Welcome to the First St. Norbert Geology Newsletter:

Welcome to the very first St. Norbert College Geology newsletter! The function of this newsletter is to keep our alumni, parents of alumni, and other friends of the department updated with the latest. We are also hoping that the newsletter becomes ever more interactive (see page 4 for a note on how you can contribute!). We would like to do this newsletter once a year around wintertime so keep your eyes open next year! Also, if you know of anyone who would like a copy of this newsletter, please email one of us so we can make sure to get them on our mailing list!

With all of the exciting things happening on campus in general, we thought we would take a moment to update you on some of the fabulous things happening on the fourth floor of JMS. First, we have a new geology faculty member who joined us last year who may already be familiar to some of you – Rebecca (Schmeisser) McKean. Second, we are instituting a brand new course for Geology majors this spring, titled “Advanced General Geology”, which will be a 2 credit course team-taught by all 3 geology faculty. The course will cover general topics that we feel are crucial for our majors to have before they graduate from here, including how to get into graduate school, basic field geology techniques, how to keep a field book, the geologic time scale, and how to interview for jobs. We are all very much looking forward to the course and are hoping it will become a regular fixture for our majors. Finally, we have also established our first alumni board. The alumni board will provide critical advice to us on the condition of our department and will help us get better (our primary goal)! We are also hearing word that the renovation of our science building is on the horizon, a project which is sorely needed and will be a huge benefit to all of us here in JMS.

Thank you for your continued support of the geology program. We hope you enjoy this newsletter and we invite you to email us or to stop by and say hi!

A Brief History of the Geology Program at St. Norbert College:

The completion of this academic year marks a quarter century of geology at SNC. The first geology courses (Introductory Geology-4 students and World Resources-6 students) were taught in the Fall of 1987. The courses and the lab were taught in the same classroom, JMS 318. We did not have many specimens way back then (i.e. the lab was not cluttered) but we did, and still do, have the big-old-red-wooden table. Our first geology "major-oids" graduated just three years after this humble beginning. They are considered “major-oids" rather than majors because they graduated with a Natural Science Degree-Emphasis Geology. Our first class of official geology majors was 1995, coincident with the second tenure-track hire in geology. Since 1995, we have graduated 43 geology majors (about 3 per year) and 15 geology minors. As for faculty, Tim Flood was that lonely professor back in 1987. Nelson Ham signed on in 1995 and Becky (Schmeisser) McKean - SNC ’04 - joined us as the third tenure-track faculty in geology in 2010. As you know, field geology and hence field trips have been a focus of our program since the beginning. We have successfully offered our Natural History Field Course 21 of our 24 years (see page 2). This year Becky is leading the course for the first time. We are destined for the Grand Canyon in May. Next year, if we can find some support for the students, we hope to do a winter break trip to New Zealand. So geologic time continues at SNC and we predict no extinction for the foreseeable future.
St. Norbert Geology Field Trips – Changing Students’ Perspectives Year After Year!

As many of you are aware, St. Norbert Geology has a long history of running field trips. In the field, students see things that they have previously only talked about in a classroom setting, a truly eye-opening experience. Students are also taught field techniques and are given the chance to interpret rocks. For longer trips, they also receive course credit. While many short field trips have taken place within the state of Wisconsin, faculty have taken students to a variety of other places over the years.

To the right you can see a map of all of the field trips run by geology faculty at St. Norbert since the beginning of our program. A total of 21 trips have been run outside of the state of Wisconsin, including 9 international trips to Costa Rica, Belize, and the Galapagos Islands. 12 trips within the United States have been offered to places like Death Valley in California, the Hawaiian islands, the Florida Keys and the southern Appalachian mountains, and Big Bend in Texas.

Field trips are an invaluable experience for our geology majors and minors and are a tradition that this department will continue. In fact, this May (directly following graduation), faculty will be leading a trip to northern Arizona to examine the Grand Canyon, the Sedona red rocks, and the San Francisco volcanic field. The following winter break (2012-2013), faculty are planning to run their tenth international trip, to New Zealand.

Updates from the Geology Faculty:

Tim Flood

As I write this note, I am aware of four clocks perched on a bookshelf in front of me. They are small gilded clocks frozen in time because I have not replaced the batteries. I received the first clock for five years of service to the College and the remaining three for subsequent time of service. This spring I will collect my fifth clock (25 years at SNC). I think I might buy some batteries, but we shall see.

What am I up to? Well, as a first confession, my efficiency must be decreasing because it seems as if I get busier and busier each year. My research agenda continues to focus on the geochemistry of igneous rocks. I had the good fortune to spend most of the month of January in Antarctica (see SNC geology web page) with one of our alums (Kathy Licht, SNC ‘92) who was the NSF principal investigator on the project, and with one of our undergrads (Nicole Bader, SNC ‘11). It was a chilling and fabulous experience and we are still working on the data we collected. Hopefully, several publications will be forthcoming in the next couple of years. ...continued on the next page...
...Tim Flood, continued from the previous page

I continue working with students on projects. This year I am working with one of our senior geology majors (Billy Fisher, SNC '12) on the origin of some mega-hornblende crystals from the Wausau Syenite. Some are the size of a shoebox! We received a student-faculty research grant from the College and will spend some time at UW-Madison after Christmas using their microprobe. We are looking at chemical zoning and origin of the crystals. I am also working on some pedagogical/teaching scholarship. Dr. Scott Kirst (SNC Science Education) and I are waiting to hear on an NSF grant we submitted on developing a new paradigm/course for education majors that would essentially integrate his science methods course with our intro-geology course. We should hear soon.

