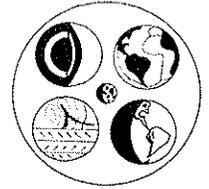




DEPARTMENT OF GEOLOGY

NEWSLETTER



Volume I No. 2

April 1, 1976

Dear Department Alumni and Friends:

Nearly a year has passed since the first newsletter was sent out. I sincerely hope that it reached you. Much has happened in the department since that issue. Many of you may have learned of the serious financial problems facing Western. Only a very small increase in budget was approved by the legislature and later cuts reduced that greatly. As a result 152 faculty members were given "pink slips" last November. Dr. William Harrison and Dr. Caspar Cronk of our department were included. Since then the administration has undertaken program review in each department. A January 28th decision revealed that Dr. Harrison would be offered a temporary position for 1976-77 and Dr. Cronk's reappointment is still pending. Obviously this has the department staff deeply concerned. This staff cut-back comes at a time when the department's enrollment is at an all-time high. There are approximately 50 undergraduate majors in geology and an equal number of earth science majors for a total of 100. Graduate enrollment remains strong with 21 full-time students. Every effort will be made to convince the administration to support our programs.

On the brighter side the most important professional responsibility the Department has undertaken will occur April 28 - May 1 as we host the North-Central Section of the Geological Society of America and several affiliated societies. The meeting consists of 2 days of technical sessions and premeeting and postmeeting field trips. Over 100 papers have been submitted and total attendance is expected to exceed 500. Six of the papers are being presented by our own students. All former students are invited to attend. Preregistration information can be obtained from the February issue of Geology or by writing to the Department.

A small get-together was held at the Salt Lake City meeting of GSA last October. Representing the department were Ron Chase, David Kuenzi, and myself. Former faculty members attending were Skip Davis, John Lufkin, and Art Reesman. Alumni at the gathering were: Roger Steininger, American Metals Climax; Harriet Cloft, Colorado School of Mines; John Pinchot, Southern Illinois University; George Groves, VPI; Bill Coons, University of Arizona; Eric Swanson, University of Texas; Joe O'Sullivan, Brockton, Massachusetts. Plans were made to hold a larger reunion when G.S.A. meets in Denver in 1976. Please plan to attend.

The Department is pleased to announce the establishment of a "Geology Department Development Fund." The fund has been established to provide an opportunity for alumni and friends to make gifts directly to the Department. In past years those contributing to the Annual Fund were required to make a special designation for the Department of Geology. Possibly, donors overlooked this option and their gifts went to the overall University Fund. The new Geology Development Fund will guarantee that the gift will be directed to the department enabling it to support activities for which no University funds are available. Please remember no gift is too small and if each of our several hundred alumni can contribute a modest amount it would give our department a much needed lift. I am enclosing a card for your convenience. All gifts are

tax deductible and Michigan residents paying state income tax can take advantage of exceptional deductions from their state tax. A card of explanation is enclosed for Michigan residents.

Amoco Oil Company interviewed students for two days last November. Interest in petroleum work among undergraduate majors and graduate students is high.

A new option on the Department's Earth Science M. S. degree is now available for students seeking to emphasize environmental geology. Several students have already enrolled in this program.

The Kalamazoo Mineralogical and Geological Society has approved a proposal to make available a scholarship for undergraduate geology majors planning on enrolling in a summer field course. Guidelines are being prepared and it is expected that the first recipient will be named for the summer of 1976. The Society holds its regular January meeting in the Department.

John Grace is spending the 1975-76 academic year at Cambridge in England studying solid-phase transformations and mechanisms in sulfide minerals. At the time of this writing John is preparing to leave England and return to the U.S. Rumor has it he has worn out his welcome by drinking the "tight little island" dry. After returning to the U.S., John will go on to the University of California at Riverside and resume his professional interests, and incidentally work on sulfide minerals. We have alerted all our friends in California that John is coming so they are busy buying-up all the beer they can.

Lloyd Schmaltz continues to shuffle papers as he handles the affairs of the department in addition to teaching Physical Geology and Geology of the National Parks and Monuments. Last April he conducted the 3rd raft trip with 30 students through the Grand Canyon. Tom Straw went along to ably help out and enjoy the splendor of the Canyon. After handling GSA activities, Lloyd will lead a 6 day trip in late May through the Canyon for the WMU Alumni and Development Office. Last summer he spent 3 weeks in Mexico and Guatemala with Oscar Horst and four students. Many interesting geologic areas were visited along with the ruins at Coban in Honduras. The recent great earthquake in Guatemala destroyed or severely damaged some of the villages that were visited. This event is another testament to the dynamic nature of the Earth as demonstrated by plate tectonics.

