



THE BUFFALO ROCK

The newsletter of the
Department of Geosciences,
North Dakota State University

“The Typical Geology Prof”

Volume 11, January 2007

Dear Graduates and Friends of NDSU Geosciences,

It's been 25 years since the Department published a newsletter. In 1972, John Brophy launched the *“The Buffalo Rock.”* Each of its 10 editions rolled off of the Stevens Hall stencil machine. The last issue appeared in 1982, the year that John retired. The cover of that issue, like the others, was graced by *“The Typical Geology Prof”* – a pencil drawing that mysteriously appeared unsigned one day on the bulletin board outside of John's office.

Obviously, a lot has happened over these past 25 years. We'll now *start* to catch you up on the news. Plus, we thought it would be interesting to include in each issue an article outlining some aspect of the history of the Geology and Geography programs here at NDSU. This issue, for example, features a story on the unfortunate closure of the Geology program in 1954 – the effects of which affected many of you for years later as graduates.

One thing, however, has remained the same over all of these years: NDSU remains a great place to study Geology. We continue to graduate excellent young geologists who go on to become excellent professionals. And we're especially appreciative of the news and support we receive from our many GeoAlumni, in whom we, as faculty, feel special closeness and pride.

The departmental web site (www.ndsu.edu/geosci) remains the primary place for news of the department and its alumni. Many of you have e-mailed in your news and photos. We are especially seeking to post photographs from some of the earlier field trips (1970's and earlier). Our individual e-mail addresses are on the web site, or you can simply send e-mail to ndsu.geosciences@ndsu.edu.

Don Schwert, Editor

NEWS FROM OUR PAST FACULTY

THE BROPHYS (PROFESSOR & SPOUSE EMERITI, NDSU APPOINTMENT: 1959 - 1982)

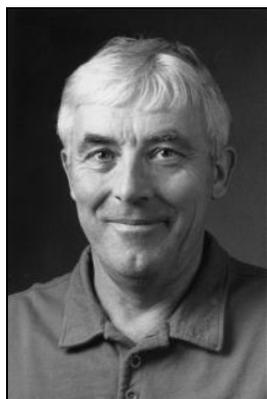


We are still plugging along, enjoying this fine little community of Corvallis and taking occasional short trips, mainly over to our lovely Oregon coast. We've had some health problems, but nothing that stops us from the activities we enjoy such as gardening, hiking, and biking. A recent high point was our adoption of two toy poodles from Senior Dog Rescue. They have made some delightful changes in our lives. This photo was taken a couple of years ago on board a small cruise ship (the "Spirit of Discovery") during our 50th anniversary trip up the inside passage to Alaska. The calving glacier in the background is the South Sawyer.

John & Peggy Brophy
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NEWS FROM OUR PRESENT FACULTY

ALLAN ASHWORTH (PROFESSOR, NDSU APPOINTMENTS 1969-1970; 1975 –)



Allan is now back in the U.S., after another successful field season in Antarctica. Accompanying Allan this fall were two undergraduate Geology majors: Kelly Gorz and Andrew Podoll. From all of Allan's work, rich new discoveries have been documented and published, and his research has attracted international scientific and journalistic interest. Allan was named the James A. Meier Senior Professor for 2004-2007. He serves as graduate advisor to a PhD student and two M.S. students. Allan continues to teach his full load of upper-level courses, plus the hundreds of students in Geology 106. He enjoys the distinction of having had the longest tenure of any geologist in the history of NDSU.

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DONALD SCHWERT (PROFESSOR, NDSU APPOINTMENT 1978 –)

In 2000, my position was split between Geosciences and the Center for Science & Mathematics Education (which I direct). I still teach Structural Geology, Geomorphology, and Environmental Geology, plus I am responsible for a one-week field course each year (this spring, it will be to Death Valley). At the Center, I help administer research and programmatic grants that focus on undergraduate education. In 2005-06, I served as interim dean of the College of Science & Mathematics, and for the first half of 2007 I'll serve as acting chair of Geosciences while Bernie Saini-Eidukat is away on his Fulbright studies. I also keep active with regional geology issues, especially land use.

