



DEPARTMENT OF GEOLOGY

NEWSLETTER



Volume I No. 6

December 1981

Dear Alumni and Friends:

Much has happened since I last wrote and it is difficult to know where to begin. From January through March I was on professional leave from Western and had the opportunity to visit with many of our alumni in Texas, Oklahoma, New Mexico, Arizona, and Colorado. A reunion party was held in Houston with over 30 alumni and spouses attending. It was a great time. I wish to thank all who were so gracious to me during my visits.

Much success was achieved by faculty and alumni in encouraging the major oil companies to recruit at Western this fall. Amoco (geology), Amoco (geophysics), Conoco, Citgo, Exxon, Gulf, and Phillips all conducted interviews. Also, the Department received its first gifts from the oil companies, \$1500 from Amoco for geophysics, and \$4000 from Exxon. The Amoco gift will be used to maintain geophysics equipment and most of the Exxon gift will be directed to assisting faculty and student research. The faculty appreciates the support you have given in encouraging the companies to contribute.

Several of our students with interests in environmental geology have taken positions with engineering firms. George Duba is now in Denver, Bill French in Kalamazoo and Don Penniman in Grand Rapids.

Activity on the 2 year EPA Underground Injection Control Project is winding down and many of our able workers are taking new positions. Don Leske has moved to Denver, Linda Miller will leave for Los Angeles, and Jeff Spruit is now with Conoco. This major project will result in the publication of an atlas: Hydrogeology of Michigan which will soon go to press. A new EPA project supported by \$43,000 to study groundwater contamination in relation to oil field development has been received. Drs. Passero and Straw, and Dennis Curran will administer the grant.

Our Seminar Series this fall is off to a good start. Of special interest was a program presented by John Fowler ('78) of Patrick Petroleum on Turbidites and Rifting in the Michigan Basin. At that seminar we were able to welcome back for visits Rob Kell from Anaconda, stationed in Alaska, Paul Ciarritaro of Quality Logging in Midland, Texas, Darcy Davenport of Northern Energy Resources Company in Portland, Oregon, and Casper Cronk with Phillips in London. It was a happy occasion. During his visit Rob spoke to a number of students about jobs as summer field assistants in Alaska.

The Department was an exhibitor at the recent GSA meeting in Cincinnati. It was an attempt to promote our programs and research efforts. Alumni attending were Kent Murray (Sacramento), Jerry Aiken (Tucson), Rich Kimmel (Lansing), Roger Steininger (Roger is now in Reno with Selco), Rob Kell (Anchorage), Clark Niewendorp, and Tom Mahan (Denver). Faculty and students presented 3 papers and were co-leaders of one field trip. Next year GSA will be in New Orleans. Look for us there at the cocktail party. Also, A.A.P.G. will be in Calgary this June, watch for the Western cocktail hour in the announcement.

A growing number of alumni are now living in the Denver area. It would be great if a gathering could be arranged in the near future. Let me know if you are interested and I'll try and arrange it.

The Department is pleased to announce that Ms. Barb Leonard is the first recipient of the W. David Kuenzi Memorial Research Award. Barb is a second year graduate student working on depositional framework of the A-1 Carbonate in the Michigan Basin with Bill Harrison. This year the award was \$250 and funds earned on the Kuenzi endowment were supplemented with funds from the Geology Development Fund. Your gifts to both these funds are

appreciated. Debbie Yervasi was the recipient of the Kalamazoo Geological and Mineral Society Summer Field Trip Scholarship. Senior Honor Awards went to Bill Schroeder, Patricia Dalian, and Debra Yervasi.

Janet Niewoonder and Carol Harkness, our secretaries, continue their busy pace in helping us get all our work done. Without them the Department office would collapse. Bob Havira keeps busy repairing and fabricating equipment, and the myriad of other things. Bob will be teaching scientific photography again this spring.

Marilynn Kuenzi maintains the family home in Kalamazoo. Nicolet Kuenzi is enrolled as a freshman geology major at the University of Texas, in Austin.

