Hope Johnson passed away in Medicine Hat on August 24, 2010 at the age of 94 [*Bulletin*, September 2010]. She had a long and productive life. Hope was an important person to many of us at both the amateur and professional levels.

I am currently writing a detailed biography on Hope and presently have a 40-page single-spaced manuscript on her personal life and her contributions to western Canadian palaeontology. I plan to submit this manuscript for publication sometime in early 2011, for the March issue of the APS *Bulletin*.

However, I can use the help of APS members. I would like the paper on Hope (part of my *Remember Me* series) to be as complete as possible and be a fitting tribute to this remarkable woman who taught us so much through her artwork and did so much for amateur and professional palaeontology. I'm hoping that some APS members can contact me at the email address above with anecdotal information on Hope.

Even seemingly small tidbits of information can be worked into the manuscript's detailed chronology. Perhaps some of the older APS members can provide details of her activities c. 1960–1975, especially in relation to the development of the smaller wooden display houses that were set up (c. 1960–1980) near the small registration building in Dinosaur Provincial Park. I'm particularly interested in hearing from APS members who worked with Hope in the field.

I am also looking for images of Hope and/or her palaeontology-related artwork, but other artwork (paintings of badlands, animals) may be considered. I have virtually no pictures of Hope in the field and would like to make contact with anyone who can supply some. Please send all images as higher resolution (*minimum* 200 pixels per inch) TIFF files to the above email address. All contributors will be acknowledged. [Note: if you have snapshots or slides of Hope but no scanner, you can contact the Editor, Howard Allen, and I will be happy to scan them for you. My contact information is on Page 2].

I will also be giving an oral presentation on Hope's life and palaeontological accomplishments at the 2011 APS Symposium in March, and it would be great to have relevant images for that talk.

2011 Meeting Dates

Mark your calendar! Following are the planned dates of APS general meetings for next year. All dates are Fridays, except March 18–19, which is the weekend.

January 21 February 18 March 19-20 (Symposium) April 15 May 13 June 25–26 (Field Trip) July 16–17 (Field Trip) August 20–21 (Field Trip) September 16 October 21 November 18 December 9

Microfossil Sorting Project Winter 2011

By Mona Marsovsky

This winter APS members will have the opportunity to aid research by sorting fossil matrix provided by **Dr. Don Brinkman** of the Royal Tyrrell Museum. We will be using microscopes provided by Mount Royal University to search for tiny vertebrate fossils in the bulk samples provided.

Upcoming microfossil sorting sessions are scheduled for the following Saturdays:

> January 15 January 29 February 12 February 26

You are welcome to attend as many sessions as you like. All sessions will take place from 1:00 to 3:30 P.M. in room B213 at Mount Royal University on a drop-in basis. If you register in advance (with **Vaclav** or **Mona Marsovsky**, (403) 547-0182, **monahome@ telus.net**), we will be able to notify you in case we have to cancel or reschedule the session unexpectedly. Please bring tweezers or a tiny paint brush and a pen to label your finds. \Box

Upcoming Events

January

Laura Roskowski

FMA Heritage Inc.

An Overview of Archaeology in the Athabasca Oilsands of Alberta

Friday, January 21, 2011, 7:30 P.M.

Mount Royal University, Room B108

The Athabasca Oilsands area, north of Fort McMurray, Alberta, contains some of the densest archaeological deposits in Canada. Archaeological investigation at many of the sites in this area suggests that this region has been occupied for the past 10,000 years. This talk will focus on the archaeology that has been conducted in the area for the past thirty years, the types of sites recorded and the artifacts recovered from those sites.

Archaeology in the Athabasca Oilsands area has generally been divided into those sites situated on the east of the Athabasca River and those located on the west. This is due to the varying type of sites and density of artifacts found on each side of the river. The archaeological sites present on the east side of the Athabasca tend to be dominated by a type of stone referred to as Beaver River Sandstone, yield dense deposits of waste material discarded during raw material extraction and early stage reduction, and are laterally extensive. In contrast, those sites on the west side of the river generally yield a variety of lithic raw material types, are sparse in nature and are laterally confined.