Don
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ELAINE HATZENBUHLER (LECTURER, NDSU APPOINTMENT 1982 –)



I am sure many of you feel that being at NDSU changed your life. I know it did for me. Joining the geology department in 1982 has been quite an experience in many ways. I think best of these has been all the great people I have had the chance to work with, teach, know, and meet. I still teach the labs. I still have an interest in dinosaurs. And yes, I still have the '68 Camaro. A photo of it (and me) is on the NDSU Geosciences website. The Camaro seems to be holding up a lot better than I am! Stop in to visit, call, or e-mail. It is always good to hear from you. Have a great 2007!!

Elaine
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BERNHARDT SAINI-EIDUKAT (ASSOC. PROFESSOR & CHAIR, APPOINTMENT 1993 –)

Trying to fill the shoes of Allan Ashworth from his time as Chair, although impossible, has been exciting and a great learning experience for me over the past two years. I'm continuing research work in Patagonia, and my collaboration with Don Schwert in research on educational software. First and foremost, I'm researching unusual germanium mineralization in a carbonate hosted zinc mine in Chihuahua state, Mexico. After carrying out field work there, I will be investigating the samples while serving as a Senior Researcher at the Bundesanstalt fur Geowissenschaften und Rohstoffe (BGR, equivalent to the Geological Survey of Germany) in Hannover, Germany. Germanium, a very rare metal, is much sought after in the semiconductor industry. While in Hannover with my family from January to July, 2007, I'll also be Senior Lecturer on ore deposits at the University of Hannover.



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KENNETH LEPPER (ASSISTANT PROFESSOR, NDSU APPOINTMENT 2003 –)

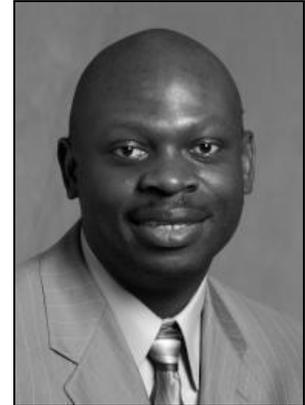


I joined the department in August of 2003. I am a product of the land grant system with degrees from "The" Ohio State University and Oklahoma State University. I did post-doctoral research at Los Alamos National Lab. My research specialty is Quaternary geochronology. At NDSU, I have established the Optical Dating and Dosimetry Lab in the far NE corner of the basement of Stevens Hall. My work revolves around quantifying rates of Earth surface processes to gain a better understanding of how elements of the landscape respond to and interact with the climate system. I teach Physical Geology, Glacial geology and Hydrogeology. Jennifer, my wife, teaches occasional biology courses at Concordia College and enjoys a wide variety of arts and crafts. My son, Finn, is in the first grade at Horace Mann and recently competed in his first chess tournament. My daughter, Lydia, is in preschool and is very enthusiastic about her ballet lessons. As a family we enjoy bicycling, hiking, snowshoeing, and sledding.

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PETER ODUOR (ASSISTANT PROFESSOR, NDSU APPOINTMENT 2004 –)

I joined the Department of Geosciences on August 15, 2004, after graduating from University of Missouri-Rolla. It was a definite change for me and my family and the comments that I got were, “Have you seen the movie, *Fargo*?” and “In *Fargo*, you will be able to make snow angels while standing.” I have had a chance to build up my water quality analyses laboratory thanks to ND-EPSCoR, College of Science & Mathematics, and the Geosciences department. We installed a Dionex Ion Chromatograph system and trained 4 students in using this sensitive and costly equipment. I am currently working on biostimulated remediation of nitrate contaminated waters and also looking at microbial signatures under hydraulic stress within water-sediment interfaces, inter- and intra- matrices of compacted smectite. I am also teaching Introduction to GIS and Advanced GIS. I will also teach Remote Sensing this coming Spring. Currently, I am mentoring a graduate student in the Environmental Conservation Science program and an undergraduate student through North Dakota Forest Service / USDA grant received over the summer in assessing potential North Dakota Forest Stewardship Areas.



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DEPARTMENTAL HISTORY: THE CLOSURE OF THE GEOLOGY PROGRAM IN 1954

For decades afterward, students graduating from NDSU Geology would question why they had received diplomas inscribed with “*Soils (Earth Science)*”

On April 4, 1951, oil was discovered in North Dakota. The first well (Clarence Iverson #1, near Tioga in Williams County) would launch an oil exploration boom in western North Dakota. Meanwhile, the discovery of oil would help set forth a chain of events in eastern North Dakota that would help lead to the eventual closure of the Geology program at the North Dakota Agricultural College (NDAC, now NDSU).

