

ALASKA GEOLOGY

Newsletter of the
Alaska Geological Society



Little Bones from a Big state: Baby Dinosaurs from the Cretaceous Paleo-Arctic of Alaska

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Curator, University of Alaska Museum of the North

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30 years ago, new paleontological discoveries suggested something remarkable: dinosaurs existed in polar latitudes. How they managed to live in these challenging environmental conditions has since remained an active area for debate. A particularly contentious area of discussion has been whether they overwintered in the Arctic or migrated south to escape the long periods of cold and darkness. The Cretaceous Prince Creek Formation of northern Alaska is recognized as the single most important unit for understanding polar dinosaurs in the world. Recent work by our team along the Colville River has led to the discovery of new sites and unexpected fossils that reveal a completely new insights into the fascinating lives of these animals: they not only lived in the Arctic but they reproduced there too. In this talk, Dr. Druckenmiller will discuss the new finds and their implications for dinosaur migration.

About the Speaker:

Patrick Druckenmiller is Director of the University of Alaska Museum and Professor of Geology at the University of Alaska Fairbanks. He is a vertebrate paleontologist who specializes in Mesozoic marine reptiles and dinosaurs, particularly from the Arctic. He has lead field investigations on fossil vertebrates across the State of Alaska and currently working on Cretaceous vertebrates from the Prince Creek Formation of northern Alaska and dinosaur tracks in Denali National Park.

AGS Meeting

Date & Time: Thursday, January 23; doors open at 11:30 am, talk from 12:00 – 1:00 pm
Program: Little bones from a big state: baby dinosaurs from the Cretaceous paleo-Arctic of Alaska
Speaker: Patrick Druckenmiller; Curator, University of Alaska Museum of the North
Place: BP Energy Center, 1014 Energy Court, Anchorage, AK
Reservations: Reservations are not required
Cost: Seminar is free (catered lunches are no longer available)
Feel free to bring your own brown-bag lunch

For more information call (907) 854-2363 or visit the AGS website: <http://www.alaskageology.org>



From the President's Desk:

We begin the new year with a continue focus on the love and advancement of the geological sciences here in Alaska and with our friends outside. We do this through our associations with the University of Alaska geoscience programs. We do it through our strong scholarship program. We do it with collaboration of many professional organizations around the world. And we do it by sharing our geology stories at our monthly luncheons.

Our first 2020 luncheon is:

Date: Thursday, January 23, 2020

Time: 11:30 am - 1:00 pm

Topic: "Arctic Dinosaurs"

Speaker: Dr. Patrick Druckenmiller, University of Alaska Museum of the North

Please plan on attending Pat's presentation.

Newsletter:

We continue to offer the monthly newsletter and website as a communication/sharing tool for all members to use. We encourage you to share your geology adventures. Please submit your geology stories and pictures with comments for sharing in these mediums.

The AGS board recognized that our advertising fees in the newsletter did not reflect the transition to a digital-only format. Our new 2020 annual fees for the newsletter and website are:

- \$100/year for full page, \$50/year for half page
- Website \$500/year this will include advertising in the newsletter. Half or full page.

We encourage our business friends to take advantage of the new rates and support our geology mission.

Repeat from December, but important:

The Alaska Geological Society (AGS) is a strong supporter of the geoscience academic and research programs for the Alaska Universities system. The University of Fairbanks and the University of Alaska are our strongest focus. We support them in a multitude of ways. As mentioned, a strong scholarship program, interaction with students, and technical conferences. We would like to repeat the announcement of our 2020 conference.

Technical Conference 2020

We have now scheduled the 2020 technical conference on the UAF campus April 18 with an optional field trip April 17 to the CREEL research center. A request for Abstracts is on our website month and more information will be posted on our website.