The sites on the east side of the Athabasca are related to the Quarry of the Ancestors site complex

located within Lease 90. The Quarry of the Ancestors is the primary location where precontact inhabitants of the area would come to extract Beaver River Sandstone to make tools for daily use. The quarry itself is characterized by incredibly dense archaeological deposits generally dominated by waste material discarded during extraction. Archaeological excavation conducted on a small portion of the quarry yielded millions of artifacts, most of which were considered to be of low interpretive value. Moving away from the Quarry, the sites although slightly less dense, are also dominated by Beaver River Sandstone artifacts. These lithic workshops tend to yield artifacts in later stages of reduction or early tool production indicating that the precontact inhabitants were reducing the Beaver River Sandstone into a portable size for transport and use outside of the area immediately adjacent to the Quarry.

Archaeological sites encountered on the west side of the Athabasca River are characterized by small campsites and chipping stations rather than quarries



Figure 1. Period projectile point recovered from Athabasca Oilsands region.

or lithic workshops. These sites yield a higher percentage of tools and a low percentage of waste materials. Tools are considered to be of high interpretive value, allowing archaeologists to discern what types of activities were conducted at the site. The sites on the west side of the river are also generally laterally confined to a small area, making it easier to excavate a larger portion of the site. Many of these sites have produced hearth features critical for obtaining radiocarbon dates from which archaeologists derive the sites' age. Hearth features are rarely encountered on the east side of the river leaving archaeologists to rely on projectile point styles for dating, which is somewhat unreliable. This talk will focus on several archaeological sites to illustrate why artifacts recovered from both sides of the river are critical in understanding the precontact use of the Athabasca Oilsands region.

Biography

Laura Roskowski attended Eastern Michigan University where she completed her B.Sc. majoring in Geology, Anthropology and History. She moved to Canada in 2001 to attend the University of Calgary for her Master's degree in Archaeology. Her thesis focused on the geoarchaeology of the Below Forks Site, Saskatchewan. On completion of her degree she began working for FMA Heritage Inc., where she has been employed for almost seven years. Working as an archaeological consultant she has travelled across Alberta, doing work on the prairies, in the parkland and boreal forest environments. Her expertise is in the archaeology of the boreal forest of Alberta where she has conducted both shovel testing programs (yielding numerous sites) and mitigative excavations (totaling over 700 m²). \Box

An Opportunity to Help with Pachycephalosaur Research!

By Mona Marsovsky

Dr. David Evans of the Royal Ontario Museum and Dr. Michael Ryan of the Cleveland Museum are researching pachycephalosaurs (commonly known as the "dome-head" or "bone-head" dinosaurs). They are interested in viewing (via digital photographs or in person during the APS 2011 Symposium on March 19), any pachycephalosaur material you may have in your collections. Skull caps (a.k.a. "domes") and skull fragments that preserve ornamentation are of particular interest.

In addition, Dr. Ryan is interested in seeing any ceratopsian (horned dinosaur) frill fragments that collectors might have found. If you have some of these specimens in your collection and would like to assist research into these fascinating but poorly understood small dinosaurs, you can contact them at the following email addresses:

David Evans: davide@rom.on.ca Michael Ryan: mryan@cmnh.org

David C. Evans, Ph.D. Associate Curator of Vertebrate Palaeontology Department of Natural History (Palaeobiology) Royal Ontario Museum 100 Queen's Park Toronto, ON, Canada M5s 2C6 (416) 586-5753

Michael J. Ryan, Ph.D. Coordinator of Research Head, Vertebrate Paleontology Cleveland Museum of Natural History 1 Wade Oval Dr., University Circle Cleveland, OH 44106 (216) 231-4600, ex 3246 □



Skull dome of *Colepiocephale lambei*. From Schott, R.K., Evans, D.C., Williamson, T.E., Carr, T.D. and Goodwin, M.B. 2009. The anatomy and systematics of *Colepiocephale lambei* (Dinosauria: Pachycephalosauridae). Journal of Vertebrate Paleontology, 29(3): 771–786. Image courtesy of D. Evans.

Remember Me: Dr. Oscar A. Erdman (1915–2010)

Rediscoverer of the Scabby Butte Pachyrhinosaurus bonebed



Figure 1. Oscar A. Erdman in his late twenties in 1946 (left) and later in life. Figure 1 (left) courtesy of Oscar Erdman, (right) from Pearson and McMillan (1993).