During my visit with many of you last winter it was suggested the Department publish an Alumni Directory for distribution. I am happy to announce the beginning of this project, however, I earnestly need your help. Without it the project will be a failure. Please return the attached form in the enclosed envelope. I'm sorry to report that those not responding will be dropped from the Newsletter mailing list and will not be included in the Directory. I regret this decision, however, the ever escalating postage and printing charges, and the expanding mailing list necessitate it. Please respond promptly. I hope to have the directory ready for distribution in early 1982.

To our Department's alumni and friends who live in Michigan, what I am about to write about should come as no surprise. Michigan is in the midst of a severe depression. A recent report shows that Michigan ranks 50th in per capita support for higher education. The Michigan Legislature has reduced Western's appropriations twice in recent months in order to balance the budget and the Michigan fiscal year is just beginning. At a time when the Department's programs are strong and students are able to get jobs, resources to operate the Department are scarce and diminishing. Also, rising tuition is placing severe hardships on students. To quote Dickens, "It is the Best of Times and the Worst of Times".

In an effort to keep things going the faculty needs your help. Please consider making a contribution to the Geology Development Fund or the Kuenzi Memorial Fund. The appropriate form is enclosed. For Michigan residents the tax advantages are very favorable. The following table provides some examples.

			INDIVIDUAL RETURN			JOINT RETURN		
Earned Taxable Income	Gift	Michigan Tax Liability ¹	Michigan Tax Credit ²	Federal Saving ³	Net Cost	Michigan Tax Credit ²	Federal Saving ³	Net Cost
\$ 10,000	\$ 25	\$ 460	\$ 12.50	\$ 6.25	\$ 6.25	\$ 12.50	\$ 5.50	\$ 7.00
15,000	50	690	25.00	15.50	9.50	25.00	12.50	12.50
15,000	100	690	50.00	31.00	19.00	50.00	25.00	25.00
15,000	200	690	100.00	62.00	38.00	100.00	50.00	50.00
20,000	100	920	50.00	36.00	14.00	50.00	28.00	22.00
20,000	200	920	100.00	72.00	28.00	100.00	56.00	44.00
20,000	400	920	100.00	144.00	156.00	180.00	112.00	108.00
25,000	100	1,150	50.00	40.00	10.00	50.00	36.00	14.00
25,000	200	1,150	100.00	80.00	20.00	100.00	72.00	28.00
25,000	400	1,150	100.00	156.00	144.00	200.00	128.00	72.00
30,000	100	1,380	50.00	45.00	5.00	50.00	39.00	11.00
30,000	200	1,380	100.00	90.00	10.00	100.00	78.00	22.00
30,000	400	1,380	100.00	176.00	124.00	200.00	148.00	52.00
30,000	1,000	1,380	100.00	450.00	450.00	200.00	390.00	410.00
40,000	200	1,840	100.00	50.00	50.00	100.00	90.00	10.00
40,000	400	1,840	100.00	196.00	104.00	200.00	172.00	28.00
40,000	1,000	1,840	100.00	500.00	400.00	200.00	450.00	150.00
50,000	200	2,300	100.00	100.00	0.00	100.00	100.00	0.00
50,000	400	2,300	100.00	220.00	80.00	200.00	196.00	4.00
50,000	1,000	2,300	100.00	500.00	400.00	200.00	500.00	300.00

¹Michigan Tax Liability computed on basis of 4.6% rate on individuals

²Michigan Tax Credit based on 50% of gift, 20% of tax liability, or \$100.00 (\$200.00 if joint return), whichever is less

³Maximum tax rate of 50% is used on earned taxable income where applicable in accordance with the 1979 tax Reform Act

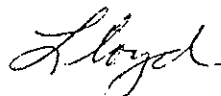
The tax savings derived from the contribution credit may affect the federal taxable income of the donor for the taxable

For those living away from Michigan the tax advantages are significant if you complete the long tax form. Also, beginning in 1982 taxpayers filling out the short form will be able to declare a deduction of 25% of the gift. Many companies provide matching gifts as well. Your gifts will be wisely used and are always appreciated.

