As the current departmental chair, I am happy to greet you on behalf of Geology and Geography at Vassar! As you will read in this issue of Terra Firma, our biennial newsletter, our department remains a remarkable place. A talented group of faculty, staff, and students gather in Ely Hall, generating a dynamic synergy of research projects and grants, papers and publications, public lectures, field trips, and educational programs.

We now nurture four interrelated degree programs, bridging the natural and social sciences: Earth Science and Society, geography, geography-anthropology, and geology. By the end of 2005-06, departmental majors numbered 44—along with five correlates and many multidisciplinary students. Continually we strive to broaden our appeal, since few U.S. undergraduates enter college with an appreciation for either geography or geology. Once students declare a major with us, they find distinguished faculty and valuable training in method and theory. We are proud of our many graduates, who have gone on to contribute so much in teaching, city and environmental planning, law, business, social work, Geographic Information Systems (GIS), and many other fields.

Our success stems in part from updated facilities in historic Ely Hall, built with its distinctive tower in 1890, which has been home to geology since 1937 and to geography since 1956. This past year, we benefited from a new GIS research laboratory and a renovated A. Scott Warthin Museum of Geology and Natural History. Our administrative assistant and museum curator, Lois Horst, masterminded these projects (and edited this newsletter!) after previously reorganizing the departmental office and flat-map room, which allowed the creation of a long-sought departmental lounge. In this comfortable setting, we now gather for informal “tea” on Wednesday afternoons during the academic year. If you find yourself on campus, please visit us and see our renovated Ely Hall.

We are sending out this newsletter in pdf format—available free for download from Adobe Reader—to those for whom we have e-mail addresses. Otherwise, we will send it to you by conventional mail. We do encourage alumni to update contact information with the AAVC, from whom we get our current mailing information. Indeed, we always enjoy hearing news from our graduates, so please stay in touch!

Best wishes,
Brian J. Godfrey
**News from Faculty and Staff**

**MARY ANN CUNNINGHAM**, assistant professor of geography, has continued her landscape-scale studies of avian habitat use in North Dakota, in collaboration with a USGS colleague. In the current phase of this work, she is quantifying threshold requirements of habitat availability for different species, which she finds very exciting. In addition, she has recently begun a similar landscape-scale avian habitat study in Dutchess County, examining birds on urban-rural gradients, with an eye to issues of suburban expansion in the region. And she is participating in a collaborative, multidisciplinary environmental assessment of the Casperkill, with Kirsten Menking and faculty in biology, chemistry, and sociology. She continues to enjoy teaching cartography and GIS, as well as Reading the Landscape, Environment and Land Use Planning, and a new ESSC course in Food and Farming with Jeff Walker. A big event for Mary Ann this year was the completion of a new, 3-seat GIS research lab in the former Rock Prep Room. (Thanks to Jill, Brian M., Lois, Meg, and to everyone whose rock prep activities have been displaced!) Joel Dashnaw has been working hard in this new lab, getting us started on landcover classification for Dutchess County, using Landsat data. Mary Ann and Kirsten are also getting ready to teach the Environmental Science in the Field course next fall, including an October Break field trip to coastal Louisiana.

**CANDICE CUNNINGHAM**, laboratory technician, had a year full of surprises and changes! The big news was that on July 23, 2005, she had a healthy baby girl named Maya Jolie! In the fall, Candice took a maternity leave, then returned on a modified schedule for the spring of 2006. She worked on setting up field trips, keeping up with the lab and field equipment, working with student workers, and getting the microscopes back in working order, and on the digital slide project. She looks forward to returning in Fall 2006 to a full-time schedule.