By Darren H. Tanke*

r. Oscar Alvin Erdman passed away suddenly in Calgary, Alberta on July 27, 2010, after a long and productive life (Anonymous, 2010a, d). He was 95. Oscar played a small yet important role in Late Cretaceous ceratopsian palaeontology during the

*Senior Technician II, Royal Tyrrell Museum of Palaeontology Box 7500, Drumheller, AB TOJ OYO **darren.tanke@gov.ab.ca** 1940s related to the discovery of the then bizarre horned dinosaur *Pachyrhinosaurus*. Erdman's name is mentioned in only a few palaeontological papers, field notes or popular works (Finch, 2007; Spalding, 1999; Sternberg, 1946, 1950; Tanke, 2006, 2010) and virtually no one in the current palaeontological community has heard of him. Yet a simple action on his part helped expand our palaeontological knowledge of a little-explored and forgotten area of Alberta and thus revealed an exciting new horned dinosaur to science.

Before we learn more about Erdman, the history of early discoveries of dinosaurs from his rediscovered site in southern Alberta needs to be related.

In 1881, the Geological Survey of Canada (GSC) conducted field work across southern Alberta (then the Northwest Territories). This expedition, which included George M. Dawson (1849–1901) and R.G. McConnell (1857–1942) searched for minerals, coal deposits and other natural resources useful for eventual settlement and industrialization of the district. Their field work included looking for fossils.

During the trip, McConnell and an assistant split off from the main group and for a few days visited the curiously named Scabby Butte, a pocket of badlands about 24 km (15 miles) northwest of presentday Lethbridge (Dawson, 1882; Russell, 1966, p. 6; Tanke, 2010). In a subsequent field season the Scabby Butte site was investigated again (possibly by McConnell) and a "... large and interesting collection ..." of dinosaur bones was made, some ending up at the museum in Ottawa (Selwyn, 1883, p. 13).

Dawson and crew—including the Royal Tyrrell Museum's namesake, J.B. Tyrrell (1858–1957), on his first expedition—returned to southern Alberta in 1883. During this expedition, Thomas C. Weston (1832–1911) and an assistant returned to Scabby Butte.

It is unknown if anything was collected from the locality that year—and will never be known, as the expedition's fossils, natural history and ethnological items were all destroyed when the transport ship *Glenfinlas*, carrying the expedition's collections, caught fire and was destroyed at her moorings in St. Catherines, Ontario, that summer (Tanke, in prep.).

The Scabby Butte locality largely faded from memory as the original workers involved in its exploration passed on and the big push for collecting dinosaurs in the Red Deer River badlands took priority in the early Twentieth Century. As part of that work, the GSC sent C.M. Sternberg (1885–1981) fossil hunting by horseback across southern Alberta in 1915 (Lambe, 1916). Near the end of his survey, he saw the Scabby Butte badlands from a train, but was only impressed enough to casually note the outcrops in his field notes (Sternberg, 1915) and did not pay them a visit. Thus was lost a great opportunity.

Around 1942, some sixty years after the GSC's first visit to Scabby Butte, Oscar Erdman, along with some family and friends, were hiking in the nearby Scabby Butte badlands (Figure 2), a place then popular with local people for picnics and other outdoor recreational activities. He had enjoyed hiking those Late Cretaceous outcrops numerous times before, but this time he made a discovery of some unusual thickened fossil bone chunks. Without realizing it, he had rediscovered the site McConnell had first visited six decades earlier.

Oscar collected a number of the bone pieces and retained them for a while, dwelling on their identity. With his academic background he was certain they had important significance, thinking they might be parts of a dinosaur skull. In 1945 he mailed some of the pieces to Charles M. Sternberg at the Gsc, but on account of the war, Sternberg could do nothing, the



Figure 2. Part of the Scabby Butte badlands, c. 1945. Image courtesy of Oscar A. Erdman.

preparation laboratory and its activities having been shut down (Sternberg, 1945) and Sternberg himself assigned to unspecified "war duties" (Sternberg, 1944). But the fossils certainly piqued Sternberg's interest because he was there to see Erdman's Scabby Butte site within a year.

The war now over, Sternberg could resume his Alberta field work. In mid-July 1946, Sternberg came back to Alberta and met Oscar Erdman (Spalding, 1999). The pair along with Sternberg's field man, someone identified in Sternberg's (1946) field notes only as "R. Steiner," spent several days at Scabby Butte.

