

MSU GEOSCIENCE NEWSLETTER SPRING 2017

The MSU Geoscience Department newsletter will be published once per semester in electronic format. It contains news of MSU Geoscience activities, what our current students and alumni are up to, descriptions of useful materials, potential job and internship opportunities, and reports of recent scientific discoveries and publications by your current and former MSU professors.

Sign up for the Newsletter by sending a request to be added to msugeoscience@gmail.com. The newsletter is currently edited by Dr. Collette. Please distribute this newsletter to anyone who might find it interesting!

GEOSCIENCE DEPARTMENT NEWS AND HAPPENINGS

The past few semesters in the Geoscience Department at MSU have been packed with newsworthy events, and not all have been positive. With the financial shortfall that the state is projecting, and with higher education taking the brunt of the cuts, Minot State University has been forced to make some position cuts, some reductions in funding, and a slight increase in student lab fees.

Assistant Professor Guy Hanley



Notably, the University has reduced one member of our faculty, and has let Guy Hanley's position expire. Guy has been employed by Minot State University for 17 years as our Museum Curator, and more recently as an Assistant Professor. He has published numerous papers on beetles, butterflies and other insects, and is a noted regional expert on invasive beetle species employed by the city of Minot each year to conduct census surveys of beetle populations to keep tabs on invasive and destructive species like the emerald ash borer. It will be sad to see Guy leave – please drop by his office before the end of the semester and tell him that he will be missed.

Guy, along with Smithsonian emeritus professor Dr. Robert Gordon, recently submitted a paper to the international entomological journal Insecta Mundi in which they revise the South American ladybird beetle genera Prodilis, Neaporia, Cephaloscymnus, Ponaria and add Succinctonotum as a new genus. 107 new species are described based on genitalic structures. This work provides а better understanding of the vast South American beetle fauna, and could provide new directions in biocontrol research as ladybird beetles are important plant pest predators.

Guy Has also finished imaging for the North American revision of the scarab beetle genus *Serica*, and is currently studying and imaging the entire fauna of aquatic and semi-aquatic beetle species of North Dakota. Guy also just submitted the final revisions to a paper that will be in press soon:

South American Coccinellidae (Coleoptera), Part XVII: systematic revision of Western Hemisphere Cephaloscymnini (Coccinellinae) with description of a cryptic new genus and species of *Coccidulini* (Coccinellinae).

New Faculty Member: Dr. Nathan Hopkins

Also notable is the acquisition this past year of Dr. Nathan Hopkins who has taken over the Geomorphology position vacated by Dr. Joseph Krieg. Dr. Hopkins comes to the Geoscience Department from Lehigh University where he graduated in 2016 after studying the application of magnetic till fabrics, or the applications of anisotropy of magnetic susceptibility to subglacial deformation of till and ice.



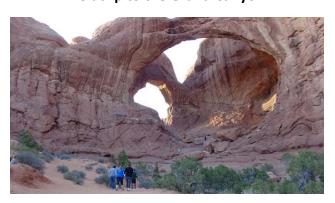
 ${\it Dr. Hopkins pausing during fieldwork in Argentina surveying rock glaciers.}$

Prior to his time at Lehigh, Dr. Hopkins attended the University of Missouri, where he received an M.S. in Geology in 2011. At Missouri, he studied interferometric synthetic aperture radar analysis of North American periglacial phenomena. You can read more about Dr. Hopkins research interests on his faculty webpage here/by/hopkins/ research interests on his faculty webpage here/by/hopkins/ research interests on

A New Look for the Geoscience Website

Beginning in late 2016, the Geosicence Department's website got a major revamp. News items are now prominently displayed at the bottom of the main index page, along with a rotating image gallery of Geology 290 Spring Break field trip photos. In addition to a major update to the faculty pages section (which had been static since the middle late Holocene), there is now a Student section, a section that gives students information and deadlines for various scholarship and grant opportunities, an interactive calendar, and information about A.U.G.I.T.E., the MSU Geology Club, as well as a link to their Facebook page. If you have news or events that you would like shared on the Geology Dept website, or if you know of, or would like to offer to provide additional funding or internships, please let us know and we'll take care of getting these added to the appropriate part of the new webpages. Send all requests to: msugeosciences@gmail.com.

2017 Spring Break GEOL 290 Regional Geology Fieldtrip to the Grand Canyon



GEOL 290 students hike into Arches National Park during the Spring Break 2017 fieldtrip.

