More Change, More Growth

This fall, we reached an administrative watershed—Bruce Ralston completed his service as department head and I stepped back in as interim head for a year. We all salute and sincerely thank Bruce Ralston for his years as department head. He held the reins at a critically important time, becoming department head in August 2000, just in time to oversee our move into the Burchfiel Geography Building and the dedication of the building. Under his leadership, the department settled into the new building, became far better equipped and technologically advanced, and dramatically prospered and grew. The number of geography majors grew from about 35 to 130, and the faculty grew from 11 to 14, with two new faculty lines added this year. Ralston’s headship, which spanned four UT presidents and four deans of the College of Arts and Sciences, helped raise the profile of the department on and beyond the campus.

While serving as head, Bruce also wrote books, taught classes, advised graduate students, served on a committee for the National Research Council, and advanced his research activities. He was eyeing that office on the south side of the building for several years, and has finally moved into it.

Being interim head now is exciting—when I last served as head, we were just moving into the new building, we didn’t have as many research contracts and grants, and we were a smaller faculty. For the first time in two decades, we’ve added two new tenure-track faculty members in the same year. Both Ron Kalafsky and Liem Tran bring tremendous new energy and expertise to the department.

Ron Kalafsky, who was previously an Assistant Professor at UNC Charlotte, specializes in the geography of manufacturing. Dr. Kalafsky plans to continue to work in Japan and Canada and extend his research to other countries in Asia. His work is extremely interesting, even to this wet-boots physical geographer. Liem Tran, whose research interests integrate GIScience and environmental assessment, came to UT after serving as an Assistant Professor at Florida Atlantic University. He is interested in integrated regional vulnerability assessment and the use of artificial intelligence (including fuzzy set theory, neural networks, and cellular automata) in geographic analysis and modeling, and he has some intriguing ideas about integrating studies through different spatial scales. He continues to be part of the core team of EPA’s (Regional Vulnerability Assessment).

As you will see in this newsletter, we have a great number and variety of research projects in progress. They create a high level of activity and productivity in the department and allow us to financially support more graduate students than we were able to in the past. Undergraduate students are assisting with research, too. We value the esprit de corps of our students and the many kinds of support we receive from our alumni and friends. Drop us a line or come by and see us.

- Carol Harden
  Professor and
  Interim Department Head
University of Tennessee
GK-12 Earth Project Funded!

Geography faculty Sally Horn and Ken Orvis, together with Dr. Lynn Champion, Director of Outreach for the university’s College of Arts and Sciences, received a $1.96 million grant from the National Science Foundation to bring the excitement of research and discovery to rural middle school science classes in east Tennessee. Through their GK-12 Earth Project, ten graduate students from the Geography Department and the Earth and Planetary Sciences Department are serving as GK-12 Fellows in seven schools spread across four school districts. Each Fellow is paired with a Teacher-Partner selected from highly committed participants in past UT summer workshops in the natural sciences. The project has a strong focus on the science of climate and environmental history, and most of the Fellows are engaged in graduate research on natural archives of environmental history, including tree rings, sediments, soils, fossils of various kinds, and stable isotopes. GK-12 Earth Fellows work closely with their Teacher-Partners to develop and carry out hands-on science activities that expose rural middle school students to the Fellows’ own unfolding research, to other research at the University of Tennessee, and to broader initiatives such as the Integrated Ocean Drilling Program.

Carol Harden and Henri Grissino-Mayer are working with Sally, Ken, and Lynn on the project, along with Earth and Planetary Science (EPS) faculty members Claudia Mora, Linda Kah, and Colin Sumrall. Kristin Rearden of the Department of Theory and Practice in Teacher Education is also involved in the project. The 2006–2007 Fellows include six graduate students from geography (Angela Danovi, Sarah Deane, Justin Hart, Zack Taylor, Saskia van de Gevel-Eddin, and Chris Underwood), and one former geography graduate student (Daniel Lewis, now a Ph.D. candidate in EPS).

To the right are three pictures of Geography graduate students in action as part of the GK-12 program.
Investment Opportunities in Geography

Gifts to the Geography Department may be designed for a specific purpose or fund or given to the department’s Enrichment Fund as discretionary funding. Be assured that it will make a difference! Existing funds are shown below. Please contact Carol Harden if you would like more information or if you would like to target your gift for a purpose not shown. The Development Offices of the College and University would be pleased to have you ask about other forms of giving, such as bequests, charitable lead trusts, and gifts of the remainder interest in a personal residence or farm, and they are set up to help you evaluate the tax benefits of different gift options. All contributors making gifts of a hundred dollars or more are eligible for University recognition via the Gift Club.

Stewart K. McCroskey Memorial Fund – Established by the McCroskey family after Stewart’s death. This fund supports field research and professional travel by Geography students and faculty.

Sid Jumper Teachers’ Scholarship Fund – Established in 1995 when Sid Jumper stepped down from the role of Head of the department, this fund supports graduate training for K-12 teachers.

Bill & Donna Cobble Geography Enhancement Endowment – Proceeds from this fund, established in 1995 by Bill & Donna Cobble in support of undergraduate education in Geography at UTK, are used to enhance the educational experiences of undergraduate students.