The pieces Oscar had mailed to Ottawa were indeed parts of a skull—and a strange one at that. It was from a horned dinosaur, the rest of which was collected (CMN [Canadian Museum of Nature, Ottawa] 8860; Figure 3a). An isolated parietal frill spike (CMN 8863) was also secured. The unusual skull was unfortunately incomplete,



Figure 3. *Pachyrhinosaurus canadensis* partial skulls, both in left lateral view. (a) (top) CMN 8860. Shown here is the fused fronto-nasal boss so distinctive in this genus. Original specimen is about 65.2 cm long; compare with Figure 3b. Image from Sternberg, 1950. (b) (lower) CMN 9485, skull collected by Wann Langston and Loris Russell from Scabby Butte in 1955. Scale bar is 10 cm long. Image slightly modified from Langston (1975, p. 1578, Plate 1, top).

pieces of it apparently having been carried away by picnickers and souvenir hunters. However, much of the top of the head and snout was preserved, with the diagnostic thickened fronto-nasal boss, which until then had never been seen.

Loris S. Russell (1904–1998) considered Sternberg's *Pachyrhinosaurus* skull finds on this expedition as the "most spectacular" of his long and distinguished career. One wonders what Sternberg thought, seeing there was excellent material there, yet having seen the locality by train thirty years earlier and thought little of it (Sternberg, 1915).

Not only had Erdman relocated the McConnell site from the early 1880s, but upon investigation by Sternberg, demonstrated that there was a good bonebed there *and* one that contained a new genus of horned dinosaur! So, a fine return for Erdman by simply mailing some bone pieces to Ottawa. This incident is ample testimony to how an amateur collector can make an important contribution to science by simply making that little extra effort to report an unusual find—amateur fossil collectors take note!

The Erdman skull and another found locally were quickly prepared and Sternberg (1946, 1947) made the first general and formal announcement of the finds as evidence of a third subfamily of ceratopsian dinosaur (this was later disproven). The Scabby Butte material and other skulls from locations nearby (also examined and collected in 1946) were fully described by Sternberg (1950) as the new genus *Pachyrhinosaurus canadensis*.

Though it is likely he did not want to leave, after

thirty-eight years of dedicated lab, office, and field work activities with the GSC, in 1950 C.M. Sternberg took compulsory retirement.

In 1955, Loris S. Russell took Sternberg's replacement, Wann Langston Jr. (1921–) on a driving tour of southern Alberta dinosaur localities. One stop, at Scabby Butte, resulted in the fortuitous discovery of a fine *Pachyrhinosaurus* skull (CMN 9485; Figure 3b) and several other bones (Anonymous, 1955). Langston was so impressed with the potential of the locality that he returned in 1957 with a small crew and made a large collection of bones, including more excellent *Pachyrhinosaurus* skulls and frill pieces as well as discovering that the bonebed contained material from the flat-headed hadrosaur *Edmontosaurus* (Langston, 1975, 1976; Ryan, 2008).

Not much work has been done at the Scabby Butte site subsequently. The posterior half of an adult *Pachyrhinosaurus* nasal boss (TMP 1982.051.0001) was collected by Philip J. Currie in 1982. This was found about 185 metres from, and at the same level as the 1957 bonebed dig site, suggesting that the bone deposit may be quite large in extent. The bonebed continues to produce dinosaur bone (Ryan, 2006). There has been some recent consideration to reopen the Scabby Butte bonebed as part of a University of Calgary palaeontology field school.

Oscar A. Erdman was born in Barons, Alberta, on May 5, 1915 to parents of Estonian heritage (Johnson, 1972; Heritage Community Foundation, 2007). Barons is a small farming community 11.3 km (7 miles) northwest of the Scabby Butte badlands; many of the original settlers there were Estonian.

He was raised in and received all of his basic education in Barons. He went to the University of Alberta (Edmonton) in the mid 1930s and alternated between going to school and working on the family farm over a four year period. He got his B.Sc. in 1939 and a M.Sc. in geology in 1941 (Anonymous, 1972).

During World War II he did not serve a direct military function, but served on the home front, helping in the exploration for oil and gas in Alberta, critical resources that could be applied towards the war effort. He did field work at this time with the GSC, specializing in stratigraphy and structural geology related to coal and oil prospecting in the Alberta foothills as well as interpreting folded thrust faults there. In the foothills he conducted field mapping and collected geological and palaeontological samples (Figure 4), the work resulting in five published reports on the Alexo, Cripple Creek, and Saunders map areas in Alberta.