In addition to my visits to some of the major oil centers last winter, I had a chance to hike in some of the National Parks and Monuments that I've yearned to see. They included Big Bend, Guadalupe, Carlsbad Caverns, Canyon De Chelly, and Chaco Canyon. I ended my leave when Marilyn was able to join me for a trip to Hawaii and visits to Kilauea Volcano, Haleakala National Park and a helicopter ride along the Napali coast and into Waimea Canyon. In June I was a co-leader of a group of Friends of Western on a six day raft trip through the Grand Canyon on the Colorado River. At Lava Falls I received my first dunking in ten years on the Colorado. The raft flipped over spilling me and five other passengers into the river. It was an exciting, once is enough experience.

I hope this nearly completed year has been a prosperous one for you and that you have enjoyed good health. Happy Holidays and best wishes for the New Year.

Sincerely,



Lloyd J. Schmaltz
Chairman

Faculty News

After recovering from eye surgery this summer which prevented any summer field activities and presentation of a paper at the North Central GSA meeting in Iowa, Bill Harrison is active again and recently led a field trip for the Annual GSA at Cincinnati. Other projects include working with heavy metals in sediments and continuing research and supervision of graduate students working in Ordovician and Silurian sedimentology and paleoecology. A full schedule of teaching endeavors include Earth History, Oceanography, Invertebrate Paleo., Paleoecology and Sedimentary Petrology.

Ray Freeman-Lynde spent the summer at the USGS office in Woods Hole, MA, working with single-channel air-gun seismic reflection profiles collected by USGS personnel off southeastern Florida. He has been able to correlate the seismic units with Tertiary strata found in onshore wells and will present the results next March in Washington at the South-eastern Section of GSA.

The Department was in good hands this past winter semester while John Grace was acting chairman. This year John is having a busy year with a big mineralogy class (45 students) and he continues to function as undergraduate advisor for the Department. He is still working on his Antrim Shale project.

Dick Passero continues to serve on the Michigan Environmental Review Board. He is working on the completion of the UIC Hydrogeologic Atlas of Michigan. He chaired a GSA session on environmental geology and presented a paper with Drs. Straw and Sauck concerning migration of leachate from a local landfill. Dick is involved in several groundwater contamination problems as consultant and thesis advisor. He has also spent considerable time with the manufacture of a soon to be delivered drilling rig.

In the area of geophysics Bill Sauck completed the Albion-Scipio project which resulted in an open-file map and report entitled: "Detailed Ground Magnetic Survey of Homer and Spring Arbor Quadrangles, MI". This is also the subject of a recently completed thesis by Steve Hoin. Bill is also in the calibration stage of a homemade long-period earthquake seismometer.

Ron Chase continues to function as graduate advisor for the Department. Ron attended a Geological Society of America Penrose Conference on "The Origin and Significance of Mylonitic Rocks" in San Diego, CA. He presented two papers and a poster session. Ron has published two papers in the U-PB zircon systematics in the northeastern Idaho batholith. This wraps up his Idaho batholith study. He spent part of the summer studying the geometry and kinematics of multistage deformation (Precambrian through Laramide) in the southern Front Range, Colorado. Ron continues to spend his spare time struggling on the tennis court and tinkering with exotic automobiles.

This past summer Chris Schmidt continued working in southwestern and central Montana on a NSF funded project dealing with the origin of the Rocky Mountain Foreland region. Chris has presented papers at the Rocky Mountain Section of GSA, AAPG Annual Meeting in San Francisco, Montana Geological Society Symposium, and the annual meeting of the GSA in Cincinnati.

Tom Straw continues his association with the Indiana University field program in Montana. He and Chris Schmidt recently completed work on the neotectonics of a portion of southern Montana in conjunction with the Montana Bureau of Mines and Geology. Tom and Chris also presented a paper on the Heart Mountain Detachment fault at GSA. Tom and Bill Harrison are coordinating a study of Michigan Basin Silurian rocks which involves a number of students. As Dick Passero's alternate in MERB, Tom occasionally enjoys the opportunity to hear about environmental problems in Michigan, an interest he still shares with Dick.