Bill Harrison has continued teaching Paleontology, Oceanography, and Marine Geology. Eugene Murray (grad student under Dr. Harrison) finished his thesis on Silurian trace fossils and had it approved.

In the summer Bill began a systematic collection of local pollen and spores for future paleoclimatic research in S.W. Michigan post-glacial deposits.

Linda and he attended the North-Central Geological Society of America meeting in Waterloo, Canada, in May and both presented papers. They also attended the A.A.P.G.-S.E.P.M. meeting in Dallas where Linda co-authored a paper on the Rio-Grande Delta. Their paper on Paleocology of a Silurian Molluscan Fauna was published in the Bulletins of American Paleontology. Quite a bit of time in the fall was spent preparing for the upcoming North-Central Sectional Meeting of the GSA.

Beyond his normal teaching duties, Caspar Cronk has been trying to improve the Geology Department's geophysics capabilities and has initiated some research projects with applications in southern Michigan. Course improvements in the Tectonics Seminar include the addition of a field trip

to the mid-western regional meeting of the American Geophysical Union. An additional hour of class (unofficial) has been added to Exploration Geophysics for supervised problem solving and laboratory experiments. (Exploration Geophysics is to become a required course for all Geology majors.)

Considerable effort has been devoted to writing a compatible set of programs for efficient and flexible reduction of field gravity data. Field projects include comparative studies on the gravity effects related to shallow or deeply buried reef structures. Other studies relate to the use of gravity measurements to delineate areas of gravel or of organic muck.

Information has been collected on high-resolution seismic techniques and a request for suitable seismic equipment has again been submitted to NSF. In addition, a trailer mounted seismic source for shear or compressional energy has been constructed. This was used in a physics master's project on shear wave generation and interpretation.

In September, 1974, Richard Passero attended Circum-Pacific Conference; the topic of the conference was Resources and Man plus field trips through Hawaiian Islands.

From September, 1974, through June, 1975, he did research on waste disposal systems with the San Francisco Bay Area Environment and Resources Project U.S.G.S., and attended various classes at Stanford University. He participated in field trips to the Geysers, San Andreas fault, and California coast areas.

Dick returned in fall 1975 to WMU from sabbatical leave to teach Environmental Geology. He is also compiling an environmental publication on Kalamazoo County, and is beginning environmental research on Kalamazoo County.

Ron Chase continued working on his study of the northeastern border zone of the Idaho batholith with NSF support. Specifically, he worked on reconnaissance mapping of the southern Sapphire Range, Montana, in the summer of 1974. He worked on rock and mineral preparations for isotopic age analysis of samples from the N.E. Idaho batholith and contact zone during the academic year. Ron spent June and July, 1975, at the University of Kansas doing the isotopic analyses with Steve Tripp. He field checked the analyses in August, 1975.

Besides these activities, Ron has kept busy serving as a graduate advisor and publishing two titles. He moved into the country and says he has spent some good moments at the Knollwood.

For much of the past year Tom Straw has been working with the problems of area-wide wastewater management and its effect on water supplies. This work dovetails nicely with the impact of soil erosion and sedimentation on water quality, an area in which he is currently interested. His work in southwestern Michigan is pointing up a number of problems in the interbasin transfer of water, sewage disposal for a dispersed population and wastewater treatment for lake communities. He hopes to begin a coordinated study of these problems within the next few months.

Bob Havira is in the middle of preparing for an exhibition of photographs to be shown with local sculptor, John Martell's work during the month of May in the Space Gallery, 2700 Knauss Hall at Western.

The Haviras will also spend a month in the British Isles during May and June resting, researching photography, and visiting friends.

Mike Jordan is filling in as sabbatical replacement for John Grace (who is at Cambridge). His teaching assignments include mineralogy, geochemistry, introductory geology and rocks and minerals. Mike's research interest is in hard-rock petrology, and tectonics and he is currently working on getting

finished with his Ph.D dissertation (from University of Texas at Austin) on Franciscan rocks in northern Coast Ranges of California.