In July of 1940 he was a member of a month-long packhorse trip, as the cook and packer's helper, on a trip led by Dr. John A. Allan (University of Alberta, 1884–1955) to the Howse pass region on the Alberta/ British Columbia border. They also visited the Freshfield Glacier and travelled along the south fork of the North Saskatchewan River.

In 1942 he assisted Dr. H.H. Beach at the head of Rocky Mountain Canyon on the Peace River and in 1943 he was assisting G.P. Crombie in the Saunders-Alexo, Alberta district. He worked the same district in 1944, where he was by then party chief. Late summer of 1945 saw him in the Cripple Creek and Hummingbird map areas. Much of this field work was in extremely remote and rugged locations and conducted on horseback, with packhorses carrying gear and geological and palaeontological specimens so carefully collected (Finch, 2007)¹.

Oscar was initiated into the Sigma Xi Society on March 2, 1943 (Anonymous, 2010b) and attended the University of Chicago where he earned a Ph.D. in Geology in 1946 (Pearson and McMillan, 1993). He then worked for the Canadian Gulf Oil Company in Calgary, starting in 1946 as a geologist. Later he was exploration manager for mainland Canada at Gulf Oil. His career in geology and the oil industry lasted over fifty years. Erdman's subsequent publications and career relate mainly to oil and gas deposits or exploration for same in central Alberta and the foothills. He was also involved in exploration activities in offshore eastern Canada and the Beaufort Sea in Canada's north.

He retired in 1978, but remained active with his own consulting company, working with City of Calgary committees, and several charitable organizations. He married Sally Cuthbert in 1950. They were married sixty years and raised three children: Ronald, Ken and Elizabeth.

Oscar was recognized in the petroleum industry for his continuing interest and enthusiasm in the field, his teaching abilities and mentoring for new, younger staff wherever he worked. He was a member of the American Association of Petroleum Geologists, and on February 5, 1993 was made an Honorary Lifetime Member of the Canadian Society of Petroleum Geologists (Pearson and McMillan, 1993)

¹ Excellent pictures showing Erdman's remote fieldwork and camp life in the Rocky Mountains of Alberta during WWII can be found at the Glenbow Museum (Calgary) photographic archives online: **http://ww2. glenbow.org/search/archivesPhotosSearch.aspx**. Simply type "Erdman" in the people search box.



Figure 4. Oscar Erdman loaded down with geological and fossil samples in the Cripple Creek map area, Alberta, c. 1945. Image courtesy of Oscar A. Erdman.

in which he was actively involved in many areas. He was also a donor and supporter of the Petroleum History Society (Anonymous, 2006), Director of the Canadian Institute of Mining and Metallurgy and council member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta (Pearson and McMillan, 1993). On his retirement, he donated his large geological library to Tartu College, now a university student residence in Toronto, formerly serving the Estonian-Canadian community.

Closer to home, Oscar loved horses and hiking the Rocky Mountains, and never forgot his Estonian roots. He and his wife were active members of the Alberta Estonian Heritage Society and travelled to the old country in 1998 and 2001, thereby helping reunite family ties long severed and nearly lost due to prior Communist rule (Leesment, 2010).

The simple act of Oscar Erdman alerting C.M. Sternberg about the Scabby Butte locality by sending him some unusual dinosaur bones, and the subsequent field work and fossil finds there permanently put the area on the palaeontological map as an important field locality. *Pachyrhinosaurus* specimens and data collected at Scabby Butte and the surrounding region provide an excellent basis of anatomical and taxonomic understanding of the genus in support of the numerous subsequent pachyrhinosaur discoveries across western North America (Sternberg, 1950; Langston, 1967, 1968, 1975, 1976; Tanke, 2006). This extends to pachyrhinosaur and other ceratopsian research continuing to this day (Fiorillo and Gangloff, 2003; Currie *et al.*, 2008; Hieronymus, *et al.*, 2010; Ryan *et al.*, 2010). Other fossil vertebrate specimens recovered from the Scabby Butte locality provide important data for other studies (Russell, 1962; Eberth *et al.*, 2007; Holmes *et al.*, 2009).