Edwin H. & Elizabeth H. Hammond Endowment Fund in Geography – Established to honor Professor Hammond, who retired in 1987. Gifts to this fund help bring a distinguished geographer, the “Hammond Lecturer” to the department each year.

Robert G. Long Outstanding Graduate Student Award Fund – The Robert G. Long Award, established to honor Professor Long who retired in 1979, honors one or two graduate students each year for superior scholarship and service to the department. The students are recognized on a plaque and receive checks of $50.

The J. Harrison and Robbie C. Livingston Professorship Endowment - This fund was established in 1997 by J. Harrison and Robbie C. Livingston to further teaching and research on population problems. Proceeds from this fund supplement the salary of a faculty member who specializes in population issues.

Geography Department Scholarship Fund – This fund provides one or more tuition scholarships to outstanding undergraduate geography majors.

The Geography Department Enrichment Fund – This fund may be used to meet special needs as determined by the department faculty. In recent years, it has supplemented our operating budget and provided travel support to professional meetings for faculty and students.

The Geography Technological Enrichment Fund – Established in 1995 by two anonymous donors, the funds are used to provide our computer research labs and classrooms with up to date equipment and software.

Geography Endowment Fund – Donations are invested by the university. The principal generates quarterly interest to the Geography Enrichment Fund.

Please send your gift to: Department of Geography, 304 Burchfiel Geography Building, University of Tennessee, Knoxville, TN 37996-0925. Make checks payable to: University of Tennessee, but also use the memo line on the check to indicate “Geography” and, if you wish, to indicate a specific fund.
All of the Department of Geography alumnae who have benefited from funds from the Stewart McCroskey fund are encouraged to give serious thought to giving back. The fund, which has been so valuable to the department in providing travel funds to graduate students (and occasionally undergrads and faculty) is now nearly depleted. We hope you agree that it should be given a second burst of strength because we have a whole new generation of students ready to do research or short-term training abroad in connection with their degree programs. The normal grant has been $500, which means virtually all who apply are having to contribute quite a bit to the trip from their own funds, but the $500 usually means that the trip is facilitated in an important way. Whether or not you have received a McCroskey grant, please consider a generous donation to the Stewart McCroskey Fund. See page 3 for details on how to contribute.
New research by two University of Tennessee professors could help us better understand hurricanes by looking to an unusual source: tree rings. By analyzing the rings of trees in areas that are hit by hurricanes, UT professors Claudia Mora and Henri Grissino-Mayer have found that the oxygen isotope content in a ring will vary if the tree was hit by a hurricane during that year. Their research was published in the online version of the Proceedings of the National Academy of Sciences, one of the world’s most cited multidisciplinary scientific journals.

There has been a significant increase in the number of hurricanes hitting the Southeast since the mid-1990s, and scientists have sought to determine the cause for the upswing. Some question exists about whether the increase is part of a regularly occurring cycle of activity, or whether it is being brought about by a cause such as global climate change. The problem facing this analysis is that the current documented history of hurricane activity in the Southeast dates back only about 100 years — not enough time to establish a cycle that might last many decades at a time.

By looking at older trees, Mora and Grissino-Mayer have been able to create a record of hurricane activity dating back 220 years, more than double the current record. “We think this can shed light on whether we’re looking at a long-term pattern, or something that could be caused by human activity,” said Mora, professor and head of UT’s Department of Earth and Planetary Sciences.

One notable aspect of their research is the accuracy with which the tree-ring oxygen analysis is able to show when a hurricane hit an area. Comparing the tree-ring data to the National Weather Service data over a 50-year period, the tree-ring data showed only one year in which their data reported a hurricane that was not in the list of recorded storms. The initial data were collected from trees on the campus of Valdosta State University, where Grissino-Mayer was previously a faculty member. The two professors then expanded their research are to are to swampy nearby Lake Louise, where they were able to find even older trees preserved beneath the waterline.

Different isotopes of oxygen present in the tree rings are the key to knowing whether hurricanes hit the tree. The moisture carried by hurricanes carries a different ratio of oxygen-18 to oxygen-16 than the normal rain that trees absorb. When that moisture falls near a tree, it is absorbed, and that ratio of oxygen is reflected in that year’s ring. “The level of resolution with this measure is key,” said Grissino-Mayer, a UT associate professor of geography. “Other proxy measures of hurricanes are not able to look at a year-by-year basis.” Mora and Grissino-Mayer also noted that this opens the door for research to go back even further than 220 years, as older trees are discovered in hurricane-prone areas, perhaps as old as 500 years.

The next steps of their research are already underway. Research teams recently traveled to areas near Pensacola, Fla., and Charleston, S.C., to collect tree samples to analyze, with the hopes of building a broader geographic sample. Mora and Grissino-Mayer are also working to improve the resolution at which they can examine when the oxygen isotope ratios are different within a tree ring, specifically looking at determining whether storms hit early or late in the hurricane season of the year in which a tree ring grew.