"Standing with the University of Alaska Geosciences"
University of Alaska Geoscience Departments & Alaska Geological Society
2020 Technical Conference
Fairbanks, Alaska
April 18, 2020

CALL FOR ABSTRACTS

The AGS tech conference will be held on Saturday, April 18, 2020 at the University of Alaska Fairbanks campus. Field trip to the CREEL permafrost research tunnel Friday April 17, 2020. No host dinner in Fairbanks. We invite abstracts for the report, technical presentations, and poster sessions. Student involvement is highly encouraged, as numerous professional geologists and company leaders will be present and interacting with poster presenters. This is a time to show off your current or past research in Alaska to professional geologists!

The technical conference will include a keynote speaker Dr. Jamey Jones (USGS).

Abstract Deadline: Feb 15, 2020

Abstract word limit: 350 words

From the President's Desk (continued):

Field Trip CRREL – April 17 <https://www.erc.usace.army.mil/CRREL/Permafrost-Tunnel-Research-Facility/Description/>

Scholarship:

This month I want to focus on the Donald H. Richter scholarship. The Richter Family set up a scholarship fund for students studying geology in Alaska, as a continuing legacy to Don's interest and enthusiasm for Alaskan geology. More information of his life and legacy is included in this newsletter link below and on our website. We solicit donations to ensure we can keep this worthy program alive in Alaska.

Visit our website: www.alaskageology.org for more information.

In summary, please help us to continue supporting the geoscience research and student study programs in the State of Alaska.

We hope your New Year is off to a great start and that you keep the love and science of geology progressing.

Sincerely,

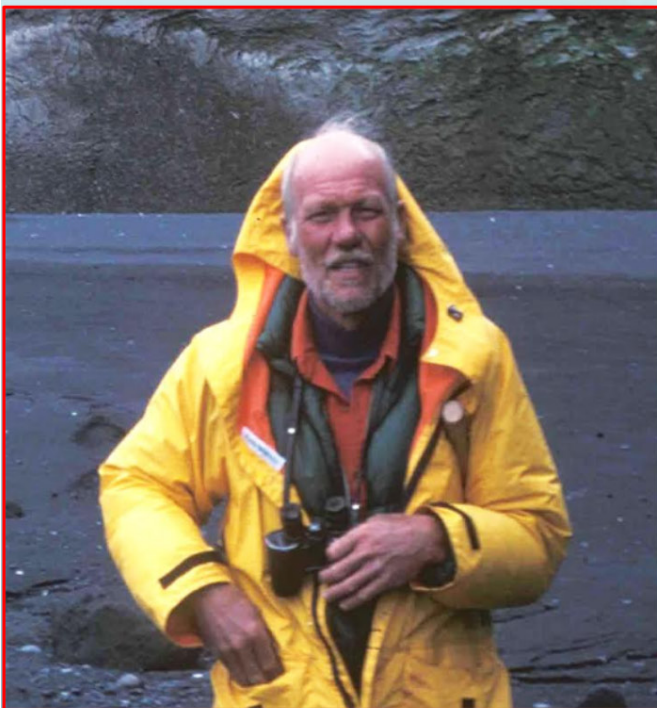
Steve Carhart – President Alaska Geological Society

January 2020

Donald Richter Scholarship and AGS recognition



The AGS strongly supports maintaining Donald's legacy through this scholarship.



Donald H. Richter September 29, 1926 to October 8, 2004

Especially at home in the mountains, Don loved the out-of-doors. His thirst for learning about the natural world was unquenchable and he loved to share that knowledge. Don was a remarkable field geologist whose Alaskan activities, primarily with the USGS, began in 1963 and continued for over 40 years to the present. Although Don was widely known as "Mr. Wrangells" for his work on the Wrangell volcanic pile, his many publications range from reports on: mineralization in the Slana district in 1965; a 1971 seminal paper on Quaternary faulting in east-central Alaska in which the Totschunda Fault was defined; the geology and mineral resources of the Nabesna area in the late 1970's and 1980's, and the many geologic maps of volcanic centers in the Wrangell Mountains in the 1990's, including, more recently, popular accounts of the geology of the Wrangell Mountains.