Dave Kuenzi was on sabbatical leave at the University of Texas at Austin from August, 1974, until June, 1975, where he worked on in/progress Guatemalan research projects, attended classes, and participated in seven field trips which took him from Louisiana on the east to the classic Capitan "reef" complex of west Texas and New Mexico. Dave also was employed part-time by the Texas Bureau of Economic Geology as a Research Scientist. His work for the Bureau involved mapping of historical changes in Texas barrier island environments (Mustang and north Padre Islands) based on time sequential areal photography. This work, which is in press as part of a larger Bureau report on the geological aspects of barrier islands, provides basic data and interpretations which will aid in the preparation of environmental impact statements for the Texas coastal zone.

In November, 1974, Dave presented a paper (co-authored with Dick McGehee and Tom Robyn) at the Miami GSA meeting on the petrology of Guatemalan river and beach sands seaward from active volcanic highlands; and in April, 1975, he presented a paper (co-authored with Dick McGehee) at the Dallas AAPG meeting on Guatemalan foreshore textural gradients and processes. Dave and Dick McGehee spent two weeks in May in Guatemala finishing up work in progress and making arrangements for new work scheduled for 1977.

After teaching field geology in Montana for Indiana University during July and August, Dave returned to Kalamazoo for the fall semester to resume the teaching responsibility for terrigenous depositional systems, carbonate and evaporite depositional systems, sedimentary petrology, and earth history and evolution. In October he presented a paper (co-authored with Dick McGehee and Oscar Horst) at the GSA meeting in Salt Lake City on the effect of volcanic activity on fluvial-deltaic sedimentation. At the time of this writing, he is expecting the rough draft of Charley Cookman's thesis on the petrology of the Devonian Rockport Quarry Limestone.

Carol Gilbert continues to run the Department Office with great efficiency. She is ably assisted by Debbi Patterson, Kitty Finan, and Mari Harrington.

Carol abandoned her big city apartment to return to her native Schoolcraft 12 miles south of Kalamazoo. Here she lives in an old house in town where she is lovingly collecting and refinishing antique furniture.

GRADUATE STUDENTS

John Fowler is a first year graduate and received his B.S. degree in Geology from Michigan State. John's interests include sedimentary petrology and energy resources.

Warren French will be completing his M.A. in Earth Science this spring. Warren is presently teaching part-time at Southwestern Michigan College in Dowagiac.

Nate Fuller is a second year graduate student and is working on a thesis involving the micrite budget of a tropical lagoonal environment. Nate spent last summer in St. Croix collecting data for this thesis.

Dari Ghahremani graduated from Isfahan University in Iran and is beginning his second year as a graduate student. Dari's interests include paleontology and oceanography.

Randy Hutton received his B.S. degree in Earth Science from Western Michigan. Randy spent last winter term student teaching in Leeds, England. He is interested in teaching on a small college level.

Rob Kell spent last summer mapping the north-central border zone of the Idaho batholith. Rob's interests include igneous and metamorphic petrology and structural geology. He is completing his thesis work which involves unravelling the complexly deformed rocks along the border zone.

Norm Lovan plans to graduate at the end of this year's summer session. Norm's thesis work concerns the stratigraphy and mineralogy of glacial tills in southwestern Michigan.

Jeff Martin is a graduate from Grand Valley State College, Allendale, Michigan, with a B.S. degree in Geology. Jeff's interests include depositional systems, sedimentary petrology and petroleum geology.

Larry Mascotti is graduating with a M.A. in earth science this spring. Larry is interested in teaching at a junior college and is presently working at the Planetarium in Kalamazoo.

Valerie Naeve is a second year graduate student and is working on her thesis involving pollen stratigraphy and paleo-climatology around the Kalamazoo area. Val's interests include environmental outdoor education, oceanography and environmental geology.

Jean Shoquist is a part-time graduate student interested in igneous, metamorphic, and sedimentary petrology.

Jeff Spruit received his B.S. degree from Grand Valley State College, Allendale, Michigan. Jeff's interests include glacial geology and igneous petrology.

Hall Taylor is a first year graduate student and received his B.A. degree in geology from Lawrence University, Appleton, Wisconsin. Hall's interests are geophysics and petroleum geology.

Steve Tripp is a second-year graduate student and is completing his thesis involving Rb/Sr and U/Pb dating in the north-eastern border zone of the Idaho Batholith. Steve spent last summer using a mass spectrometer with Ron Chase at the University of Kansas at Lawrence.

GEOLOGY-EARTH SCIENCE CLUB-NEWS

This year's Geology Earth Science Club has encountered most of the typical situations that it has in the past and has used innovative as well as traditional means to handle them.