The lead author on the article was UT earth and planetary sciences doctoral student Dana Miller, now a researcher at Oak Ridge National Laboratory, whose dissertation was written about the new findings. The research was funded by grants from the National Science Foundation, along with the UT President’s Initiative in Teaching, Research and Service. An abstract of the article, as well as a full-text PDF, are available online at www.pnas.org/cgi/content/abstract/0606549103v1.
In Memoriam

Michelle “Chell” Pfeffer, geography undergraduate, died on February 21, 2006 at Vanderbilt hospital of a stroke due to complications from leukemia. Chell was known for her passion for environmental causes. She sought to educate people about environmental issues as a member of the steering committee for UT’s Environmental Semester. She was an advocate for systemic change and for recycling on campus through the organization SPEAK (Students Promoting Environmental Action in Knoxville). Chell volunteered for numerous service projects including helping to clear trails at House Mountain State Natural Area in Knox County. She also was an active promoter of vegetarianism and helped to organize Knoxville’s “Meat Out”. The East Tennessee Vegetarian Society created an award in her name to be given annually to people who go above and beyond the call of duty for the cause. The Department named its outstanding undergraduate award in honor of Michelle and the first Michelle Pfeffer Outstanding Undergraduate Award was presented to Kate Smith for the 2005/06 academic year. Michelle’s B.S. degree was awarded posthumously.

Announcing the 2006-2007 Hammond Lecture

The geography department’s 2006-2007 Hammond Lecturer will be Dr. Ellen Mosley-Thompson, Professor of Geography at the Ohio State University. Dr. Mosley-Thompson, also part of the Ice Core Paleoclimatology Group at Ohio State, has published recent papers on climate change and paleoclimatic records from the Greenland ice sheet, Antarctica, Peru, and Mt. Kilimanjaro (Tanzania). She is an award-winning lecturer and researcher, and a “Fellow” of the American Association for the Advancement of Science.

Hot Off the Presses

The New Tennessee: A Geographic Perspective Maps are Here !!!

These two-sided posters are updated from two previous collaborations between the Geography Department and the Tennessee Geographic Alliance. Additional funding for the project was provided by the J. Harrison Livingston Endowment through the Department of Geography and the UT Institute for Public Service. On one side is Tennessee: A Geographic Perspective, a four color poster with 22 maps depicting numerous types of quantitative and qualitative data related to our state. The reverse side is Tennessee: County Boundaries, Names, and Population 1791-2005. This poster shows the changes in county boundaries and population throughout Tennessee’s history on fifteen different maps.

One complimentary copy per alumnus may be requested by calling or emailing Kurt Butefish at 865-974-4841 or kbutefis@utk.edu. Be sure to include your mailing address in your message. The map will be mailed folded. If you prefer to have an unfolded copy sent to you in a tube, please send a check for $10 made out to the Tennessee Geographic Alliance to cover the cost of the tube and postage to Kurt at: 304 Burchfiel Geography Building, Knoxville, TN 37996-0925.
Charles Aiken. After writing and publishing on William Faulkner off-and-on for a number of years, Charles has finally finished his primary work on the author. Charles’ invited paper to the 2004 William Faulkner conference at Oxford, Mississippi, “Faulkner and the Passing of the Old Agrarian Culture,” is the first article in William Faulkner and Material Culture, which is to be published by the University Press of Mississippi later in 2006 or in 2007. Charles’s book manuscript, “William Faulkner and the Southern Landscape,” has been accepted by the University of Georgia Press and will be published in 2007.

Charles and Kurt Butefish, with assistance from John Rehder, received a $191,000 grant from the National Endowment for the Humanities for a 2007 Summer Institute for 25 teachers from across the nation. This is the third grant that Charles and Kurt have received from NEH since 2002. The three grants total more than half a million dollars.

Mary Ann continues to teach at Pellissippi State. She continues to have the largest number of undereducated English students who make the most progress toward achieving college-level educations.

Both of the Aiken’s children now live in the North. John is a First Officer with the Delta Connection and flies in the Northeast from smaller cities into New York’s JFK Airport. One advantage of his job is that his parents have free passes for non-business travel on Delta flights, other than paying taxes and landing fees. Charles and Amy have moved from New York to Cleveland, Ohio, where Amy was offered a 9:00-5:00 in-house job with a large utility company for which she did much work while with a New York law firm. Charles, who left the United States Court of International Trade, is an associate attorney with Squire, Sanders, and Dempsey in Cleveland, one of the nation’s largest law firms. The couple bought a home in Shaker Heights, Ohio.