Graduate Student News

James Barnett completed his undergraduate studies at the University of Iowa. Jim's graduate area of study is sedimentation and his thesis concerns micrometeorites in the Salina Salt (Michigan Basin).

Katharine Fulker, from Wittenberg University, is interested in geochemistry. Kathy's thesis work is being done at the KL landfill and concerns heavy metals in sediments.

Michael Gallagher is a new graduate student from the University of Puget Sound. Mike is interested in environmental geology.

William Gierke is presently working on his thesis concerning the geothermal potential of White Sulfer Springs, Montana. Bill is interpreting structural controls, hydrology, geochemistry, and geology. He did his undergraduate work at the University of Wisconsin-Oshkosh.

Dave Hall is working on a thesis in geophysics involving the mapping of groundwater pollution plume using the Schlumberger vertical electrical sounding method to detect the polluted water. Dave is from Bridgewater State College.

Thom Hanna's interests lie in igneous petrology and economic geology. Thom's thesis concerns trend surface analysis and alteration of QMZ intrusive in central Idaho.

Jon Hermann expects to graduate this December after concentrating his efforts with igneous petrology. Jon's thesis deals with the features and significance of layering in the zone of mylonization in Montana.

Steven Hoin has recently begun working for Amoco in the area of geophysics. Steve's thesis in geophysics involved ground magnetic study of part of the Albion-Scipio trend.

Stan Leja is working on a resistivity and magnetics thesis with a tentative completion date of April 1982. His geophysical survey is being done at the Cork St. landfill.

Barbara Leonard's graduate area of study is carbonate sedimentology. Barb's thesis has her working on the depositional framework of the A-1 Carbonate in the Michigan Basin.

David Lindsey is a new graduate student from Michigan State University. Dave is undecided concerning his area of study.

Thomas Luby, from Bridgewater State College, is finishing up his geophysical study in the Kalamazoo area and hopes to graduate in April.

Clark Niewendorp is now working for St. Joseph Lead Company in Missouri. Clark is presently finishing a thesis concerning hydrocarbons and lead-zinc deposits in Vibrium trend in Missouri.

Donald Penniman is interested in environmental Geology. A study of variations of chemical parameters in groundwater near the KL landfill is Don's thesis topic.

Kevin Prochaska graduated in August of this year. He is employed by Exxon in Kingsville, Texas.

Mark Sheedlo is a new graduate student from Central Michigan University. His interests include stratigraphy and structural geology.

Sally Snell is undecided concerning her area of study. Sally completed her undergraduate studies at Alma College.

Gary Stefaniak's thesis work involves studying the depositional history of clastic carbonates in the area south of Cincinnati. Gary hopes to graduate in April.

Mike Streeter is a new graduate student from Central Michigan University. Mike is interested in sedimentology and his thesis topic will involve Elkhorn Mountain Volcanics and associated stratigraphy in southwestern Montana.

Teresa Wagner is a new graduate student from the University of Puget Sound. Terry's graduate area of study is environmental geology.

Kevin Walsh is a new graduate student from Hanover College. He is interested in hydrogeology and structural geology.

Art William's area of study includes structural geology and geophysics. Art's thesis involves a study of the Gardner fault in Montana.

Mary Anne Wunderlich completed her undergraduate studies at Illinois State University. Igneous petrology is her area of interest. Mary Anne's thesis will deal with the petrology of the Cripple Creek Granite, Southern Front Range, Colorado.

Gary Barton is a new graduate student coming from Eastern Michigan University. Gary previously worked as a well site geologist for Ex-log and plans a soft-rock thesis.

Betty Garrett continues to work on petrographic analysis and geological assessment of southwest archeological sites. A representative from National Geographic has taken eight of Betty's photo micrographs to consider using them to illustrate an article on southwest Indians. Betty house sat for a pilot who was on the Double Eagle V while he was on his Trans-Atlantic flight. She also enjoys crewing for him when he launches his balloon.

Bill Williams continues work on his doctorate concerning the sediments of Austin Lake. Bill also has been involved in teaching some courses in the Department.

