Vol 64 No. 1

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P2 / PRESIDENT'S LETTER

Read on for our incoming President's first message of his term.



P4 / GIRLS-N-SCIENCE

View another thank you for your contributions to this outreach event.



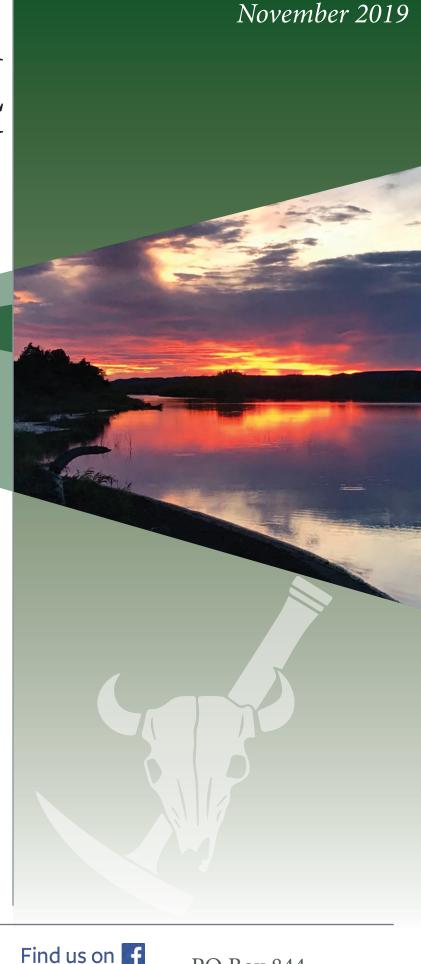
P5/OILIES

It's that time of year again -- don't miss the annual Oilies Christmas Party!



P6 / IN THE NEWS

Read up on the latest worldwide geologic discoveries found online in ScienceDaily.



Contact Us:

mtgeo.org / montanageologicalsociety@gmail.com

Add our email address to your contacts so your Newsletters & Luncheon announcements don't end up in Spam!

PO Box 844 Billings, MT 59103

President's Letter

Dear Membership,

As my first order of business as the newly elected MGS President, I would like to thank our outgoing President - Sarah Friedman - for her leadership over the past year. While we are not specifically an oil-and-gas-focused society, the vast majority of our members work in that industry to some degree and the current down cycle in that market can sometimes make it hard to summon the energy for a volunteer society, at least for me. I never saw that from Sarah; she was always there with a great attitude, pushing us to do more...even to the point of proposing a Field Conference to be held next year! The Board has decided to throw our weight behind that effort and it will be our focus this year. We know it will be a massive effort this year to get ready, and I expect that we will be making many calls for volunteers as the plans are fleshed out.

One other person I need to thank is outgoing Board Member, Past President and all-around good guy Felipe Pimentel. His input, effort and attitude will be greatly missed on the Board (despite me writing him in for the President position rather than voting for myself).

Happy Thanksgiving to you all.

MGS President Tom Hewett

2019-2020 MGS Officers

President

Tom Hewett 406-281-8203 Vice President/Speaker Coordinator Spenser Kuhn 406-696-0268

Treasurer

Jim Suydam

Secretary

Sarah Friedman 406-896-5931

Past President Sarah Friedman



"Like" the Montana Geological Society to keep up-to-date with the MGS.

MGS Classifieds

Who's Who of the MGS

BOARD OF DIRECTORS

Ioe Carlisle

Don French

Robert Schalla

Steven W. VanDelinder

AAPG-ROCKY MOUNTAIN SECTION

Delgate: Mark Millard Alternate:

Don French

Foundation:

Rob Diedrich 303-830-5875

COMMITTEES

Awards and Continuing Education:

Felipe Pemintel

Field Trips:

Gary Hughes

861-2072

University Liaison:

Steven W. VanDelinder

Publications:

Duncan McBane

252-3170

Montana Oil & Gas Fields Update:

Jim Halvorson

656-0040

PUBLICATION SALES

Doretta Brush

259-8790

NEWSLETTER EDITOR

Jessica Renstrom

208-2504

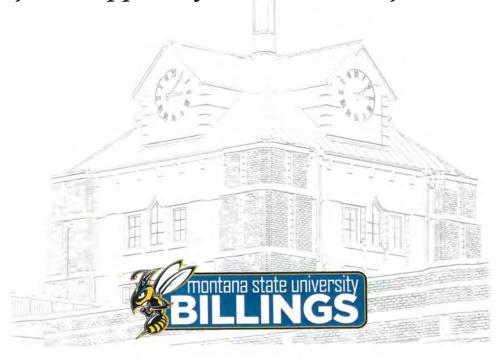


Have something geological to sell, give, or find? Place a free ad in our MGS Classifieds!