The GEOL 290 Regional Geology class offered this spring took its field trip March 8-18. Dr. Webster and five students made the trip to the Colorado Plateau, Basin and Range, and Snake River Plain provinces. Notable stops along the way included the Powder River Basin, Flaming Gorge, Dinosaur National Monument, Arches National Park, Goosenecks State Park, Monument Valley, Grand Canyon National

Park, Zion National Park, Great Salt Lake, Shoshone Falls, and Craters of the Moon National Monument.

A highlight of the trip was a three-day, two-night backcountry hike into the Grand Canyon. We hiked down the South Kaibab Trail to camp at the Bright Angel Campground along (near) the Colorado River, near Phantom Ranch.



GEOL 290 students at Goosenecks State Park in Utah, overlooking a deep meander of the San Juan River below during the 2017 Spring Break fieldtrip.

The second day involved a hike part way up the Bright Angel Trail to camp at Indian Gardens. The third day was the hike out, going the rest of the way up the Bright Angel Trail. In all, the hike was a little more than 16 miles. I think everyone would agree that it was a challenging but very rewarding experience. Throughout the trip, we had great weather – above average temperatures throughout (at least once we got away from North Dakota). We also saw evidence of snowmelt from a good snowpack in the mountains – something that has been much needed out west.



GEOL 290 Students expressing their Beaver Pride just as they entered Beaver City, Utah during the 2017 fieldtrip.

2016 Spring Break GEOL 290 Regional Geology Fieldtrip to Southern California

Southern California is an incredibly active place from a geological perspective. The Pacific Rise (the Pacific Ocean's spreading center) runs through the Gulf of California and the Salton Trough, generating crustal extension, faulting and a pull-apart basin with some hot rocks very close to the surface. A bit further to the north, along much of the coast of California, the Pacific Rise has collided with, and been subducted beneath the North American Plate, creating a transform boundary and a series of (mostly) right-lateral strike-slip faults, including the renounded San Andreas fault. Prior to and in conjunction with this series of events, California has been involved in accretionary events, orogenies, and erosion due to



A photo that was taken in the lava tubes in the Mojave National Preserve during the GEOL 290 2016 Spring Break fieldtrip.

sea level change associated with recent ice-age glaciations; it has been the site of shallow seafloors that are now tall mountains. California is home to a myriad of microclimates controlled in some instances by water vapor that never precipitates, and surreal desert landscapes that persist for geological time, but are incredibly fragile at the same time.



GEOL 290 students overlooking the floor of the Mojave in Anza Borrego at the Wind Caves, 2016 Spring Break fieldtrip.

The route we took allowed students to see coastal tidepools and sedimentary rocks of the Torrey Fm in and around San Diego, to visit Anza Borrego — the largest state park in the contiguous US, the Salton Sea and trough, Joshua Tree National Park, collect trilobites in the Mojave Desert, crawl through lava tubes, and see the spectacle that is Death Valley.



Dante's View overlooking Badwater Basin a mile below in Death Valley, 2016 GEOL 290 fieldtrip

2018 GEOL 290 Regional Geology Possible Fieldtrip Locality

Dr. Hopkins may be leading the 2018 Regional Geology Spring Break fieldtrip on a tour of the geological points of interest of the southern Appalachian region. GEOL 290 is in the very early planning stages at this point as it is a year off, but the early, tentative plan is for a trip to explore the regional geology of the southern Appalachian region. Stay tuned for more information as it becomes available.

New ONLINE Course: GEOL 127 – Environmental Earth Systems

The Geoscience Department's first ever online course offering (and indeed, the University's first as well) will go live this Fall semester 2017. This 4 credit course is geared specifically to the University's exclusively online degree-seekers, and is a lab-based science course.

The course is an introduction to Earth Science with an emphasis on people's connections to environmental issues. Earth science is covered within an Earth systems framework with an emphasis on interactions, how the various Earth systems interact with one another. It also deals with how Earth interacts with people, including how Earth affects people (resources, hazards), and how people affect Earth in both positive and negative ways. An underlying concept in this course is stewardship: How people can live with Earth responsibly, working toward a sustainable future. If this course model proves successful, it might open the door to other online lab-based science courses at MSU.

FACULTY NEWS AND HAPPENINGS

Dr. Joseph Collette



Dr. Collette pointing to MSU's initials that GEOL 290 students assembled in the crater of Amboy volcano - an extinct cinder cone in the Mojave Desert along old Route 66.