Don spearheaded the initial USGS's AMRAP program in east-central Alaska enabling the entire program to get off to a flying start. His participation in the fledgling Alaska Volcano Observatory response to the 1989-90 eruption of Redoubt volcano was pivotal to its success.

Don was still producing geologic maps and reports on the volcanology of the Wrangell-St. Elias National Park at the time of his untimely death.

His wisdom, experience, and keen perceptions of Alaskan geology will be sorely missed by friends and colleagues.

The Richter Family has set up a scholarship fund for students studying geology in Alaska, as a continuing legacy to Don's interest and enthusiasm for Alaskan geology.

Contributions by check to the scholarship fund should be made to the Alaska Geological Society, with "Don Richter Scholarship Fund" on the memo line. Contributions can be made on the AGS website at <http://www.alaskageology.org>

Call for Abstracts

Pacific Section AAPG/SEPM/SEG Convention

2020 Vision: Producing Our Future

April 4-8, 2020

Join us in Oxnard, California, just an hour north of Los Angeles, at the Embassy Suites Beach Resort, an oceanfront hotel and excellent convention venue. We are currently seeking abstracts for a high quality technical program that covers the broad interests of our members and the geoscience community. Convention information and instructions for abstracts at <http://psaapgconvention.org/2020>. Technical presentations will be scheduled for Monday and Tuesday, April 6-7.

Abstract Deadline is Friday, January 10, 2020.

Suggested Topics Include:

- Case Studies in Exploration and Development, California and the Pacific Rim
- The Monterey Formation and Similar Strata Across Space and Time
- Source to Sink Studies
- Integrated Studies in Stratigraphy and Sedimentology
- Applied Sedimentology and Paleontology
- Unconventionals and Alternative Resources
- Petrophysics: Applications, Innovations, Images
- Geoscience, Climate, and the Environment
- Aquifers, Underground Injection and Environmental Regulations
- Seismic: Acquisition, 3D Applications, AVO/Inversion, Induced Seismicity
- Structural Geology: Tectonics, HC applications, Earthquakes, Hazards
- Maximizing Recovery: Reservoir Characterization, Models, EOR
- Digital Tools and Big Data Applications



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Alaska Geological Calendar of Events