Contact the Newsletter Editor for more information.

MGS Members -- Thank you...

for your support of our community's students!



Miller Sold Cal Cal

Thank you for your support of this year's Girls-n-Science! We couldn't have

done it without you.

Cale Junt Marking



OILIES CHRISTMAS PARTY

In the spirit of the season and our tradition, let us gather together for good cheer and friendly festivities

Billings Petroleum Club

22nd floor of the Double Tree Hotel (formerly Crowne Plaza)

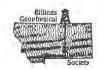
27 N. 27th Street Billings, Montana

Friday, December 13, 2019

5 - 10 pm

Great food
Complimentary keg beer and selected wines
Cash bar for cocktails

Organized by our professional associations and societies - land, geology, engineering and geophysics









Geology: In the News

"Extra-terrestrial impacts may have triggered bursts' of plate tectonics"

"When -- and how -- Earth's surface evolved from a hot, primordial mush into a rocky planet continually resurfaced by plate tectonics remain some of the biggest unanswered questions in earth science research. Now a new study suggests this earthly transition may in fact have been triggered by extra-terrestrial impacts."

To read the article, please visit: https://www.sciencedaily.com/releases/2019/11/191126091313.htm

"Secret of explosive volcanism unlocked"

"When will the next eruption take place? Examination of samples from Indonesia's Mount Merapi show that the explosivity of stratovolcanoes rises when mineral-rich gases seal the pores and microcracks in the uppermost layers of stone. These findings result in new possibilities for the prediction of an eruption."

To read the rest of the article, please visit: https://www.sciencedaily.com/releases/2019/11/191115101109.htm

"New technology developed to improve forecasting of Earthquakes, Tsunamis"

"Geoscientists have successfully developed and tested a new high-tech shallow water buoy that can detect the small movements and changes in the Earth's seafloor that are often a precursor to deadly natural hazards."

To read the article, please visit: https://www.sciencedaily.com/releases/2019/11/191122113307.htm

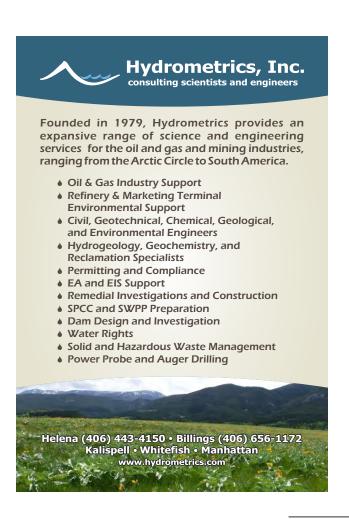


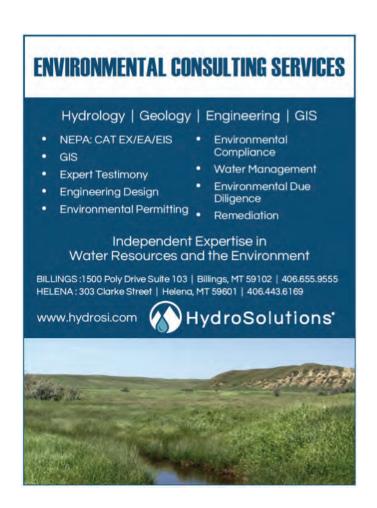
Interested in placing an ad?

Contact Jessica Renstrom at montanageologicalsociety@gmail.com with your ad, or request pricing to create one for your business or event.

2019 Advertising Rates: Full Page - \$100/month Half Page - \$50/month Quarter Page - \$25/month Business Card- \$10/month

All ads must be prepaid.
Send payment to:
MGS, PO Box 844
Billings, MT 59103







Montana Geological Society
PO Box 844 • Billings MT 59103

• E-Mail: montanageolocialsociety@gmail.com Web: montanags.com

Montana Geological Society 2019-2020 Annual Research Scholarships

Purpose

The Montana Geological Society (MGS) is a non-profit organization created in 1949 "...to promote interest and research in geology and allied sciences and their practical application, and to encourage fellowship and cooperation among the members." This annual award supports these goals by providing financial assistance for up to two student dissertation, thesis, or senior projects involving Montana geology and by providing a venue for students to present their work to geology professionals in Montana.

Award

Up to two scholarships, one for $\underline{\$2,000}$, and one for $\underline{\$1,000}$, may be awarded each year to the most qualified applicants. The successful applicants agree to present their research results at a luncheon meeting of the MGS in Billings, MT, and will receive reimbursement for travel expenses to and from Billings in addition to the scholarship amount.