I'm just getting to the end of my third year here at MSU – and it's been a busy time. We just bought a

house in town this past year, and I continue to be active in outreach to local schools. I just visited the 10^{th} grade science classes at Nedrose High School, just down the road from Minot to talk about radioactive decay processes and what these can be used for. I had a great time, met some really great students, and had some really insightful questions asked by students.

Research.—I've been busy working on several evolutionary biological projects, including descriptions of strange new arthropods from Antarctica and Poland, with colleagues from the University of Wisconsin and Vanderbilt; continuing a large-scale revision of another strange arthropod group along with colleagues at the Natural History Museum in London and the Denver Museum of Nature and Science. I've been working with a really great group of students on varied paleo-related research projects as well:

Tessa Cammel is working on a trilobite that could be a new species, and is currently doing geometric morphometrics to try to determine its relatedness to other, similar species.

Ana Swor is attempting to use continental gradients in a nearshore intertidal continental setting to infer something about selection pressures that may have led to the very first animals crawling ashore during the Cambrian, some 500 million years ago.

Calob Werre is working on a study using geometric morphometrics to attempt to quantify the intra- and interspecific variation that may be confounding the systematics of several genera of Cambrian-age saukiid trilobites from Laurentia.

Emily Schaefer is a graduate student in the M.S.Ed. Program who is working with me on a large surface of 500 million year-old stranded jellies that occur on an intensely bioturbated sandy surface. Emily is interested to know if the jellies may have been a food resource that was being used by animals inhabiting this nearshore environment, or if the animals present were eating something else entirely.

On the personal research front, I've finally found significant enough time to get some journal articles out the door. I've just had a paper accepted for publication in the Journal of Paleontology:

 Collette JH, Isbell, JL, and Miller MF. In Press. A unique winged euthycarcinoid from the Permian of Antarctica;

...and I will be submitting a second paper within the next couple of weeks, along with coauthors in Poland and at the Czech Geological Survey to the British journal Palaeontology:

 Broda K, Collette JH, and Budil, P. In Prep. Phyllocarid crustaceans from the Upper Devonian of the Kowala Quarry (Holy Cross Mountains, central Poland) and their palaeobiogeographical significance.

Dr. Nathan Hopkins



Dr. Hopkins collecting sediments from the base of Matanuska glacier (Chugach range, Southern Alaska).

Settling in to my role as the new assistant professor has been a fun and educational experience. In many ways, Minot and Minot State University differ from my experiences in education and geology in Missouri and eastern Pennsylvania. However, I welcome these changes, and thoroughly enjoy the hardworking character of our geoscience majors. As this is my first academic year in the department, my primary goals were to hit the ground running and to keep my feet under me. I think I succeeded. So far, I have had the pleasure to teach Physical Geology, Soils, and Introduction to Geographic Information Systems (GIS), and I am looking forward next fall to teach Geomorphology. Field trips are essential components of the coursework in surficial geology, and the local area abounds with valuable exposures and landscapes relevant to soils and geomorphology.

My research program is off to a great start. I am continuing research on the processes of subglacial deformation and sediment transport. Along with collaborators from Lehigh University, I conducted field work and sampling at the Matanuska glacier, Alaska, in February of this year. Samples we collected will be analyzed at the Institute for Rock Magnetism (IRM) at the University of Minnesota, and yield information regarding how ice-sediment mixtures at the base of glaciers deform and contribute to glacier motion. In addition, I have developed a collaborative project with researchers at Stockholm University to reconstruct the ice flow patterns of the ancient Fennoscandian Ice Sheet in the Swedish mountains. Preliminary fieldwork will start this summer, with a return trip slated for the following year.

Lastly, the local geology of North Dakota provides numerous avenues for research ideal for training undergraduates in the principles and practices of geomorphological research. I have engaged two undergraduate students in exploring the local geomorphology and glacial history of the Minot area. Chandler Jacob has initiated a project to use recently-produced state-wide LiDAR elevation data to evaluate mass wasting and stream channel interactions in the coulees of the Souris river basin. Haley Hannah seeks to use the same dataset to map the glacial geomorphology of the eastern margin of the Souris basin to inform paleoglaciological reconstructions. We eagerly await results!