**JOEL DASHNAW**, laboratory technician, graduated from Vassar in 2005 with a degree in geology. Over the summer of 2005 he worked as an assistant to the Environmental Studies Program, working closely with chemistry professor Stuart Belli to develop a class in “Essentials of Environmental Science” that was taught in the fall of 2005. Joel worked as the laboratory technician for the Department of Geology and Geography during the academic school year, full-time in the fall semester, and part-time in the spring semester, in replacement for Candice Cunningham. While serving as the lab technician, Joel focused his energy and enthusiasm onto many important projects for the department, as well as the college, including: renovating the geology museum; leading school and scout groups through the newly renovated geology museum; curating the mineral collection; researching and initiating the future major overhaul of the department website; working with geography professor Mary Ann Cunningham to create classified land use data of Dutchess and Ulster Counties; undertaking the collection of all previous multidisciplinary work related to the Casperkill Creek for future use by the scientific community, both on campus and off; and environmental geological consulting for Pace University and the Hudson Riverkeepers. Joel has cherished his time at Vassar and in the close-knit department of Geology and Geography, and will be moving west to pursue careers as a secondary science teacher, and climbing guide.

**AMY FREEMAN**, adjunct assistant professor of geography, taught two courses spring semester, 2006: Geographies of North Africa and the Middle East (280) and Gender, Nationalism and Identity in Muslim Communities (381, cross-listed with Women’s Studies). She co-organized (with Michael Collyer, University of Sussex) two sessions at the 2006 Association of American Geographers’ meeting in Chicago on “Global Patterns of Temporary Labor Mobility,” during which she presented her current research on child maids in Morocco. Amy also published a paper “In the shadow of liberalism? Comments on Neil Smith’s ‘The Endgame of Liberalism’” in Political Geography 25(1): 27-36. While at Vassar, she gave an informal talk in the International Studies course connected with the spring study trip to Morocco (INTL-110) and discussed historical and contemporary issues related to women and nationalism in Morocco. Amy lives in Brooklyn with her husband Alex and son Max, and the whole family is eagerly awaiting the arrival of another child in early August.

**BRIAN GODFREY**, professor of geography, served as department chair in 2005-06 and taught courses on “Water and Cities” (Earth Science and Society 100, with Kirsten Menking); Senior Seminar (Geography 302); and Advanced Regional Studies (Geooraoehv/Latin American

In addition, Brian began a book project on issues of heritage and memory in the historic cities of Brazil. He presented this research in Mexico during October 2005 and in Brazil during March 2006. Brian currently serves on the executive boards of both the Conference of Latin Americanist Geographers (2004-2007) and the Brazilian Studies Association (2004-2006). Incredibly, Brian has now been at Vassar 21 years, and he has supervised a total of 55 senior theses! He has enjoyed continued communication with former students, whose many accomplishments since graduation give him immense pride!

**DAVE JANSSON,** visiting assistant professor of geography, taught five classes in 2005-2006: Population, Environment, and Sustainable Development (266) Political Geography (270), and several sections of Global Geography (102). In 2006-07, he will continue to teach two classes of 102 for us, while he concentrates on a book project with a working title of *Internal Orientalism in the U.S.: the Spatial Construction of American National Identity through the Othering of the South.* In January Dave began a research project in Scandinavia with financial support from the Vassar Research Committee. He interviewed members of a new political party in Åland, a Swedish-speaking province in Finland, called Ålands Framtid (Åland's Future). The party wants independence for Åland from Finland. He also published an article in a special issue of the *Arab World Geographer* commemorating the work of Edward Said. And in April he put out his first (self-produced) music CD, titled *Ridge and Valley,* with ten songs (including eight originals). In fact, Dave has enlightened departmental events with his musical compositions, including stirring renditions of "Bombs over Vassar," a crowd favorite!