The teaching of “Geology” as a subject of practical instruction at the NDAC had long been stipulated in the North Dakota Century Code (Chapter 15-12-02). The Code (1891) further defined a role for the “*professor of geology*” to act as director of the State Economic Survey. Horace D. Stockbridge, the first president of the NDAC, was even author of a textbook on geology and soils.

However, Geology as a program had always been small at the NDAC, with a major being offered from 1910-12 and in 1928. In 1949, a

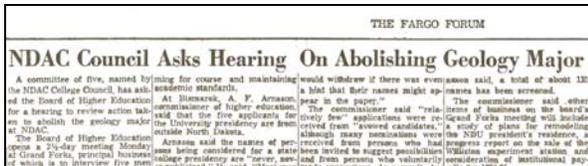
major program in Geology was reintroduced, under the direction of Dr. Willard Pye who operated a Geology and Geography program almost single handed. By 1954 the program had grown to 26 majors. In 1953, Pye received permission to hire another geologist. He selected



W. D. Pye

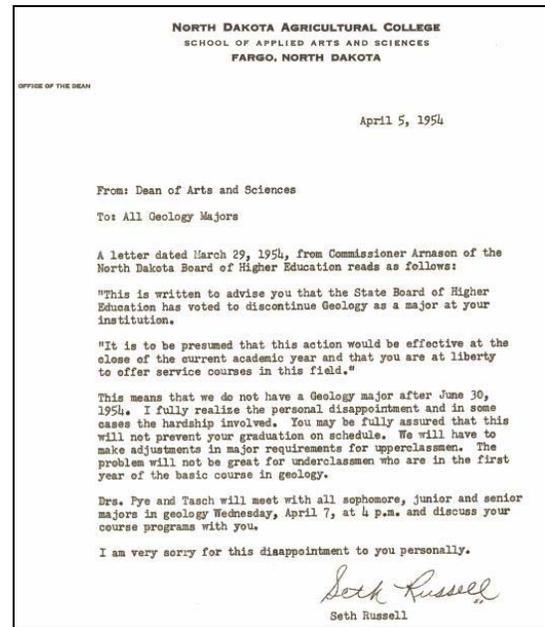
Dr. Paul Tasch, a paleontologist specializing in Paleozoic stratigraphy. Pye's selection of the young Tasch created a political ripple that extended as high as A. F. Arnason, the Commissioner of the State Board of Higher Education (SBHE). Arnason later, rather lamely, expressed that he thought he had approved the hiring of a glacial geologist and not someone whose potential research interests related to petroleum exploration.

What is unclear in any documentation is the role of the State Geologist, Wilson Laird, who was also chair of Geology at the University of North Dakota. What is clear is that the hiring of the talented Paul Tasch by the NDAC was viewed as a threat to UND's own interests in Williston Basin oil production. To be fair to Laird, the North Dakota Century Code assigned the inventory of the state's mineral resources to UND's mission. A message was somehow conveyed to the SBHE that the growing Geology program at the NDAC was duplicating that of UND's. In late March, 1954, the SBHE met and voted to close the program at the NDAC effective June 30, 1954 – citing fiscal exigencies and the need to avoid duplicate programs.



NDAC president Fred S. Hultz acted without public question to swiftly implement the SBHE's decision. Pye (who was tenured) and Tasch (who was non-tenured) would both be released from employment on June 15th. Dr. Seth Russell, Dean of Arts & Sciences at the NDAC (and clearly a proponent of Pye, Tasch, and of the Geology program), sent a letter to the program's 26 majors informing them of the SBHE's decision.

These undergraduates quickly became activists in expressing their opposition to closure of the program. Among them was Sonja Blegen (now Sonja Mulvane), who was serving as Secretary of the Geology Club. A letter of protest that Blegen wrote to Commissioner Arnason was cc'd by her to the likes of U.S. Congressman Usher Burdick and U.S. Senators Bill Langer and Milton Young. In this letter, Blegen noted that these actions would strand 26 majors, "some of



whom are juniors this year and who expected to be graduated from NDAC next year with a Geology major." Clearly irritated by her letter, Arnason (April 24, 1954) responded to Blegen, "In view of the situation described above, I do not believe that there is any chance that the Board will reconsider its action ... Reference to 26 majors is a trifle misleading as only five of your group are juniors ... Your group is an enthusiastic one, as evidenced by your letter. I am not being critical, but it would have been better if you had not sent copies of your letter to elected officials." When Blegen and her fellow students learned that Arnason would be traveling to Fargo, she requested a meeting with him. Arnason's response to her (May 24, 1954) is full of every excuse of not having had any time to do so.