Dr. Kati Kilroy

Greetings to all of you who read this far. I hope you are well and leading productive lives. This is my 9th year at MSU. I seem to be picking up more 100-level classes, which frees me a bit to work on other things, but it is amazing how fast those "other things" take over my time and interest. I am working to produce an online, 100-level class with a lab that will be an alternative to Physical Geology for non-majors called Water Planet. Right now, I am working on getting the required signatures for this class. I am reworking some of my lectures and assignments in Hydrogeology to concentrate a little more on "how to do the math" than just how to do hydrology. The focus is just a gnat's eyelash broader than what we have done in the past and seems more in-line with current student needs.



Dr. Kilroy on Arran Island in Scotland during one of her summer adventures.

I continue to work on characterization of local aquifers. In the fall I worked with students Shane Miller (math) and Tawie Machiva (chemistry) on causes of low oxygen in the Souris River during winter months. We identified places where we could access the river easily even in snow, collected water and sediment samples, and rounded up equipment. In particular, we think that H2S gas associated with methane is having a negative effect on Oxygen levels in the river. Momentum for the project stumbled when Tawie left Minot State in January and Shane

drifted off in other directions. We will try to get back in the game next fall.

Leif Larson has recently shown interest in characterizing faults that cross the Missouri Coteau. These faults do not outcrop on the surface, making them difficult to find. We think the faults occurred after deposition of the Fort Union Formation (which has coal in it) and movement ended before deposition of glacial till. Leif will be looking at the depth to coal layers recorded in ND State Drillers logs and plotting them in GIS. Offsets in the coal depths along linear features will be good indicators of faulting.

On a more personal note, I biked in East Anglia, U.K. this past summer and visited the spectacular Sedgewick Geology museum in Cambridge. I also visited Flag Fen near Peterborough, U.K., a 3,500year old Bronze Age religious site that was also spectacular. We are selling my father's house in Virginia after a careless tenant put fresh ashes in a plastic bucket next to the back wall and nearly burned the place down. Luckily, the neighbors woke the woman sleeping in the house, rescued her 3dogs, and we had fire insurance on the place. The house is back in good shape now and on the market. I am planning a week-long bike ride from Washington D.C to Pittsburgh along the Great Allegheny Passage bike trail in June. In July, I plan to head to the Netherlands for a bit more biking.

Dr. John Webster



Dr. Webster pauses during a back-country hike on the Tonto Trail in the Grand Canyon circa 2007.

Research.—As it has been for a number of years, my research over the past year has been focused on late Eocene sandstones of the tri-state area of southwestern North Dakota, northwestern South Dakota, and southeastern Montana. Six students have completed their research projects under my direction (five undergraduate, one graduate), and one more is nearing completion.

Work on the Medicine Pole Hills locality continued with completion of the thesis research of Aaron Klingbeil for his MAT-Science degree. Aaron has successfully defended and completed his final draft of his thesis. Also, a detailed study of a second new Medicine Pole Hills sample is being carried out as a GEOL 305-310 class project; we are studying six different size fractions to better understand effects of grain size on heavy mineral abundances.

I also continued heavy mineral work with undergraduate students along two lines: (1) heavy mineral analysis of additional grain sizes from samples previously studied (Rattlesnake Butte and Square Butte); and (2) expanding heavy mineral research to new localities (White Butte and Whetstone Butte). Over the past year, five undergraduate students completed their research and presented their results in Seminar. Last spring, Sauvik Chakraborty (Square Butte), Ryan Curzon (Hettinger County White Butte), Tyias Huck (Long Pine Hills), and Paul Vogelsang (Whetstone Butte) completed their heavy mineral research projects. Last fall, Courtney Crites completed a study of the Rattlesnake Butte sample.

Currently, I am working with Mandy Olson on a study of the lithology of pebbles from late Eocene sandstone exposed at Square Butte. In addition to classifying pebbles into lithologic types, Mandy has carried out whole-rock chemical analysis of volcanic pebbles. The data generated are being compared with similar work done on pebbles from the Medicine Pole Hills and Rattlesnake Butte, and with igneous rock compositions from potential source areas. Mandy will complete her study and report her results this semester in Seminar.

I have also started new heavy mineral work in a collaboration with Dr. Clint Boyd of the North Dakota Geological Survey (paleontologist). I have nearly completed an analysis of a sample that was thought to (perhaps) be equivalent to the Medicine Pole Hills sandstone. Results are showing it is rather different than the Medicine Pole Hills sandstone in terms of heavy minerals. I also received five samples from the Brule Formation for analysis. Work on these samples is just getting started. I hope to make a lot of progress on this work during the coming summer. This would be a good project for involvement of a student, or multiple students.