Tom Bell and Peggy Gripshover. Tom and Peggy, a.k.a., the Dynamic Duo, had another active year fighting for truth, justice, and the geographic way. Always on the go, they have been busily working away on writing projects, paper presentations, and of course, using their superhuman lectures to numb untold numbers of UT students into total submission. Tom and Peggy have a chapter in the forthcoming book, Beyond the Metropolis: Urban Geography as if Small Cities Mattered, (University Press of America, 2006), edited by Ben Ofori-Amoah, entitled “The Urban Corona Effect and Retail Change in Small Cities: The Case of Central Iowa.” Tom contributed a chapter on the plays and movies of Neil LaBute, “Place, Popular Culture and Possibilism in Selected Works of Playwright Neil LaBute,” that appeared in Neil LaBute: A Casebook edited by Gerald C. Wood (Routledge Press, 2006). An article that Tom wrote with Ola Johansson (Ph.D. Tennessee 2004) about Nashville, Tennessee, appeared in The New Encyclopedia of Southern Culture (University of North Carolina Press, Spring/Summer 2006). Tom is also working with Ola as co-editor of a music geography book. Tom has been granted a leave from teaching during the Spring semester 2007, which will come in handy as he works with Ola on the manuscript. This year saw the publication of teaching materials prepared by Tom and Peggy for the Educational Testing Service (ETS), the Princeton, NJ-based group that administers the Advanced Placement examination in human geography. These materials complement those on economic and industrial geography that they had written for another book targeted toward teachers of the AP course (A Teacher’s Guide to Advanced Placement Human Geography edited by Robert S. Bednarz, National Council for Geographic Education, 2004). Tom and Peggy are also in the process of editing the North America section of the latest version of a popular German school atlas, Westermann’s Diercke Weltatlas, as they had previously done in 2005. The North American portion of the
project is directed by Westermann’s Björn Richter (who matriculated in the department at Tennessee).

Peggy’s chapter on the cultural landscape of Lake View and “Wrigleyville” neighborhoods of Chicago will be appearing soon in From Tinker, to Ernie, to Ryno: A Social History of the Chicago Cubs, edited by Gerald C. Wood, (McFarland Press, 2007). The best part about the Chicago Cubs study was having to do “field work” at Wrigley Field, which for Tom, consisted mainly of making certain the “Old Style” vendors were kept busy. And just to be sure that they have more reasons to return to Chicago, Tom and Peggy are continuing their Windy City research by investigating the role of 19th century media, specifically the Chicago Tribune, in shaping the public’s perception of suicide rates in the city, especially before and after the Great Chicago Fire. They are presenting papers on this topic at both the AAG and SEDAAG annual meetings, as well as preparing a manuscript for publication. Also at SEDAAG, Peggy is presenting a paper on racial bias in Knoxville’s place naming conventions, and, along with Christa A. Smith (Ph.D., Tennessee 2000) of Clemson University, is the co-author of a paper on the effects of coal economies and New Deal policy on West Virginia coal camp culture. This summer, Peggy was involved in developing a cultural landscape narrative and web page for Humanities Tennessee that was used in support of the Smithsonian’s “Between Fences” traveling exhibit, on display at the Blount County History Museum, in Maryville, TN. Peggy also edited, Tennessee: A Geographic Perspective, a new edition of the map originally created in the department by Dr. Leonard Brinkman (Emeritus Associate Professor, UT Geography), for the Tennessee Geographic Alliance.

On a more personal note, Tom and Peggy rejoice in the birth of Tom’s daughter Leia’s third baby boy, Oslo Kilby Sherburne, which is “OK” with us (get it?). Tom and Peggy were able to meet up with Leia, Phil and the boys, Cortez and Ivan, in Chicago this past summer, during the Pitchfork Music Festival and the accompanying Flatstock poster art sale. Naturally, Leia’s poster booth did a land office business. Check out Leia’s artwork at leiabell.com. While Leia worked at the festival, Tom, Peggy, and Phil took the boys to Chicago area attractions, including the Lincoln Park Zoo and Millennium Park. Of course we would have to plan this trip during the worst Chicago heat wave in years! Tom’s son Brian has formed a new musical group called The Relationship while Weezer is on hiatus after last year’s successful tour supporting their fifth album. You can check out some of The Relationship’s songs on the band’s MySpace website (www.myspace.com/therelationship).

This summer, Tom and Peggy spent part of their vacation time in Door County, WI. They arrived in Wisconsin by taking a car ferry across Lake Michigan between Ludington, MI and Manitowoc, WI. The ship they were on, the S.S. Badger, the last of the coal-fired lake freighters, was originally built to carry railroad freight cars across the Lake. Today it only runs during the summer months carrying passenger vehicles and commercial trucks across the lake at a speedy 15 miles per hour. Peggy and Tom are hoping to win the lottery so that they can afford a summer “cottage” in Door County. What a beautiful setting—at least in the summer! This summer they went to Pennsylvania to celebrate Peggy’s mom’s 75th birthday and to Iowa for Tom’s mom’s 98th birthday.

When they are not busy saving the world from itself, Peggy and Tom still enjoy biking on rail trails. Peggy continues to play tennis and volunteers with HABIT, the UT Vet School program that arranges visits by therapy animals (such as their Australian shepherd, Sophie) in facilities such as nursing homes, schools, and hospitals. Sophie has a new friend too—Pivo, the pride and joy of their new colleague Ron Kalafsky. If the energy generated by Sophie and Pivo could be harnessed, there would be no energy crisis! Perhaps Sophie and Pivo could co-author something for the AAG meeting—something like, “How Geography has Gone to the Dogs”?