**BRIAN McADOO,** newly promoted associate professor of geography, returned from a sabbatical year at the Swiss Federal Research Institute in Zürich. On the teaching front, the Digital Underground: Field Geophysics class surveyed a slave burial ground in Stormville, New York where we found evidence for up to 80 graves on the site. The spring semester held the stalwarts of Global Tectonics and the senior Continental Margins seminar on the Indian Ocean Tsunami. In January, 2006, he and colleagues from several US and international institutions were awarded a $2.4M grant from the National Science Foundation to study the circumstance and mitigation of offshore geohazards, including large subduction zone earthquakes, tsunami, and landslides. As part of the grant, he and Earth Science and Society (ESSC) major Amy Dowley (’08) traveled to Oslo to discuss the initiation of the grant. Earlier in the year, Brian and Gina La Cerva (ESSC ’06) traveled to Indonesia, where they completed a study on mangrove rehabilitation for the NGO Care, International, and attended a meeting in Padang, Sumatra to discuss the immanent tsunami risk to that community. Brian had several papers accepted for publication this year including tsunami field surveys in Indonesia, the Maldives, and Sri Lanka, and a paper on the remarkable survival rate of people on the island of Simeulue (Indonesia), 50 km from the epicenter of the December 2004 earthquake, where an oral tradition recalled a previous tsunami and held instructions on how to react. Brian’s daughters, Zoe (6) and Nina (4), will be glad when all of this ‘tsunami’ work will be done!

**KIRSTEN MENKING,** associate professor of geography, took the helm of Vassar's newly created Environmental Research Institute in the Fall of 2005, a position she will hold for the next 3 years. As director she co-organized a conference on groundwater issues in Dutchess County with colleague Jeff Walker and members of the Dutchess County Environmental Management Council, and spearheaded, with colleague...
Mary Ann Cunningham, a successfully funded Mellon Foundation project to study the health of the Casperkill stream that flows through campus. The project, taking place this summer and next, will relate water chemistry, biology, and sediment characteristics to variations in land use and involves students and faculty in Chemistry, Biology, and Urban Studies in addition to Geology and Geography. Kirsten went to New Mexico on sabbatical in the spring of 2006 where she studied pollen grains from New York lake sediments to reconstruct the climate history of the Hudson Valley since the last ice age and conducted numerical modeling studies to determine what might have caused a massive drought in the American Southwest 5-7000 years ago. She also submitted a paper, with colleague Meg Stewart, to the Journal of Geoscience Education on the use of tablet PC technology in field mapping exercises. While in New Mexico, she traveled to southern Louisiana with Mary Ann Cunningham to scout locations for an Environmental Sciences in the Field course they are teaching in fall 2006. Six months after hurricane Katrina, the amount of devastation still in evidence was quite remarkable. Kirsten had the wonderful opportunity to co-teach a course on “Water and Cities” with geography colleague Brian Godfrey in fall 2005 and looks forward to co-teaching the Louisiana course with Mary Ann.

JOSEPH NEVINS, assistant professor of geography, was on leave during 2005-06. Nonetheless, he remained active in the department and on campus in a number of ways, such as by serving as a House Fellow in Cushing Residence Hall. During the Fall 2005 semester, while on sabbatical, he worked on a co-edited volume (with Dr. Nancy Peluso of the University of California, Berkeley) on the relationship between commodity production and people, places, and nature in Southeast Asia. During Spring 2006, he studied climate change as a recipient of a Mellon Foundation Faculty Enhancement Fellowship. His academic publications during the year included A Not-So-Distant Horror: Mass Violence in East Timor, (Cornell University Press) and an article in AmeriQuests. He also wrote a number of journalistic articles, which appeared in such publications as The Providence Journal, The Jakarta Post, and The Christian Science Monitor.