Other Things.—I am nearing (I hope) work with the group that is preparing for our next accreditation visit from the Higher Learning Commission. I have been leading an excellent group of people working on Criterion 3 Teaching and Learning, one of five criteria that must be addressed. The HLC visit is set for next fall semester.

STUDENT NEWS AND HAPPENINGS

Chandler Jacob Lands an Internship at Falkirk Coal Mine



Congratulations to Chandler Jacob — he has just received a paid summer internship at the Falkirk coal mine just down the road from Minot in Underwood,

ND! Chandler is currently a junior in the Geoscience BA program at MSU. Chandler will be responsible for:

- Supervising contractors on the drill rig
- Installing ground water monitoring wells for the ground water monitoring programs
- Collecting data from these monitoring wells
- Taking core samples and hole drilling logs
- General collar surveys for the top of drill holes
- Mapping using the AutoCAD program
- Using the Carlson Mining software to build geologic models and build mine plans
- Update and maintain drill data, daily mining budgets, and the geologic data base using Microsoft Excel

2017 Graduating Seniors



Cortney Crites in the field during her fieldcamp over summer 2016.

Cortney Crites.—"I have just moved to Atlanta where I am volunteering at the South Atlantic Water Center. I plan on continuing volunteer work at the SAWC until I can gain employment. I have job prospects (and are currently interviewing) for Hydrology technician jobs in Paradise Valley in Nevada, New

Meadows in Idaho, and Big Horn National Forest in Northern Wyoming. I am also in the process of interviewing for an Environmental/Industrial Hygiene Consulting firm in Oakland, California."

Mandy Olsen.—"I've applied to places like Braun Intertec Inc, Hess, and Baker Hughes for positions such as material testing, project assistants, and field techs in both construction and oil fields. I'm very open to trying different things so that's why I've applied for different jobs that have you either in the office or in the field. Ideally I'd like to have a job that's 65% field work and 35% office work but beggars can't be choosers. I think it's important to test the waters of all options so you find what you really enjoy. I'm hoping to find a job based out of Minot so I can be home every night. Doing what I love is important but family is even more important to me."



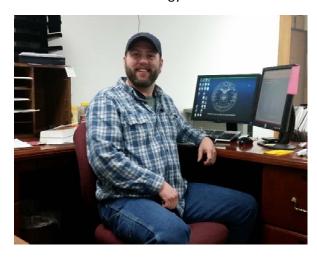
Mandy at Goosenecks State Park in Utah on the 2017 GEOL 290 fieldtrip.

Grayson McCreary.—Grayson will graduate in Fall 2017 after taking that one last class!

ALUMNI NEWS AND HAPPENINGS

Thomas Filkins - '15

Environmental Field Scientist Earth Resources Technology



Thomas Filkins hard at work. There's no classified information on those computer screens, is there Tom?

"I am currently working on Minot AFB as an environmental field scientist with <u>Earth Resources</u> <u>Technology</u>. I collect and analyze data from air emission measurements, soil and water samples to curtail the influence of military operations on the environment. I also perform research, do audits, and investigate potential violations, to develop processes and plans to further reduce the amount of damage to the local environmental. We also provide oversight of any hazardous materials accumulation points and central location through the preparation of waste generation documents and reports, facility inspections and waste characterization.

The obvious reduction of environmental and Earth Science funding with the current administration has cast a shadow over the prospects of increasing the number of jobs available. Although with oil and minerals on the upswing, opportunities should start to be seen throughout the fracking shale fields and mining operations. A bachelors-level degree appears to have become the new norm across the field of geology, so having a combination of experience and graduate level work allows one to stand out in the candidate pool.

Networking and internships are two of the most important aspects in the search for gainful employment. Internships provide the basic experience employers are looking for in new graduates. If a summer internship will fit in your budget, there are a number of geoscience-specific associations that advertise yearly. Keep in contact with your classmates after graduation, meet new people at any scientific conventions or meetings that you are able to attend. My experience in North Dakota has shown me that the majority of available work has been of a geotechnical or oil and gas related nature."

MSU Geoscience Alums - KEEP IN TOUCH!

We are making a concerted effort to keep in touch with our Geoscience Department alumni, and to build and maintain a master alum email contact list. If you know folks that have not received this newsletter who are MSU Geoscience alums, please ask them to submit their current email address to msugeosciences@gmail.com.

Likewise, if you wish to continue receiving this newsletter once per semester, please make sure you send an update (and long-term stable) email address to msugeosciences@gmail.com with any email address changes that you may have.