As the fall semester began, club members re-opened the morning donut stand, continuing a successful fund raising effort of last year. Members donated an hour of their time each week between eight and eleven o'clock and sold rolls in the lobby of Rood Hall to students and faculty. The donut sales were very popular among those attending early morning classes and netted the club about \$100.00 last semester. This has contributed significantly to the club's treasury.

The treasury, incidently, presented a sore spot to the club for several years. Arrangements with Western's accounting department were usually made through the Student Activities office to handle the funds. However, this system was very inefficient and it often required several days to weeks to make withdrawals. This year on advice of the new Director of Student Activities, GESC, as are many other student organizations, is depositing its money in a local bank which facilitates the book work and transfer of funds and gives the membership greater control of its own.

GESC's membership is from a department of a diligent breed of students and every so often it is difficult to coax them away from their private lives long enough to attend meetings. Different approaches have been taken to solve this problem.

In the fall semester regular meeting times were changed to an evening hour and set at once every three or four weeks. This solved the problem of conflict with class hours and the redundancy of weekly meetings. Also to induce attendance, movies from the school's film collection were shown through their organizational lending agreement.

Another method for moving the membership was to form ad hoc committees to solve specific problems as they arose. Such a committee reviewed a request to subscribe to several publications. Within a few days after the committee gathered the forms had been sent to the publishers of Geotimes, Scientific American, and the GSA Bulletin. These are now being sent and are available to read in the Geology department lounge. Presently several other committees are working on the details for a weekend trip to the caves of southern Indiana and designing pictures of interesting geologic subjects to be used as decoration around the department.

THIS 'n THAT

Larry and Margaret Goldman had their first child, Robert "Robby" Lawrence, in August, 1975 (a boy, as they predicted). Larry has been teaching high school earth science and geology. He also was working with curriculum development and, together, with a biology instructor, their students built a self-contained greenhouse heated with solar energy.

Bill Lauritsen has been substituting at Kalamazoo and Van Buren County Schools. He hopes to earn an earth science major and do advance work in geology after accepting a job (permanent). Bill is currently living in Portage, Michigan.

Dr. Ed Carlson is a research associate at Stanford University Medical School--Cardiology. He has been doing cardiovascular research (physiology), and is also still interested in Geology, Paleontology, and Oceanography. He did some traveling down to the Bajas and saw many interesting rock formations and lava flows.

Jim Sumner is head of the Geography Department at Montcalm Secondary School in London, Ontario, where he has been living.

Michael Wilson is teaching physical and earth science to junior high students. He started master's work in earth science education in Fall, 1975. Last summer Michael went backpacking in Colorado. He lives in Glen Ellyn, Illinois.

Eric Swanson has been a student and Research Assistant at the University of Texas and has been living in Austin. He hopes to receive a Ph.D. from the University of Texas this spring. Last August he married a student at the University of Texas (she is not in geology).

Burt Bordine was Director of the Gila Pueblo Campus of East Arizona College, but planned to return to fulltime teaching at middle Tennessee State University in the fall of 1975.

Audrey Judge has been teaching high school. She planned to go to South America and Galapagos Islands last September, 1975. She lives in Galesburg, Michigan.

Gloria Walters has been substitute teaching in the KVISD Districts, mainly Portage. Living in Kalamazoo, she hopes for a full time teaching position at the elementary level or related position.

Dan Purdom is living in Utica, MI, and working as an earth science teacher and coordinator for Utica Schools. He is active on committees of the Clinton River Watershed Council and has been coaching the 7th and 8th grade track teams. He is also pursuing a master's in geology/hydrology at Michigan State.

Raymond Abbey is living in Sanford, MI, and teaching earth science at Bullock Creek High School. He is interested in education administration. He was a graduate student at C.M.U. in Educational Administration.

Randy Kerhin has been a geologist with the Maryland Geological Survey and has been living in Baltimore. He has been a participating geologist in the Chesapeake Bay Earth Science Study (CBESS) and did research with ERTS-1 and SKYLAB remote sensing relative to Chesapeake Bay.

Everett Wirgau has been working as an Experimental Metallurgist in the Process Engineering Labs at Oldsmobile, Division of GMC in Lansing Michigan. He lives in Haslett, Michigan. He has been working at Olds for 12 years.