Blegen also appealed to State Geologist Laird of UND, writing (May 29, 1954), "It would seem to me that one holding the position of State Geologist in any state would definitely be interested in the welfare of any or all Geology Departments in schools of the state, and would surely be interested in the continuance of a growing department ... By maintaining a Geology Department in only one school in the state, North Dakota is denying many people in areas remote from that one school the right to participate in the oil activity of the state ... May I ask if you, as State Geologist, have taken steps to intercede in the removal of the Geology major and the Geology Department at NDAC?" Laird (June 7, 1954) responded to Blegen, "I am not ... in any

position to criticize one way or another any decision that the Board of Higher Education makes in view of the fact that they are my superiors in this as well as any other action they wish to take. I trust this satisfactorily answers your question."

The impending closure of the Geology program created widespread protest. In a letter published in the Fargo Forum, William Guy wrote, "*The State Board of Higher Education by its recent action in abruptly dropping the geology major at NDAC has weakened one of its finest state institutions far more than is justified by the economy effected.*" Wallace Warner, Nonpartisan League endorsee for Governor, described a "geology mess" at the NDAC which "*has caused concern in national circles.*" Noting that the discovery of oil had ushered in a new era of growth and development, the Fargo Chamber of Commerce issued a written statement (May 19, 1954) in support of the Department's continued existence: "*It is clearly the responsibility of all of our citizens and institutions to expand those facilities and programs which will enable the maximum number of North Dakota boys and girls to take courses which will equip them for good positions in North Dakota.*"

SCENE, Thursday, January 13, 1955



800 NDAC STUDENTS ATTEND RALLY CONCERNING FACULTY DISPUTE — An estimated 800 students (above) filled Memorial Union ballroom Monday night to listen to two hours of debate concerning the faculty-administration controversy. Tuesday evening the NDAC Student Senate voted to have a four-member committee arrange a meeting "as soon as possible" with the State Board of Higher Education to discuss the recent board action demanding the resignation of four professors. The N. D. Board of Higher Education has asked the resignation of Dr. Daniel Q. Posin, Baldur Kristjanson, Cecil B. Haver and William P. Treumann but they have refused to do so. Below, the Students listen to Hal Miller present his argument on the subject. The students includes (left to right) Kenneth Moxness of CATHAY, Wallace Webster of Valley City, Barbara Wiadfield of Fargo, Duane Anderson of Fargo, Dorothy Ryan of Sterling, Gary Hart of Wales, Dorothy Lund of Fargo and Sonia Swanke of Lakota. (SCENE Photos)

The closure of the program and especially the release of the two faculty (one of whom was tenured) sent the NDAC campus into uproar. A petition of protest was signed by 776 of the NDAC's 1622 students. Four tenured NDAC professors (Drs. William Treumann, Cecil Haver, Baldur Kristjanson, and Daniel Posin), although not members of the terminated department, openly

protested President Hultz's and the SBHE's actions. Hultz, in evident retribution, began to openly criticize papers that the four had published and then requested their resignations. The four professors accused Hultz of violating their academic freedom and, in turn, advocated his removal from the position of president. In early 1955, the SBHE found "*that an unhappy situation exists which must not continue*" and supported Hultz in his demand for the resignation of the four faculty. The four refused to yield, causing Hultz to charge the professors with having "*engaged in a course of conduct deliberately intended to interfere with, undermine, frustrate, and render ineffective the administration of the Agricultural College.*" The four were dismissed from their positions, and their subsequent appeals to as high as the North Dakota Supreme Court were rejected or refused. In 1956, the American Association of University Professors (AAUP) placed the NDAC on censure for violations of academic freedom and tenure.