If you would like to submit a piece for inclusion in the Alumni News and Happenings section of the newsletter, please write up a few paragraphs about where you are currently living, where you work, the kinds of work you are doing, and a photo of yourself (preferably in the field or lab) at work.

Also, if you would like to perhaps come in to MSU and give a talk to our current students about how you went about getting a job in geology, what you do in your current job, and some suggestions that might be helpful to people about to enter the workplace, we would love to host you! Please send an email to msugeosciences@gmail.com.

A.U.G.I.T.E. NEWS AND HAPPENINGS

Mandy Olsen – President

Jordan Torgunrud – Vice President

Ana Swor – Treasurer

Haley Hanna – Secretary

A.U.G.I.T.E.—The **A**ssociation of **U**ndergraduate **G**eologists in Industry, **T**echnology, and **E**ducation is the Minot State University Geology Club. It is an active University entity that sponsors geology-related fieldtrips outreach events, and brings in occasional speakers from geological industry to discuss issues that graduating students might soon face when entering the professional geological workplace.



A.U.G.I.T.E. members in costume in the MSU dome.

During the 2016-2017 school year, MSU A.U.G.I.T.E. has been busy! Over the course of the two semesters, the club has participated in a number of outreach activities, including the Club Fair, Homecoming Block Party, Halloween, and the Science Open House. The Club Fair was an

informational session designed to recruit new students and inform them of the endless possibilities for campus social life. The Homecoming Block Party was just as it sound - a block party open to the community, filled with fun and games for all ages! Similarly, Halloween was more fun and games open to the community – this year, A.U.G.I.T.E. was a blast from the past, with volcanoes and the Tyrannosaurus rex handing out candy and dancing with children. The Science Open House was geared more towards encouraging middle school age children to pursue the sciences - demonstrations were hosted by a variety of groups. A.U.G.I.T.E., in true geology fashion, presented minerals, fossils, and hydrology activities. The club looks forward to participating in future outreach events.

In the fall, the club hosted Dr. Johanna Blake of the United States Geological Survey. Dr. Blake presented on "Water Quality related to Mining Legacy and Oil and Gas Development." The focus of her talk was mining and the oil and gas industry, and the related water effects. Career opportunities and inspirational discussion were also included.

The club also sponsored the annual geology field trip held over spring break. This year, A.U.G.I.T.E. helped send five students to the Powder River Basin, Dinosaur National Monument, Arches National Park, and The Grand Canyon! This trip, while designed to educate the students participating in the Regional Geology Course, also provides hands-on experience in the field and an exciting adventure with fellow aspiring geologists.

MSU A.U.G.I.T.E. is excited to welcome new recruits in the 2017-2018 academic year and all of the events to come! If you would like more information on the club, please see the A.U.G.I.T.E. link from the MSU Geoscience website.

—Jordan Torgunrud

SIGN UP FOR THE MSU GEOSCIENCES NEWSLETTER

If you are not receiving the MSU Geosciences Newsletter and want to, you can sign up by sending an email request to: msugeosciences@gmail.com.

We are always looking for news and information on alumni and what you are all doing now. If you would like to share some of your experiences, news, events, information, current or upcoming internships, or other information you think is interesting, please send a 2-3 paragraph write up about your news item to msugeosciences@gmail.com and I will add it to the next newsletter scheduled for Fall semester 2017.

If you know someone who is not receiving this newsletter who should, please feel free to share your copy, or to shoot us an email suggesting we add someone to our mailing list!

HELP!

We're looking for email addresses for the following Geoscience people – if you know them, please ask them to contact us and give us their new contact info so we can send them the Newsletter!

Awalt, Brody; Blacklock, Sara; Brandiezs, Bryan; Christensen, Allison; Collins, David; Dahl, Cordell; Evans, Colleen; Feist, Susan; Fogarty, Heather; Graves, Adam; Hodenfield, Cody; Hoff, Ryan; Hughes, Jean; Jacobson, Todd; Kight, Roy; Larsen, Jennifer; Longtin, Max; Marchand, Arin; McLeod, Jesse; Mohr, Brett; Pitt, Patrick; Ronning-Schemetz, Kathleen; Sande, Brent; Stover, Monica; Vachal, Lynnette; Warner, Colleen; Webb, Tina; Webb, Tina; Weidler, Jordan; Whitlow, Tim; Wiebe, Joseph.

LOOK FOR OUR NEXT NEWSLETTER IN FALL 2017!