Basis of Award

All projects will be reviewed by a committee composed of Officers and Board Members of the MGS. The award will be made based on project merit, difficulty, and innovation appropriate for the applicant's educational level. Projects in the early to middle stages of research will receive preferential consideration over those at or near completion. The awards will only be made to fully qualified and deserving applicants, if any, as determined by the committee.

Eligibility

Scholarships are available only to full-time students working toward a BA, BS, MS, or Ph. D degree in an accredited geology or earth science program at a Montana college or university. The research area must be based at least partially in the state of Montana.

Application Packet

Applicants must submit **1.)** a <u>brief</u> cover letter that summarizes the applicant's educational background, current student status (B.S., M.S., Ph. D), anticipated graduation date, and research interests. Include name, mailing address, email address, and phone number, **2.)** a <u>short</u> (300 words or less), <u>concise</u> summary of their approved or proposed project that includes study area, purpose, and applicability of research to Montana geology, along with an advisor's signature, **3.)** a work flow timeline, and **4.)** an estimated itemized annual budget which specifies how the funds from this award will be used. The budget must include the amount and source of all other project funding.

Deadlines

Applications can be emailed (preferred) or mailed. Emailed applications (as attached file(s) in any standard format) must be sent to months-applications must be post marked no later than February 1st, and should be addressed to: Montana Geological Society, PO Box 844, Billings, MT 59103. Awards will be announced and payment made in the form of a check to the successful applicant no later than April 1st.



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MONTANA GEOLOGICAL SOCIETY

PUBLICATION	QUANTITY	PRICE	TOTAL	
2006 Montana Oil & Gas Fields CD		\$65.00		
2006 AAPG Datapages - MGS Publications DVD		\$180.00		
2006 AAPG Datapages - MGS Publications DVD (MGS Member price)		\$150.00		
2000 50th Anniversary Symposium		\$20.00		
1999 Thrust Systems of the Helena Salient		\$20.00		
1998 8th Int'l Williston Basin Symposium		\$20.00		
1998 8th Int'l Williston Basin Symposium Core Workshop		\$20.00		
1997 Big Horn Basin Symposium		\$20.00		
1997 MGS-TRGS: The Edge of the Crazies		\$20.00		
1997 AAPG - Rocky Mtn. Section Meeting / Abstract Volume		\$10.00		
1996 AAPG - Rocky Mtn. Section Meeting / Abstract Volume		\$10.00		
1993 Energy and Mineral Resources of Montana		\$20.00		
1991 6th International Williston Basin Symposium		\$20.00		
1991 Geology & Horizontal Drilling of the Bakken		\$20.00		
1991 AAPG - RMS Field Trip: Beartooth Mountains		\$7.50		
1991 AAPG - RMS Field Trip: Eagle Sandstone, Billings		\$7.50		
1991 RMS Field Trip #1 Nye-Bowler Linemont		\$7.50		
1991 Sequence Stratigraphy of Eagle Sandstone		\$7.50		
1990 Bakken Workshop Short Course Study Notes #1		\$10.00		
1989 Geologic Resources of Montana		\$20.00		
1986 Geology of the Beartooth Uplift		\$20.00		
1985 Montana Oil & Gas Fields		\$20.00		
1971 Stratigraphic Names of Montana		\$10.00		
1969 Economic Geology of Montana		\$20.00		
Shipping and Handling charges - \$5.00 per CD/DVD \$8.00 per book				
Total Due	9			
Billing / Shipping Information				
Name Company				
Address City, State, Zip				
Email Address				
Please make checks payable to: Montana Geological Society. Visa and MasterCard also accepted.				
sa / MasterCard (circle one) Expiration Date				
Name as it appears on the Card				

Mail orders: Montana Geological Society, PO Box 844, Billings, MT 59103

Email orders: dbrush@ballardpetroleum.com **Phone orders**: Doretta Brush (406) 281-8228

Phone Number (____)_

MONTANA GEOLOGICAL SOCIETY

P.O. Box 844

Billings, MT 59103

Membership Renewal

Last Name		
First Name	Middle Initial	
ANNUAL DUES:		
\$20.00 Regula	r	
\$10.00 Studen	t	
******	********	**********
Please update the has changed:	e information below if need	ded. Please leave blank if nothing
Company/Affiliation	1	
Mailing Address (wo	ork or home)	
Street		
City	State	Zip
Phone (w)	Phone (h)	Phone (c)
E-Mail		
	ease circle) YES NO	
Education (School, 1	Degree, Year)	
Degree #1		
Degree #2	_	
Degree #3		