Date	Time	Organization	Event	Location
April 23, 2019	11:45 am	AGS/GSA/SPE	Joint AGS/GSA/SPE presentation, Shuvajit Bhattacharya (UAA), Old Tax-Credit Subsurface Data and New Analytics: Implications for Improved Subsurface Interpretation and Skilled Workforce Development	BP Energy Center, Anchorage
May 15, 2019	5:00 pm - 8:30 pm	GSA	GSA 2019 Spring Scholarship Picnic	AK Airman's Assoc Hall, 4200 Floatplane Dr
May 29, 2019	11:45 am	AGS	Laura Gregersen, Alaska DOG, "The history and aerial distribution of exploration drilling targets categorized by play type, North Slope and offshore arctic Alaska"	BP Energy Center, Anchorage
May 30, 2019	7:00 am - 5:00 pm	AOGA	AOGA Conference	Dena'ina Center, Anchorage
May 31, 2019	9:30 am - 4:00 pm	AOGA	AOGA GMC Technical Beakout Session	Geol Material Center 3651 Penland Pkwy.
August 12, 2019	11:45 am	AGS	Pedro A Restrepo-Pace, Oil Search Ltd., "Technical Progression in Tackling the Papua New Guinea Fold Belt : A Fit for Purpose Tool-kit, a Learning Curve and the Persistence that Led to Success in One of the Most Challenging Surface and Geological Settings	BP Energy Center, Anchorage
Sept 17, 2019	11:45 am	AGS	Greg Wilson, ConocoPhillips, A Regional look at Nanushuk Formation facies in outcrop, Brooks Range Foothills, Alaska"	BP Energy Center, Anchorage
Oct 22, 2019	11:45 am	AGS	Tom Homza, Shell Exploration & Production, "Deconvolving Alaska's Barrow Arch"	BP Energy Center, Anchorage
Nov 19, 2019	8:30 am - 11:30 am	AGS/USGS	Dave Houseknecht, USGS, "US Geological Survey Public Assessment Review"	BP Energy Center, Anchorage
Dec 9, 2019	11:45 am	SPE/AGS	Oliver Mullins, Schlumberger, "Asphaltene Gradients, Connectivity and Tar Mats All Treated by Simple Chemistry and Reservoir Fluid Geodynamics"	BP Tower, Anchorage
Jan 23, 2020	11:45 am	AGS	Pat Druckenmiller, UAF, "Little bones from a big state: baby dinosaurs from the Cretaceous paleo-Arctic of Alaska"	BP Energy Center, Anchorage
Feb 18, 2020	11:45 am	AGS	Speaker to be determined	BP Energy Center, Anchorage
March 17, 2020	11:45 am	AGS	Dave Buthman, Hilcorp, "Cook Inlet Exploration: Past, Present, and Future"	BP Energy Center, Anchorage
April 17-18, 2020	All Day	AGS Tech Conference	"Standing with the University of Alaska Geosciences"	UAF, Reichardt Building
May 21, 2020	11:45 am	AGS	Tom Douglas, Cold Regions Research and Engineering Laboratory, Title to be determined	BP Energy Center, Anchorage
Sept 17, 2020	11:45 am	AGS	Speaker to be determined	BP Energy Center, Anchorage
Oct 22, 2020	11:45 am	AGS	Barrett Salisbury, DNR, "Neotectonics of Interior Alaska"	BP Energy Center, Anchorage
Nov 19, 2020	11:45 am	AGS	Speaker to be determined	BP Energy Center, Anchorage
Dec, 2020	11:45 am	AGS	Date and speaker to be determined	BP Energy Center, Anchorage

AMA: Alaska Miners Association; **AGS:** Alaska Geological Society; **GSA:** Geophysical Society of Alaska

AAEP: Alaska Association of Environmental Professionals; **SPE** Society of Petroleum Engineers; **UAA** University of Alaska Anchorage.

NEW! UAA Geological Science Department Weekly seminars: Cook Inlet Exploration: Past, Present, and Future
<https://www.uaa.alaska.edu/academics/college-of-arts-and-sciences/departments/geology/seminar.cshtml>



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The Alaska Geological Society, Inc.
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On the web at: <http://www.alaskageology.org>

The Alaska Geological Society is an organization which seeks to promote interest in and understanding of Geology and the related Earth Sciences, and to provide a common organization for those individuals interested in geology and the related earth sciences.

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MEMBERSHIP INFORMATION

AGS annual memberships expire November 1. The annual membership fee is \$25/year (\$5 for students). You may download a membership application from the AGS website and return it at a luncheon meeting, or mail it to the address above.

Contact membership coordinator Kirk Sherwood with changes or updates (e-mail: membership@alaskageology.org; phone: 907-334-5337)

All AGS publications are now available for on-line purchase on our website. Check to see the complete catalogue:

<http://www.alaskageology.org/publications.htm>

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Advertisements may be purchased at the following rates:

1/10 Page--\$190/9mo, \$75/1mo; size=1.8 x 3.5 inch

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<https://www.pickclickgive.org/index.cfm/pfdorgs.info/Alaska-Geological-Society-Inc>

- From the PFD home page <http://pfd.alaska.gov/Application>, select the green "Add or Change Your Pick.Click.Give. Donation" button
- You can change/add your donation at any time throughout 2020



Additional Ways to Support AGS:



Support us when you shop. Sign in to Amazon Smile instead of Amazon and a portion of your purchase is donated directly to the AGS. Go to: <http://smile.amazon.com>

Membership Note

Membership renewal is November 1

Annual dues are:

Full member - \$25

Student member - \$5

Lifetime membership - \$250



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