Joseph VanderMeulen is currently finishing his research in hydrogeology. Joe has received a one-year appointment as an intern at LOSA (Legislative Office of Science Advisor).

Alumni News

Dawn Adams reports from Washington, D.C. where she is Associate Editor of Rocks & Minerals Magazine. She indicates she will start a M.S. degree program in Oceanography at the University of Connecticut starting the summer of 1981.

Jean Baier from Sheridan, Wyoming reports that she has just started her own drafting business with special interest in engineering, surveying, geology and hydrology. Good luck Jean!

Glen Baja (B.S. 1975) and Karen Kemp-Baja (B.S. 1975) visited the department and report that they are now living in the Detroit area. They expect the arrival of their second child this year. Karen reports she is teaching part-time.

Ken Beiser reports from Denver he is working in hydrogeology.

Steve Bracken (B.S. 1976) has been a physical scientist with the National Park Service and has a special interest in Grizzly Bears at Glacier National Park. He hopes to continue his interest in this area.

Elizabeth (Buffie) Brown-Oldham (B.A. 1976) is a geologist and project leader for Denver C.G.G. (Compagine Generale de Geophysique). Buffie has just completed one year as a consultant with Japan Petroleum Exploration Company in Tokyo. Good luck Buffie!

Michael Dueweke (B.S. 1975) writes from Kenai, Alaska where he is serving as a field engineer with Dressar involved with well-log interpretation.

Lisa Dulin (B.S. 1980) is a teaching assistant for Miami University, Oxford, Ohio and is working on her M.S. degree. She worked for U.S.G.S. in Denver during the past summer.

Sharon East (B.S. 1980) currently in Louisiana is employed by Drew Cornell, Inc.

Dennis Gaulden (B.S. 1970) is teaching Earth Science in Wisconsin near Milwaukee.

James & Collette Hahnenberg sent a nice note. Jim is with Marathon in Houston and Colette is working on a M.B.A. at the University of Houston. Jim has finished his M.S. degree. Congratulations!

Jenny Hoffman (B.A. 1980) is presently with Analex involved in mud logging in the Wyoming area.

Steve Kremers (B.A. 1975) reports he is teaching junior high Earth Science in Virginia Beach, Virginia.

Tom Laux reports from Traverse City, Michigan that he is a drilling technologist with Amoco Production Company and is developing interest in some of the Niagran Age sedimentary features and structures in the northern reef trend of the Michigan Basin. Tom reports he recently married a former Jane VerMeulen of Kalamazoo. Congratulations!

John McGovern (B.S. 1979) writes from Ann Arbor and is presently working with Hertler Brothers in farm supply.

Bruce McLeod is teaching Earth Science and Chemistry in Green Bay, Wisconsin and has become actively interested in the geology of Northeast Wisconsin. He invites his friends to stop by if they would like to see his part of Wisconsin.

Jim Melvin writes from San Diego, California, where he is now employed with the Bankers Life Company.

Gary Miller stopped by the department and is presently working for U and TH Resources in Golden, Colorado.

Gary Myers (B.S. 1980) is a M.A. candidate at Michigan State with an interest in geophysics. Good luck Gary!

Howard Nevins writes from Evansville, Indiana, where he is involved with geological promotion as a crude oil company representative. He is also working as a Vice-Chairman for the American Petroleum Institute, Illinois Basin Chapter. A new baby girl arrived 5-7-81.

Joseph O'Sullivan writes from Massachusetts and sent a nice letter recently. Joe is an Earth Science teacher at Brockton High School and reports a second daughter, Karen Beth, is a new member of the family.

Ron Parker (B.S. 1977) writes from Bellevue, Washington, where he is actively involved in engineering geology. Thanks Ron for the ash from Mt. St. Helens.

Russell Periogo writes from Ann Arbor that he will be completing his M.S. thesis on Late Precambrian - Cambrian Paleomagnetism of the Armorican Massif, France.

James Peterson's picture was published in an issue of the Wall Street Journal. Jim is a geologist for Anadarko Company. We have lost touch with Jim and would like to know his current address.