JILL SCHNEIDERMAN, professor of geology, served as department chair and associate dean of the faculty concurrently in 2004-2005. In 2005-2006 she continued as associate dean of the faculty and also taught one course “Earth Science and Environmental Justice,” a course which focused on questions of social justice as they pertain to natural disasters. As associate dean of the faculty, Jill works on issues of affirmative action and diversity among the faculty, stabilizing staffing in the multidisciplinary programs, college-wide assessment initiatives, the college’s ’Equity Project,’ and manages Vassar’s Mellon postdoctoral and Consortium for a Strong Minority Presence predoctoral and postdoctoral fellowships. The scholarship she conducted on gender and water resources as a Fulbright scholar in Trinidad and Tobago in 2003 resulted in a publication in 2005 in Natural Resources Forum. Her manuscript on heavy minerals and provenance has also been accepted for publication in a major review of the research on heavy minerals. Jill has embarked on a book project entitled For the Record: Geologists on Intelligent Design. Jill gave a plenary address on environmental issues and feminism at the National Women’s Studies Association annual meeting in Orlando Florida in 2005 and also served on an NSF panel reviewing applications for graduate fellowships. With regard to professional service, Jill was elected to serve as a councillor on the national board of the Geological Society of America for a five-year term. She also volunteered to serve on the board of the Family Pride Coalition, a national organization that educates on behalf of lesbian, gay, bisexual and transgender-headed families.

ALLISON TUMARKIN-DERATZIAN, visiting assistant professor of geology, in 2005-06 taught Earth, Environment and Humanity (151), The Evolution of Earth and Its Life (161) and Topics in Vertebrate Paleontology (383), a new seminar cross-listed with Biology that focused on evolutionary theory, mass extinctions and paleohistology. She also presented posters on crocodilians from the Cretaceous of Egypt and horned dinosaur evolution at the 2004 and 2005 Annual Meetings of the Society of Vertebrate Paleontology, and she was a co-author on two other posters discussing fossil fish from the Egypt deposits. In fall 2004 she was featured along with other researchers in a News Focus article on the study of paleohistology, published in the November 5th issue of Science. In summer 2005 she began work on a histological study of the effects of protein deficiency on growth in rats, the initial phase of which was supported by the Vassar Faculty Research Committee. This research is a cooperative venture with
paleohistologist Anusuya Chinsamy-Turan from the University of Cape Town, South Africa, who visited the Department in fall 2005. Allison’s work on aging bird skeletons using bone surface textures is currently in press for the Zoological Journal of the Linnean Society. Two additional manuscripts are in review for the Zoological Journal of the Linnean Society (bone surface textures in alligators) and The Anatomical Record (effects of trauma on bone growth in birds). Sadly for us, Allison will be departing Vassar this summer to accept a Lecturer position in the Department of Geology at Temple University, where she will be able to live full-time with her Philadelphia-based husband.

JEFF WALKER, associate professor of geology, had his edited reissue of John Burroughs’s 1886 book “Signs and Seasons” published by Syracuse University Press. He added an introduction, and a series of commentaries, one for each of the essays in the book. This publication was the climax of an otherwise extremely hectic Spring Quarter during which he taught Earth Materials with a lab, Food and Farming with Mary Ann Cunningham, and Geohazards to 85 students! As chair of the College Committee on Sustainability, Jeff took the lead in organizing SWAPR—a program to collect usable items that seniors might otherwise throw away and donate to local charities. This June 2006 Jeff presented a paper and spoke on a panel about Burroughs scholarship at the biennial “Sharp Eyes IV: The John Burroughs Nature Writing Conference and Seminar” at SUNY Oneonta, NY. Sharp Eyes V will be held at Vassar in June, 2008, so participants can visit the Vassar Special Collections (where many of Burroughs’s papers are held) and Slabsides (his cabin retreat in West Park, NY).

YU ZHOU, associate professor of geography, continued her directorship for the Asian Studies program after a sabbatical in China last year. In the fall she taught ethnic geography and economic geography courses (renamed “Spaces of Global Capitalism”) to large classes. In the spring Yu led a study trip to China with political scientist Fubing Su for 26 students and 8 Vassar faculty. The group traveled to six cities in China in a two week period and was overwhelmed by the drastic contrasts and mind-boggling changes in the country. Yu also finished co-editing a special issue of China Review devoted to China’s high-tech industry development. She also published a paper on “The making of an innovative region from a centrally planned economy: Institutional evolution in Zhongguancun Science Park in Beijing,” in Environmental and Planning A 37: 1113-1134. Yu received a three-year NSF grant for a collaborative study of China’s information communication technology industry. She will serve as principal investigator with colleagues in North America, Hong Kong, Taiwan, and mainland China. Her family is doing well. Both kids started new schools. Kevin is in his first year at Arlington Middle School and Kaitlyn started first grade in Arthur May Elementary School.