Kurt Butefish. Kurt continues in his role as coordinator of the Tennessee Geographic Alliance. This past summer he got a chance to travel to Beijing, China for a month to teach conversational English at Tsinghua University. The experience and a catalog of pictures have provided material for a number
of presentations for teachers across the state. Kurt’s service on the Board of Directors of the Tennessee Council for the Social Studies (TCSS) has provided the Alliance with opportunities to collaborate with that organization. The TGA and TCSS have twice combined annual statewide meetings and, this summer, hosted a series of summer workshops for teachers at the University of Tennessee, Chattanooga. The Alliance once again partnered with Charles Aiken and received assistance from John Rehder to successfully propose a 2007 four-week summer institute for teachers called The American South: Geography and Culture. This is the third such grant award the trio have received from the National Endowment for the Humanities. We will recruit and host 25 teachers from all across the United States for this field trip-intensive program.

**Anita Drever.** Anita is still up to her usual migration mischief: She and a collaborator spent two weeks over the summer in New Orleans interviewing Latinos who had come to the city to help in the reconstruction effort. The stories of these migrants poignantly reveal how current U.S. immigration policy disadvantages both the communities undocumented immigrants are moving to and the undocumented immigrants themselves. Anita will be writing up the results of this research next semester and she has applied for funding to return to New Orleans.

Anita remains engaged in her research on Latino migration to Tennessee, an issue she presented on at UT’s Faculty Pre-Game Showcase in early November. She recently completed a book chapter for a volume being edited by Fran Ansley and Jon Shefner here at UT also dealing with Latino migration to Tennessee. Two of her Master’s students are doing Latino immigration research: Paul McDaniel recently finished a thesis on ethnic entrepreneurship in Birmingham and Kristian Dennis is using GIS to analyze immigrant settlement patterns in Southern cities.

Anita is looking forward to her spring semester teaching reprieve, which will allow her to finish a paper that discusses how residential segregation effects differ in different national context. This paper will discuss some theoretical insights gleaned from over a decade of research on segregation effects in Germany. Anita has also been invited to present at a segregation conference this March in Berlin.

**Ron Foresta.** Ron recently completed his book on the Land Between the Lakes and is shopping for a publisher. He participated in a panel on Chicago at the AAG meetings in April. Ron continues to serve as a reviewer for several journals including the Professional Geographer and Historical Geography. Fall semester, he took over the undergraduate major proseminar course and implemented many revisions to the course structure, incorporating numerous guest panels. Ron heads up the department’s human geography working group and chairs the undergrad program committee. He is beginning work on what he hopes will become a book on Santa Fe and the making of the Southwestern style.

**Henri Grissino-Mayer.** During the last year, Henri, Sally Horn, and their colleague, former UT graduate Charles Lafon from Texas A&M University, were able to develop a proposal that would investigate the changing dynamics of wildfires in the Great Smoky Mountains National Park. The proposal was submitted to the Joint Fire Science Program, the research arm of the National Interagency Fire Center in Boise, Idaho. In June, Henri, Charles, and Sally were notified that their proposal was accepted and were awarded $300,000 for the three-year project. Graduate student Lisa LaForest will be the Ph.D. student funded by the project. Henri, Lisa, and Sally, along with other departmental graduate students, have begun the task of collecting samples off the Foothills Parkway near the western edge of the park near its interface with urbanized environments.

Henri was also able to secure funding from the Tennessee Historical Commission for two major projects: (1) to continue the department’s research at the Rocky Mount Historic Site north of Piney Flats, Tennessee, and (2) to investigate the authenticity of the log cabin said to be the home of Governor John Sevier, located at the Marble Springs site in south Knox County. Both projects have major implications for the history of Tennessee. The research concerning the authenticity of the Rocky Mount site will be published in
the journal *Historical Archaeology* this summer, with Henri and graduate student **Saskia van de Gevel** as co-authors. Henri has also had four Ph.D. students apply for and be awarded prestigious Doctoral Dissertation Research Improvement (DDRI) grants from the Geography and Regional Science Program of the National Science Foundation: Saskia van de Gevel (stand dynamics of whitebark pines in Montana), **Georgina DeWeese** (fire history of Table Mountain pines in Virginia), **David Mann** (climate change and fire history of whitebark pines in Montana), and **Justin Hart** (stand dynamics of second-growth hardwood stands on the Cumberland Plateau).

Henri has also done quite a bit of traveling, mostly related to his research. In June 2006, he was accompanied by undergraduate student **Tim Green** and graduate student Saskia van de Gevel to attend an international conference on dendrochronology. Scientists from around the world got to select the keynote speakers, and Henri was selected to give one of five plenary talks (only two from the United States were asked). In addition, Henri and Saskia gave talks about their research and Saskia won Honorable Mention in the Student Paper competition. Tim Green was also able to attend the International Dendroecological Fieldweek held in Mongolia. Later, Henri helped collect samples along the Salmon River in Idaho along with graduate students **Jessica Brogden** and **Lisa LaForest**, assisted by undergraduate student **Maggie Stevens**. In November, Henri and Charles Lafon organized a special session on fire regimes of the southern Appalachian Mountains given at the International Fire ecology and Management Congress held in San Diego, California. Sally Horn contributed by presenting a paper on charcoal evidence of past fires in Great Smoky Mountains National Park.