John Pinchock is living in Normal, Illinois. He attended Southern Illinois at Carbondale and is especially interested in mining and exploration of minerals or coal and geochemistry. He completed his thesis "Accessory Minerals of the Pilot Knob Iron Ore Mine, Iron County Southeast Missouri. At last news he was engaged to be married.

Bill Middleton is living in Houston, Texas and working as a geophysicist. He completed the Exploration Training Program on February 28, 1975, then transferred to Southern Region, Gulf Coast group, CSOC, May 3, 1975.

Dennis Gaulden is an earth science teacher at the Horace Mann Jr. High School in West Allis where he has been living. He has been developing an earth-space science course for adult education night school for Waukesha County Technical Institute for Winter, 1976, semester. The last we heard, he had a baby due in August, 1975.

Jim Moses is a curriculum writer/researcher in social studies. He is living in Saipan, Mariana Islands. He is especially interested in archeology and cultural anthropology of the Mariana Islands, and is also interested in pottery analysis.

Randy Bellinger is a geology librarian in charge of a 15,000 volume geology branch library serving the faculty and students in the geology department at Virginia Polytechnic Institute and State University. He is living in Blacksburg, Virginia.

Pam Evans is an earth science teacher at Central High School and sounds interested in going back to school to receive her masters in earth sciences (as soon as she raises the money).

Tom Hylland, living in Muskegon, is Vice President of Dobb, Truck and Crane, Inc. He is married and has two sons. He taught science for three years before going into his own business and is still very interested in science, particularly earth and ecological science.

Terry Crevia is living in Saginaw, Michigan. He is teaching earth science in a secondary school. He has been earning additional credits in geography and earth science classes.

Gary Niemeck is living in Kalamazoo. He is a member of the American Society of Planning Officials and Michigan Society of Planning Officials. He has been employed in the office of City Planning since September, 1970. From September, 1974, to April, 1975, he was acting Planning Director of the City of Kalamazoo.

Glenn Oliver is student teaching at Traverse City Junior High School and living in Harbor Springs, Michigan.

Mike Laufer is the Nursery Superintendent for the VanBuren Soil Conservation District Nursery. He is growing trees and shrub seedlings for re-forestation and other conservation purposes. He is living in Decatur, MI.

Bob Steckley has obtained a M.S. Degree in Geology from the University of Wisconsin-Milwaukee in 1970. He moved to Minneapolis where he went to work for the U.S. Bureau of Mines. In October of 1974, he transferred to the Bureau of Mines Intermountain Field Operations Center where he is doing mine and mill costing for the Bureau's Minerals Availability System (M.A.S.). M.A.S. is similar to the C.R.I.B. system of the U.S.G.S., differing in the fact that he does a financial analysis of all reserves and resources. Bob says he has done several relatively large resistivity surveys; and he also does shallow refractive seismic surveys with a single channel instrument.

George Grover had planned to finish and present his thesis in October, 1975, at the GSA National Meeting. He has been a full time G.T.A. teaching the sedimentary petrology lab. Over the summer he was a G.R.A. George was elected President of the Graduate Affairs Assembly, a committee to promote better communication between the graduate students themselves as well as between students and faculty. At last word, George was considering a Ph.D. He informs us that Rich Saunders married Patti Frelich and has been doing well down at southern Florida. Rich received a three thousand dollar research grant to do a sedimentological study of some Gulf of Mexico sediments for the Marine Sciences Department.

Ron Ace visited the department recently and expressed interest in returning to school as a graduate student. Currently he is serving as a Captain in the Air Force in New Hampshire.

Christmas greetings were received from Jim and Carol Peterson with Texaco and from Jim Bohlin in Massachusetts.

On April 14, 1975, we received a postcard from Tom Sherman wishing us greetings from Geneva. He was there with the Liberian Delegation to the U.N. Conference on the Law of the Sea. They discussed Marine Scientific research, sea-bed resources and pollution problems. And on December 1, 1974, we received another postcard from Liberia.

Tom tells us that Gene Shannon and Nate Richardson are at Syracuse University and Purdue respectively for Ph.D. programs in Geology.

Grace Stoll is now Mrs. Grace Durgin and living in Arcata, California.

Gene Murray is now working with Texaco in New Orleans where he is living in the Garden District. He will be returning in April to present a paper at the GSA meeting.

Name _____ Year Graduated and Degree _____

Address _____ Phone _____ Major _____

Current Position _____

Professional Interests _____

Other News _____

Return to: Dept. of Geology, Western Michigan Univ., Kalamazoo, MI 49008