And just look at how active our retirees are!

HARVEY FLAD, Emeritus Professor of Geography, was very busy with efforts geographical in this his second year of retirement. He published two articles: “Audubon Terrace, the American Geographical Society, and the Sense of Place” in the GEOGRAPHICAL REVIEW, and was the co-author with Geography Alum Craig M. Dalton. VC ’03 of “A Tree and Its Neighbors: Creating Community Open Space,” in the HUDSON RIVER VALLEY REVIEW. HisDVD of his fieldtrip into the City of Poughkeepsie that he did annually for both the department and the Program in Urban Studies was completed and final cuts were shown at various events on campus and in the community. Harvey also presented a few clips at the AAG meeting in Denver on a panel discussing "visual narratives." Meanwhile, he continues his research and writing of a book on the landscape and social history of the City of Poughkeepsie and its region over the past two centuries with co-author Clyde Griffen, emeritus professor of history. Harvey’s most gratifying scholarly effort in 2005 was his authorship of a cultural landscape study for the "Community Character� section of the visual impact assessment as testimony for Scenic Hudson and other opponents of a proposed immense cement plant in Hudson, NY. The NYS Department of State referred to this work in its ruling against the multi-million dollar proposal. On an equally satisfying and even more pleasurable note, Harvey was the Vassar College faculty host on a "Lewis and Clark" trip up the Columbia River with a small group of Vassar alumn/i and friends. Prior to the voyage he gave a lecture at the Lewis & Clark College archives. He and Mary's post-voyage travels included visiting Mt. Hood, Yosemite, and Sequoia/Kings Canyon national parks. Back home in the Hudson Valley, they continued their involvement in organizations preserving the Shawangunks and the Adirondacks, and Harvey offered a number of presentations on the historical significance of the Fall Kill creek in the City of Poughkeepsie in support of its ecological restoration and the development of a Greenway along its corridor.
So what do you DO with a degree in geography or geology?

- geographer at the U.S. Census Bureau, working on data analysis and GIS projects for census enumeration
- project manager for a residential infill developer with transit-oriented, mixed-use, anti-spray, and increasingly green projects
- landscape architect working for a large multi-disciplinary historic preservation firm
- teaching assistant to teach the labs for introductory maps and geographic information class in a geography graduate program
- intern in environmental assessment for Envirolissues, a firm based in Seattle
- professor of geography, specializing in historical geography and remote sensing
- editor for a popular guidebook series - Not For Tourists
- policy analyst and environmental planner for the State of New Jersey, working primarily on incorporating sustainable land-use patterns into New Jersey's state plan, finding policy incentives for urban redevelopment, and ensuring that environmental justice issues are adequately addressed
- high school teacher of world geography, history, and social studies
- geologist with the U.S. Geological Survey
- social worker with Planned Parenthood, in the education department with a prevention/youth development with middle school youth
- freelance retail consultant, after working for many years with a multinational marketing and financial analysis firm
- wrote and published a book about OpenOffice.org
- resource management consultant for college campuses
- run a homebirth & midwifery supply business
- intern at American Museum of Natural History in Earth & Planetary Sciences Dept.
- teach yoga!