Henri also continues to be somehow featured on television and radio shows. In January 2006, Henri and his students in the Laboratory of Tree-Ring Science were filmed by a production crew from Los Angeles for a 30-minute segment that was featured on the series *Forensic Files* shown on the Court TV channel. The episode began airing in July and was called “Wood-be Killer.” The episode involved Henri’s contribution to solving a murder case in Collin County, Texas in 2004. Evidence supplied by Henri and his colleague Dr. Madhavi Martin of Oak Ridge National Laboratory helped ensure that the suspect was convicted and sentenced accordingly. In September, Henri was notified that he had been selected by the producers of the Weather Channel in Atlanta that his research on the link between climate during the Little Ice Age and the quality of musical instruments made by Antonio Stradivari was selected as one of the “100 Greatest Moments in Weather History.” Henri traveled to Nashville, Tennessee, where he was interviewed for the five one-hour segment documentary, which will air in spring 2007.

In September 2006, Henri and his colleague Claudia Mora, Department Head of Earth and Planetary Sciences, and their former graduate student **Dana Miller** (now at Oak Ridge National Laboratory) published an article showing a strong and significant link between the chemical properties of tree rings and hurricane events. This research, published in the *Proceedings of the National Academy of Sciences of the USA*, demonstrates that longleaf pine trees along the Atlantic and Gulf Coast seaboards can be used as a proxy for past hurricane occurrences. Essentiallly, any time a hurricane makes landfall in a location where pine trees are present, the water taken up by the tree will be depleted of the isotope oxygen-18, and this depletion can be isolated in the tree-ring record. The research was prominently featured in hundreds of newspapers and magazines around the world. Earlier this year, this research was selected by *Discover Magazine* as one of the Top 100 Science Stories of 2005 and was featured in their January 2006 issue.

**Carol Harden.** Carol is serving the second year of a three-year term as a National Councillor of the Association of American Geographers. As part of that service, she chairs the Publications Committee of the AAG. She was a presidential plenary speaker at the AAG meeting in Chicago in April 2006, and a panelist on the Healthy Departments panel organized by former AAG president Dick Marston at the SWAAG meeting at Oklahoma State University in October, 2006.

Several projects and collaborations in recent years have finally been published, including Grable, J.L. and Harden, C.P.,

Carol took a summer off from work in South America, and has instead focused her studies on the Little River watershed, in east Tennessee, which was designated a “Targeted Watershed” by EPA in 2006. She is working with a group of partner agencies, including Blount County Soil Conservation Service, TVA, Little River Watershed Association, water managers of Maryville and Alcoa, and other UT faculty and is monitoring flow and water quality to determine sources of and to remediate water pollution problems in the river and its tributaries. The Targeted Watershed grant extends from 2006 through 2009.

**Sally Horn.** Sally, Ken Orvis, and graduate students Sarah Deane and Allison Stork began the year on Abaco Island, The Bahamas, where they collected sediment cores for a project funded by the National Geographic Society. Following their return in mid-January Sally left immediately for Buenos Aires, Costa Rica, where she participated in a workshop on fire management organized by The Nature Conservancy. Sally’s task as a workshop instructor was to discuss the results and management implications of her research on postfire vegetation dynamics and long-term fire history in the high-elevation páramos of Costa Rica. Some of the work on which she reported was carried out in collaboration with Ken Orvis and former M.S. student Brandon League. Her long-time colleague Maureen Sánchez of the University of Costa Rica also participated in the workshop, and the two spent an extra day in the area inspecting archaeological sites at which Maureen is directing excavations. Casual conversation at the workshop with Oscar Esquivel Garrote of Chirripó National Park resulted in an opportunity for Joshua Albritton to conduct senior thesis research on fire history in montane forests of the park. Joshua’s field work in the park in summer 2006 was funded by a McClure scholarship.

Shortly after returning from Costa Rica Sally received the excellent news that the grant proposal to NSF that she had submitted with Ken Orvis and Lynn Champion of the College of Arts and Sciences was approved to the tune of $1.96 million dollars. Since that time she and her Co-PIs have been kept rather busy running this program (see related story elsewhere), but all signs are that project is off to a very good start.

Sally, Ken Orvis, and Claudia Mora of the Department of Earth and Planetary Sciences received a separate $200K NSF award to fund their continued analyses of lake sediment evidence of Holocene climate change in the Dominican Republic. Ph.D. students Chad Lane and Tom Strange are GRAs on this grant. Brock Remus’ M.S. thesis and the senior honors thesis that undergraduate John Thomason is pursuing are also related to the NSF project. The grant includes an outreach component at South Doyle Middle School that Chad and Tom are carrying out in collaboration with Mr. Jim Arnett.

Three dedicated middle school science teachers worked with Sally and graduate students Jason Graham, Zack Taylor, and Laura Lieberman Taylor (Earth and Planetary Sciences) over the summer investigating fire history as revealed by charcoal particles in marine sediment cores and in soils of Great Smoky Mountains National Park. Teachers John Beard (Jefferson Middle in Oak Ridge), Lance England (Farragut Middle, Knoxville) and Brian Hardison (Pi Beta Phi Elementary, Gatlinburg) participated in field and lab work as part of the Math and Science Partnership program coordinated by Professor Stuart Elston of the Physics Department. Sally received a grant of $3570 from the Great Smoky Mountains Conservation Association to support radiocarbon dating of charcoal samples collected and sieved by the teachers and graduate students.