Acknowledgements

The author is grateful to the late Oscar Erdman for relating his personal experiences regarding the Scabby Butte *Pachyrhinosaurus* discovery and for providing some of the images used herein. Thanks to Darlene Tanke Main and *Calgary Herald* library staff for tracking down a reference, Patty Ralrick for proofreading and APS *Bulletin* editor Howard Allen for his always excellent editing skills in helping to put these articles together.

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Paleo 2011

The Symposium

Paleo 2011 is a two day event with talks, posters and displays on Saturday, March 19 and workshops on Sunday, March 20. Saturday programs are free and open to the public. Sunday workshop participants will need to register and pay a small fee for manuals and materials. Main events will be centred in the lower level corridor at Mount Royal University. Lectures will be held in the Jenkins Theatre.

Call for posters and abstracts

The Alberta Palaeontological Society (APS) invites you to present a poster at Paleo 2011. The symposium will feature presentations from avocational and professional palaeontologists from all over western Canada. We are interested in posters or displays associated with palaeontology. Invitations have been sent to staff and students of universities, natural history clubs, the Geological Survey of Canada, museums, the petroleum industry and the artists' community. Our aim is to showcase palaeontology to the public and foster closer relations between the APS and the above groups. There is no fee to submit a poster and abstract.

Instructions for posters and displays

A table and stand with a 4 x 8-foot poster board will be supplied to each presenter. You should bring push pins or tape for attaching posters, but we will try to have some on hand for those who forget. Special requirements such as electricity to operate a display or a larger display area should be identified when you request a space. Presenters are requested to provide an abstract (see below). We request that poster presenters be set up by 9:00 A.M. Saturday, March 19. During the day a poster session period will be specified; please be available at least during this time for discussion of your exhibit. The deadline for submitting requests for poster space is February 1, 2011.

Paleo 2011 abstracts volume

A symposium abstracts volume will be published and sold at a price to cover costs. We would like all speakers and poster presenters to submit abstracts for publication. Abstracts may be any length: one page is standard; less than a full page is OK, multi-page abstracts will be accepted. Contributors are encouraged to include photos and/or diagrams, but note that colour images will be converted to black and white. Documents are not edited for content but may be reformatted to fit into the volume. The author's mailing address (and email address if you wish) should be included. Deadline for abstracts is February 15, 2011. Download guidelines for authors from our website, **www.albertapaleo.org** or contact the Editor (see Contact Information, next page).

Workshops

Two workshops will be offered. Both will be held at Mount Royal University, Room B213. Registration is limited to 20 participants per workshop, so register early! To register, contact **Mona Marsovsky** at (403) 547-0182 or email **giftshop@albertapaleo.org**. Registration deadline is March 7, 2011. Cheques should be made payable to Alberta Palaeontological Society. Payment may be handed to Mona or mailed to the Society's mailing address at P.O. Box 35111 Sarcee Postal Outlet, Calgary, AB T3E 7C7.

Fossil arthropods, with Dr. Paul Selden, University of Kansas. Sunday, March 20, 2011, 9:00 A.M. to 12:00 P.M. Cost: \$15.00 per person. This workshop will provide an introduction to the arthropods, including the variety of groups which are found as fossils: trilobites, chelicerates, insects, myriapods and crustaceans. There will be representative samples to look at, and you will learn how to identify them and where they might most commonly be found as fossils.

Ankylosaur Fan Club with Victoria Arbour, University of Alberta. Sunday, March 20, 2011, 1:00 P.M. to 4:00 P.M. Cost: \$15.00 per person. Get to know the ugliest of the dinosaurs, the armoured ankylosaurs! We will learn how to recognize ankylosaur fossils from Alberta, and how to tell different species of ankylosaurs apart. This will be a hands-on workshop with specimens and models to study, and will be appropriate for both children and adults.

Contact Information

Paleo 2011 committee chairperson: Vaclav Marsovsky, membership@albertapaleo.orgPosters & displays: Wayne Braunberger (403) 278-5154, president@albertapaleo.orgLecture program/general information: Philip Benham (403) 691-3343, programs@albertapaleo.orgAbstract submissions: Howard Allen (403) 862-3330, editor@albertapaleo.orgAdvertising: Harold Whittaker (403) 286-0349, vicepres@albertapaleo.org

Visit the APS website for confirmation of lecture and workshop times and speakers: www.albertapaleo.org

Helpful Hints for Poster Presenters

What is a poster?