Dr. Harold Klosterman (former chair of NDSU Biochemistry) was at the NDAC during that period. Before his death in 2006, Klosterman recounted how President Hultz and others in the state had viewed these four faculty members as communist sympathizers. Klosterman recalled attending a Farm Bureau meeting where those in attendance were all riled about this infiltration of "communists" onto the NDAC campus. Klosterman stood up and spoke, noting that just about all of the NDAC faculty and students had been born and raised in North Dakota ... and making an observation to the audience that "*these are your sons and daughters that you are accusing.*" For his audacity in opposing President Hultz and for supporting these "communists," Klosterman found himself threatened with his own removal from the NDAC.

In retrospect, the loss of intellectual power to the NDAC campus and to North Dakota attributable to Hultz's and the SBHE's actions was enormous. Willard Pye went on to become a distinguished geologist at the University of Arizona. Paul Tasch became a renown paleontologist, plus author of a numerous professional papers and a famous text on fossils. William Treumann moved over to Moorhead State University, where he later became dean of mathematics and natural sciences. Cecil Haver continued on as an economist at the University of Chicago, McGill University, and Bishop's

University. Baldur Kristjanson became an economist for Agriculture Canada and later served as chair of Farm Credit Canada. Daniel Posin was employed by the Ford Foundation, then taught at DePaul University and later San Francisco State University. He won six Emmy awards and was nominated for the Nobel Peace Prize six times.

In 1959, President Hultz granted permission to Dean Seth Russell to recruit (this time *very* specifically) a glacial geologist to the NDAC to teach enough geology to accommodate soils and engineering majors; John Brophy was selected.

Brophy, Klosterman, and D. Ross Moir (a Botany professor) later worked together on getting the black mark of the AAUP censure lifted so that a Sigma Xi chapter could be established on campus; they succeeded in 1964. Over subsequent years, Brophy worked to add faculty and to rebuild a Geology program. In 1970, John Hoganson (now PhD paleontologist for the ND Geological Survey) became the first student to

graduate from the program. However, Hoganson, like dozens of NDSU Geology's graduates to follow, received a diploma stating a degree in "Soils – (Earth Science)" – for the events of the spring of 1954 would make it impossible for NDSU graduates to receive a "Geology" degree.

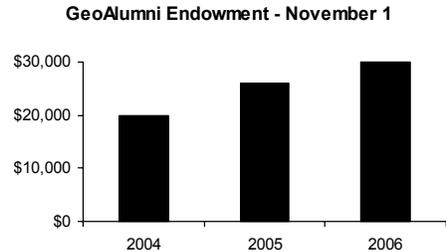
EPILOGUE: On April, 2, 2001 (almost 50 years to the day after the discovery of oil in North Dakota), the SBHE granted permission of NDSU to again award a degree in "Geology."

I am grateful to Sonja (née Blegen) Mulvane, John Brophy, and the late Harold Klosterman in their assistance in helping me to assemble this history. Reference materials in assembling the story are from the NDSU Archives and from the records and documents of Sonja Mulvane.

DPS

NDSU GEOALUMNI ENDOWMENT FUND

Contributions to the GeoAlumni Endowment Fund support field training opportunities and scholarships for our undergraduates. The fund has shown significant growth, thanks to support that GeoAlumni and friends like you provide. All contributions to the fund are tax-deductible. Many employers will match the donations of employees; for information on how to provide a match, see: www.ndsufoundation.com/annualfund/matchinggift.htm



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Left-to-right: Allan Ashworth, Kelly Gorz, Andrew Podoll and Adam Lewis. In 2007, Lewis anticipates joining the NDSU Department of Geosciences as a Research Professor.

Allan Ashworth just returned from his third Antarctic Expedition – but this time, he was able to invite two NDSU Geology majors, each of whom is carrying out an independent research project. One of them, Andrew Podoll, has been working with Fargo middle school students. At the beginning and end of the expedition, the school students participated in a live videoconference to the expedition team at McMurdo Station. Using a satellite phone hookup, Andrew kept a blog so the students could follow the expedition progress over the months. The research team, which also included NDSU student Kelly Gorz and Ohio State University professor Adam Lewis – was working in the Dry Valleys. In an interesting twist, the team's activities were documented by an award winning film maker, Anne Aghion of Dry Valleys Productions. For photos and news, visit Andrew's web blog at: www.humanedgetech.com/expedition/ant2006/

For the latest in departmental and alumni news, visit:

www.ndsu.edu/geosci



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