Sally participated in panels on “Qua
ternary Paleoenvironments: Current Status and Future Directions” and “Teaching Biogeography” at the March 2006 AAG meeting (the latter panel organized by Chad Lane), and presented research on a case of “salvage paleoecology” carried out with former student John Rodgers. The highlight of the meeting for Sally, however, was the advance work done by Bruce Ralston, who told every single person Sally knows and a whole lot of people she doesn’t know about her successful GK-12 grant before she could tell them. Complete strangers as well as acquaintances repeatedly accosted Sally during the meeting to offer congratulations and questionable financial propositions.

Sally published one book chapter and was co-author on one article that appeared in 2006, and helped more along a half dozen other manuscripts that are now in review or already accepted for publication. The published and accepted manuscripts include:


Ron Kalafsky. Ron’s research focuses on the geographical aspects of industrial activities, especially the role of changing workforces and the export strategies. One current research project entails examining links between manufacturing and economic development in Japan. This is a continuation of a study last summer that was funded by the Japan Foundation. Another looks at the changing Canadian workforce and the implications for the competitiveness of its manufacturers.

Ken Orvis. Ken’s AAG paper this year was on a sediment record in the Dominican Republic that seems to show there were few if any hurricanes crossing the Caribbean before about 4,500 years ago. A paper interpreting a paleosol series exposed on the crest of the Cordillera de Talamanca in Costa Rica suggests the climate was not only colder but much, much drier during the earlier portions of the last glacial cycle (say, 75,000–30,000 years ago) was just accepted for publication in Palaeo3. Ken just returned from a course in Peabody, MA electron microscope. Now student Sarah Deane and he can really whip those electrons around. That will let them do more things with analyzing sand grains, wood, soil particles, and other fun stuff. This year two of Ken’s students received their M.S. degrees, one for a study on the effect of water level changes in TVA reservoirs on migrating shorebirds, and the other for a study of the impacts of the expected hemlock extinction on streams in the Smokies. Other students who finished whose committees he served on studied dendrochronology of longleaf pine, vegetation history in the Bahamas, oil resources under the Cumberland Plateau, how to provide GIS resources tailored to a dispersed nonprofit organization, and the geology (Areology?) exposed by impact craters on Mars. That leaves about 23 other grad committees and another six or so new ones this year.

Lydia Pulsipher. Lydia’s textbook, World Regional Geography: Global Issues, Local Lives, W.H.Freeman, NYC (co-authored with her son, Alex, with the essential help of husband Conrad Goodwin) is now being revised for the 4th edition to come out in 2007. The book is used in about 200 colleges and universities in the U.S. and in several other countries, including Spain, Slovenia, and Bangladesh. For the second year, the course for which this book is used at UT, World Geography, was chosen as the focal point for

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the prominent UT lecture series, *Conversations about World Affairs*, which is part of the Ready for the World project of the university. Many of the 10 speakers featured are people Lydia came across while doing research for the textbook.

Lydia and her husband Mac have restarted their work in Montserrat with a project on a 17th century sugar estate that will be the center of the new post-volcano capital city for the island.

In summer, 2006 they made their usual trip to Slovenia and Central Europe where Lydia has three graduate students doing their research and Lydia and Mac each have research interests as well. Mac is working on understanding the Slovene wine industry in the post-EU accession era. Lydia did ethnography on how a European village was responding to sharply rising fuel oil prices. AAG presentations are planned in 2007 by both. While in Europe, Lydia visited her advisee, Michelle Brym, a candidate for the Ph.D. in UT Geography, who is doing dissertation research in Poland. They met with United States Ambassador Ashe and attended the 4th of July celebration at the Ambassador’s residence in Warsaw.

In November 2005 Lydia was given the Distinguished Mentor of the Year award by the National Council for Geographic Education. The award was presented at the NCCE meeting in Birmingham, AL. A special paper session was held in her honor. UT geography graduate students, Kendra McSweeney, Toby Applegate and Lisa Zagumny gave papers as part of that session.

A British publication on global cruise ship tourism, Cruise Ship Tourism, edited by Australian, Ross Dowling of Edith Cowling University, CABI Publishing, UK, 2006, just came out. Lydia Pulsipher and Lindsey Holderfield (U.T. Geography M.A., 2003) have a article in it about the Eastern Caribbean experience with cruise tourism, entitled, “Cruise Tourism in the Eastern Caribbean: An Anachronism in the Post-colonial Era?” Lindsey conducted research on cruise tourism in Antigua, and this article is about the industry in the wider Eastern Caribbean. The authors argue that the cruise industry markets the ship not the region and inaccurately portrays the region, its culture and its level of living, playing on the geographic ignorance of the American tourist, in order to discourage tourists from disembarking. This retains tourists’ spending for on-board the ship and reduces the cruise-line responsibilities to organize on-island experiences, but, of course, deprives the islands of income from tourist spending. Meanwhile Caribbean people allow their landscapes to be used as a free backdrop for the cruise lines and themselves to be inaccurately depicted as poor and even dangerous. They unnecessarily settle for an intrusive and unprofitable relationship with the cruise industry when in fact Caribbean societies are vibrant and relatively prosperous — firmly in the global middle class with services (education and health) that in some cases exceed those in North America.