Bob Ramsen (B.S. 1979) received a M.S. from Penn State in Geophysics and is currently employed with Phoenix Geophysical Ltd. in Willowdale, Ontario.

Thomas Sherman continues his busy travel schedule as newly appointed Assistant Minister of Lands & Mines for Liberia. Tom is involved in the U.N. Law of the Sea Conference and has recently sent us some of the regulations concerning this project.

Arlene Shub (B.A. 1979) has been serving as a cartographer for the department's U.I.C. Research Project and the Hydrogeologic Atlas of Michigan.

Julie Stein is now Assistant Professor of Archeology at the University of Washington, Seattle, Washington.

Roger Steininger (B.S. 1964) is now Exxon Manager - Western U.S.A., American Selco Inc., Reno, Nevada. Roger attended G.S.A. in Cincinnati and reports he is finishing his Ph.D. in Geology at Colorado State University. Congratulations Roger!

Don Stern (B.S. 1971) is currently serving as the operator for the Wastewater Treatment Facility in Wyoming, Michigan. Don's interests are in industrial water treatment and organic chemistry.

Susan Stone (B.S. 1976) is currently self-employed in Kalamazoo selling herbs and natural foods.

Cam Streidle is now working for Exlog.

Vince Symanski (B.S. 1979) reports he is with West Bay Exploration in Traverse City, Michigan.

Dan Truckle (B.S. 1978) is presently involved in uranium prospecting with a company in Denver, Colorado.

Steven Vealey is currently an independent consulting geologist in Gillette, Wyoming. He invited all his friends passing through the Powder Basin to stop by.

Jim Bartel is now working in Andrews, Texas for Exxon Oil Co.

William French is in Kalamazoo working for Wilkins & Wheaton Engineering Co. in charge of their soils laboratory.

Jeff Martin is in Houston working for Gulf Research and Development Co.

Tom Mahan went to work for Cities Service Oil Co. in Tulsa and after a 6-month training program he was transferred to Denver.

Kiff Samuelson is in Lafayette, Louisiana working for Exxon Oil Co.

Students and faculty were saddened to learn of the passing of Joe Jeffs as a result of a fatal heart attack the weekend of November 21 in Montana. Joe had many friends among faculty and students and he will be greatly missed.

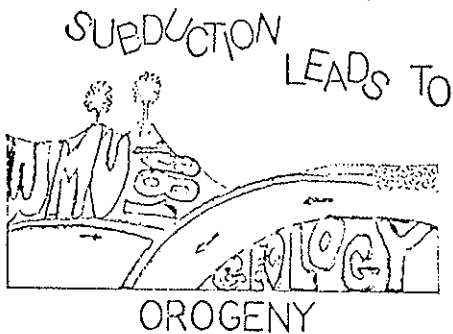
Geology Club News

The Geology/Earth Science Club has been meeting every other week. Club meetings have included stories of field camps for those unaware of its perils, slides of Mt. St. Helens (by a grad who was there when it blew), and of Mesa Verde National Park. The money-making project this year, as always, is the donut table.

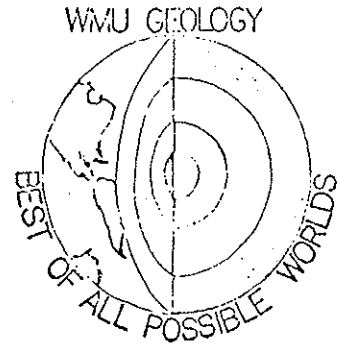
In October the second square dance and hayride was held and those who went had a good time. The Club's first volleyball team also had a good time this fall, although their record is not one to boast about.

At present we are selling T-shirts (\$7.00) and caps (\$6.00) as pictured below. If any alumni would like to order these items please let the Department know immediately (indicating shirt size).

Shirt...



Cap...



Alumni Directory

Attention

Attention

Attention

To continue receiving the Newsletter please complete the following form and return in the enclosed envelope:

Name _____

Major _____ Degree Earned _____ Date of Graduation _____

Name of Spouse if WMU Graduate _____

Address _____

Phone _____

Current Position _____

Professional Interests _____

Other News _____