A poster is a visual medium to express results or an overview of one's research work on a topic they have chosen to study. It is something that you pin up on a board. The dimensions of a poster can vary. It can be anywhere from $2' \times 3'$ to $4' \times 8'$. It contains text and images relevant to your work.

Who should do a poster?

Anyone who has an interest in sharing their work and who likes feedback from the audience (symposium attendees) should consider doing a poster.

What should be considered for a poster?

Any topic that ties in with palaeontology can be considered for a poster.

Why posters?

Written and illustrated presentations convey developments in a field of study that interests the investigator. Posters are an effective form of presentation.

A typical poster format:

- Title, Author(s), Affiliation
- Summary—sum up the study in one paragraph
- Introduction—reasons behind the work
- General information, location (study area)
- Description and interpretation
- Conclusions
- References

Dedicate a box to each one of the sections listed above. Within the box, include the text and figures

relevant to that section. Number the boxes in such a way that the reader can follow from one box to the next in your intended sequence. The structure of the framework will vary from topic to topic.

How does one make a poster?

Today, with powerful graphics and word processing software, a poster can be made entirely using a computer. The final poster image can be printed on a large-format colour printer. But you don't need a computer to do a poster! Carefully hand-lettered or typewritten text can be combined with drawings, photos or enlarged photocopies to make an effective presentation. These days it should be easy to find someone with a computer who could print out some titles or captions to add to your text.

What about the visual presentation?

Whatever the size of the poster, when one views it from one or two metres away, the type (or font) size must be large enough that the text can be easily read. Also, figures should be reasonably large. Think about when the eye doctor wants you to read off her chart of alphabets and numbers from a distance. Don't be tempted to crowd too much information onto a poster—you can overwhelm your audience. Adding colours makes a difference to the poster, and can lure viewers to your poster or even drive them away!

What's an abstract?

An abstract is just a summary of your work, from introduction to conclusion, boiled down to one or a few paragraphs. We'd like to have an abstract from each of our poster presenters and speakers, to include in the Symposium Abstracts Volume. Illustrations are encouraged (they will be converted to black-and-white).

Good luck, and have fun!

Alberta Palæontological Society

Paleo 2011

Presented in conjunction with the CSPG Palaeontological Division and Mount Royal University Earth Sciences Department.

Mount Royal University 4825 Mount Royal Gate SW, Calgary, Alberta

Lectures and poster displays—Saturday, March 19, 2011, 9:00 AM to 5:00 рм Workshops—Sunday, March 20, 2011, 9:00 AM to 4:00 рм

Saturday events are free to the public

Sunday workshops require registration and a minor fee.



Saturday, March 19, confirmed speakers

Titles are tentative. All talks are to be held in Jenkins Theatre, lower level of Mount Royal University. For schedule updates, visit www.albertapaleo.org/meetings.htm

Darren Tanke, Royal Tyrrell Museum of Palaeontology—*Hope Johnson, LLD, 1916–2010: An Extraordinary Albertan Amateur Palaeontologist.*

Bert Hunt and Katalin Ormay, Paleontological Society of the Peace—*The History of Peace Country Palaeontology.*

Jon Noad, Murphy Oil—*How to Find Fossils: Blending Sedimentology, Palaeoecology, Pattern Recognition and Common Sense.*

Emily Bamforth, McGill University—*Ecosystems in Stone: Determining Paleobiodiversity Drivers in the Latest Maastrichtian of Central Canada.*

Tetsuto Miyashita, University of Alberta—How Tyrannosaurs got Tyrannosaurus rex.

Victoria Arbour, University of Alberta—In Search of the Beautiful and the Brainy: A Summer Studying Ankylosaurs in Korea, China and Mongolia.

Ben Gadd, Author—*Icefield Bunnies, Gullible Bees and Why the Tallest Mountain is not the Highest.*

David Eberth, Royal Tyrrell Museum—*A Revised Chronostratigraphy for the Oldman, Dinosaur Park and Bearpaw Formations at Dinosaur Provincial Park, Alberta, Canada.*

Paul Selden, University of Kansas—*Silk and Venom: the Geological History of Spiders.*

For more on Paleo 2011, see Page 12