I am still teaching Mineralogy, Petrology and Structural Geology along with Intro-Geology but have not taught World Resources or Field Methods in a while. I serve on a few College-wide committees and am still delighted to be back in the classroom rather than in administration (Chair of Natural Sciences, ‘97-’02).

On the home front, Sally and I have been married for almost 10 years now and have two wonderful boys, Connor 8 and Ryan 7. Given their ages and mine, my retirement has been put off a bit, probably until the next advance of an ice sheet through Wisconsin. All in all, life is good. Please feel free to check in with us now and again. We would love to hear from you.

Rebecca (Schmeisser) McKean

Although I am the newest member of the faculty (I am in my second year), I am no stranger to the SNC Geology program. I graduated from here in 2004 and am absolutely thrilled to be back! After St. Norbert, I headed out to Flagstaff to pursue my passion for paleontology at Northern Arizona University, finishing my master’s degree in 2006. Next, I moved to Lincoln, Nebraska to study the world famous Nebraska Sand Hills – the largest sand sea in the western hemisphere. I earned my doctorate from the University of Nebraska in 2009. From there, I spent a year teaching at a community college in Minneapolis before starting my current position. At St. Norbert, I teach Intro Geology, Oceanography, and Sedimentology/Stratigraphy. I will eventually add Historical Geology and a paleo course in the future.

My research covers both paleontology and sedimentology, because I love plesiosaurs, but I’m also fascinated by the environments they are preserved in. Recently, I published a paper in Cretaceous Research describing a new species of short-neck plesiosaur (*Dolichorhynchops tropicensis*). My big research agenda at the moment is focused on hashing out the taphonomy (burial history) of large marine vertebrates (sharks, plesiosaurs, and mosasaurs) from the Cretaceous. It’s ridiculously exciting figuring out how these animals were preserved! I am also still actively studying sand dunes. Nelson and I just finished working with a student (Sarah Day, ‘11) on some sand dunes from northern Wisconsin (see page 5).

On a personal note, I married a fellow SNC alum, Colin McKean ('05) this summer! We got married at Old St. Joe’s church right here on campus. I would love to hear from any alums, so please keep in touch!
Nelson Ham

It has been great to see many of you the past few years at GSA meetings, and it’s great to hear from you via email and phone calls. Believe it or not this is my 17th year at SNC. I am still regularly teaching Geomorphology, Glacial Geology, Hydrogeology, and Environmental Science in addition to Introductory Geology. In addition, I have become actively involved in our Honors Program, which is being completely revised.

After quite a few summers co-directing a summer REU at the Matanuska Glacier in Alaska, I have been spending the past few summers back home in Wisconsin. The last couple of years have been spent finishing up a project for a new segment of the Ice Age Trail in Rock County for the National Park Service, and publishing a couple of papers on the glacial landscapes of Wisconsin with colleagues from a number of institutions. Now I have started working with LIDAR to re-interpret the glacial landforms of Brown, Oconto, and Lincoln Counties. LIDAR has started to reveal landforms never seen previously with traditional topographic maps and aerial photography. Lauren Hoffman, a senior geology major, is working on a senior thesis interpreting the origin of moraines in Brown County using LIDAR. I also have ‘started’ working on a book on basic stream hydrology....very slowly. And I’m hoping to have a student begin working next summer on a project looking at the relationship of watershed geology on stream-temperature gradients. The Wisconsin DNR recently published a detailed study forecasting how climate change might impact stream temperatures in Wisconsin, and they are now especially interested in understanding the more subtle influences of watershed geology on temperatures in different climate change scenarios.

The most exciting news has happened on the home front...my wife Staci and I adopted a little girl from Ethiopia 2 ½ years ago. Her name is Zinash, and she is doing great! We are also expecting another new little addition this coming spring. We couldn’t be more blessed and thankful. Please send a note whenever you get a chance! I hope all of you are happy and doing well.

Awards:

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<th>Award</th>
<th>2009-10</th>
<th>2010-11</th>
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<tr>
<td>Academic Achievement Award</td>
<td>Kiernan Folz-Donahue</td>
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<td>Outstanding Field Geologist</td>
<td>Cait Randerson</td>
<td>Nicole Bader/Melissa Patz</td>
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<td>ROX Award</td>
<td>Carli Arendt</td>
<td>Lauren Hoffman</td>
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Request for Alumni News:

We want to hear from YOU! If you have a funny, serious, or insightful story about your time as a geology major at St. Norbert College, we would love to hear it! We are considering publishing some stories in our next newsletter, and we know there are plenty of great memories to go around!

We would also love to hear what you’ve been up to since you left St. Norbert. Please drop us a line to let us know how you’ve been and consider giving us some news that you wouldn’t mind sharing with other friends of the Geology department!

Please send all stories and news to rebecca.mckean@snc.edu. We’re looking forward to hearing from you!
SNC Geology at the South Pole!  
(photographer: Tim Flood)

For all updates and departmental news, follow us on our website:  
www.snc.edu/geology

SNC Alum Sarah Day ('11) augers into a Wisconsin dune as part of her senior thesis project that she conducted with Nelson and Becky  
(photographer: Becky McKean)

Sed/Strat field trip on a cold April day. From left - Chelsea Potier ('11), Nicole Bader ('11), Lauren Hoffman ('12), Jordan Baker ('12), Zach Osborne ('14).  
(photographer: Becky McKean)

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