The opportunities are endless for our graduates, as you can see from this list.
Senior Theses

2004-2005 Academic Year

Joel Dashnaw, Geology, “Reconstructing paleo slope and current of the Buckhorn Conglomerate of Eastern Utah: Implications for Early Cretaceous uplift and topography” Advisor: Kirsten Menking


Samuel Kahn, Geography, “The role of GIS in geographic education and employment: trends and prospects” Advisor: Mary Ann Cunningham

Emily Loomis, Geography, “The legalization of squatter resistance: citizenship and the right to publicly owned abandoned property on New York City’s Lower East Side” Advisor: Pam Martin

David McCarthy, Geography, “Coloring outside the lines: breaking down Red and Blue America” Advisor: Joseph Nevins

Jessica Till, Geology, “Magnetic domains and properties of the Tiva Canyon Tuff, Yucca Mt., Nevada” Advisor: Jeff Walker

2005-2006 Academic Year

Ariana Brill, Geography, “Public goods in residential communities” Advisors: Mary Ann Cunningham, Gwen Broude (Cognitive Science), Sean Flynn (Economics)

Gina La Cerva, Earth Science and Society, “Mangrove evolution and the periodic disturbance of tsunamis” Advisor: Brian McAdoo

Roger Putnam, Geology, “Retrograde reactions in the Bash Bish Quadrangle OR How I Learned to Love Chlorite” Advisor: Jeff Walker

Ashley Willhite, Geography, “Preservation or urbanization: the future of agriculture in the Hudson Valley” Advisor: Mary Ann Cunningham

Colin Wilson, Geology, “Tidal heating and its implications for planetary geophysics” Advisors: Brian McAdoo, Fred Chromey (Astronomy)

Remember how much you loved field trips?

Mary Ann Cunningham leading a class at Mohonk Mt. House
Photo by Joel Dashnaw
**Museum Renovation**

The A. Scott Warthin Museum of Geology and Natural History (the name was slightly tweaked to accommodate the diversity of specimens in the collection and the types of exhibits that we have) underwent a complete transformation this year. This work, coordinated by Lois Horst, the newly-named Museum Curator, was a cooperative effort within the department. The faculty, staff (in particular, Joel Dashnaw, laboratory technician, whose geology degree was put to good use!), student employees and majors, all had a hand in the renovations.

The process began more than a year ago when the Art Department’s Architectural Design class, taught by Barry Price, was assigned the museum as a design project. The presentation they gave at the end of their project (attended by President Fran Fergusson!) was full of great ideas and insights into the space. Though most were beyond our financial abilities, we were able to adapt some very pertinent ideas—larger, more impressive doorway, space to gather for school groups, emphasize the wonderful windows and natural light—into our renovation. We were also able to obtain antique museum cases from the Pratt Museum (of Amherst College) when they were moving out of an old building and into a brand new space.

The renovations included installing beautiful French doors at the entrance to the museum, new track lighting, and painting of the room. In order to do this, we had to empty and dispose of the old metal display cases. Then hundreds of drawers of specimens were moved into the AULA to allow for the switching out of old cases and moving in of the new. Then all those drawers were replaced. The new cases have lots of glass—we spent hours with the window cleaner! The new exhibits are being tailored to the general public in order to fulfill the educational mission of the museum. There are three key areas: What is a mineral?, What is a rock?, and What is a fossil? These lay the groundwork for the overall geoscience theme of the museum.

The museum was officially reopened on April 19, 2006, with a lecture by Warren Allmon, the Director of the Museum of the Earth, part of PRI, in Ithaca, NY. His talk addressed the value to research and education of such historical collections as ours. The importance of the museum’s holdings cannot be stressed strongly enough, and we are concentrating on providing access to the collections, not only for school groups—who love the field trips here—but also to researchers, through creating a database of the specimens that eventually will be on-line. A very rough estimate of the monetary value of the museum was put at one million dollars!

Remember the geyser exhibit? At approximately 70 years old, it has now received a facelift! A studio art major with a geology correlate, Katie Adams ’06, repainted the landscape using photos of actual geysers in Yellowstone to provide the correct color scheme. The Art Dept’s technician, Mark Briscoe, did repair work on the basins and copper tubing to ensure many more years of geyser activity in Ely Hall. The school kids love it! But, more importantly, it is a part of the history of the department as well as the museum, and so retains its place here.

Make sure to stop by and enjoy the new museum space when next you’re on campus. Though there is plenty of work yet to be done, it has become a more inviting space, to the delight of us all.