**Bruce Ralston.** Bruce is adjusting to life after department headship. Despite relinquishing the reigns, he still manages to have very full days. He currently serves in the College Advising Center, on the Board of Humanities Tennessee, the AAG Census Committee, the United States Geospatial Intelligence Agency’s Education Board, and as Treasurer of the Tennessee Geographic Information Council. During the fall semester he was program chair for TNGIC’s East Tennessee Regional GIS meeting. He helped Humanities Tennessee develop a GIS interface to their cultural database using Google Earth and Google Maps. Working with his MS student, Young-Sook Noh, he developed a series of databases and web-based GIS services for the Legal Aid Societies across the United States. His main research product this fall entails releasing the census related software he has written into the public domain. This includes the executables for the programs, their user manuals, technical whitepapers describing the programming strategies used in his software, and the source code for his most popular programs. These materials were released in mid-November. On the pedagogic front, Bruce is busily working on developing two new courses: one on spatial data management, and one on advanced spatial analysis. He looks forward to working with Dr. Liem Tran on that course.

**John Rehder.** John is now in his fortieth year at Tennessee. His research continues on the ongoing book, “Tennessee’s
Log Buildings: A Folk Tradition”, for the Center for American Places. Data on over 4,000 log buildings in 40+ counties are in the mapping and writing stages. He plans to have the manuscript ready to submit by Spring 2007. As a part of the Log book, John is also writing detailed case studies of four log building sites located in Knox, Sevier, Union, and Sumner Counties. In Union County, in the summer of 2006, John completed the narrative and field photographic collection in the “Between Fences” project for Humanities Tennessee and the Smithsonian. He has recent articles published in The New Encyclopedia of Southern Culture. John also has key roles as lecturer and field trip planner in the NEH Grant “The American South: Geography and Culture” that will be run this summer (2007) with Charles Aiken and Kurt Butefish.

John still enjoys serving on the editorial board for the University of Tennessee Press; it is a three-year commitment to meet and work on a number of manuscripts that come to the Press.

This year, John is much better at golf. He now ranks #6 in a field of 45 in the Men’s Golf Association at Fairways and Greens; and was in 6th place in a field of 10 in the final shootout of the top ten players tournament. Whew! John says he needs do more hiking and fishing this year. As usual he took his annual October two-day overnight hike to Mount LeConte. Judy, Karen, Ken and Angie along with field assistants -grandkids - Allen (8) and Emma (6), are doing fine this year.

Shih-Lung Shaw. Shih-Lung stayed busy this past year! On externally funded projects, he received a two-year research grant of $212,045 from the National Science Foundation’s Geography and Regional Science Program for a project entitled “Towards a GIS-based Analytical Time-Geographic Framework for Physical and Virtual Activities.” This project will extend Hägerstrand’s time geography to develop an extended time-geographic framework of concepts and analysis functions that can support research and applications involving physical and virtual activities and their interactions. In addition, this research will design a space-time GIS to implement the extended time-geographic concepts and analysis functions for studying spatio-temporal activity and interaction patterns. Dr. Hongbo Yu, who received his Ph.D. degree from this department in 2005 and is now an assistant professor at Oklahoma State University, is a co-PI of this NSF project. Shih-Lung also continues to work with Louis Gross (EEB), Michael Berry (Computer Science) and Suzanne Lenhart (Mathematics) on another three-year, $1.4 million National Science Foundation (NSF) project. In addition, Shih-Lung completed a one-year research project of designing and developing an Environmental Justice GIS application for Tennessee Department of Transportation in August of 2006.


Shih-Lung developed a new study abroad course of “Geography 491- Experiencing the Geography of China”. This 3-week, mini-term summer course is designed to offer an opportunity for students to learn the geography of China through first-hand experiences of observing, participating in, and
interacting with people, culture, society, and physical environment inside China. This study abroad course will consist of a series of lectures given by experts in China as well as many field trips in and around Beijing, Xian, and Shanghai to learn and experience various aspects of geography in China. Shih-Lung first had the idea of developing this course during a meeting between the geography faculty and the undergraduate geography majors a couple of years ago, when our undergraduate majors requested the department to offer study abroad courses. Shih-Lung finally was able to put together the logistics (e.g., teaching facilities, meals, housing, field trips and transportation inside China) required on this study abroad course during his visit of China this past summer. Shih-Lung looks forward to leading this study abroad course this coming summer. Sign up for this course! You will have a unique and wonderful experience of learning the Geography of China by visiting and experiencing the country!

Shih-Lung serves on Executive Committee, Graduate Program Committee and Graduate Admissions Committee in the Department. He also shares responsibilities of managing the computer labs. Last year, he chaired a search committee for a faculty position in Geographic Information Science/Physical Geography and served on another search committee member for a faculty position in urban/economic geography. Shih-Lung also continues to serve on the editorial boards of *Journal of Transport Geography* and *Southeastern Geographer* and on the Standards for Geographic Data Committee of the Association of American Geographers (AAG).

Shih-Lung was invited by three separate groups to visit China this past summer. During the first part of his stay in China, Shih-Lung and Harvey Miller, co-authors of their *GIS for Transportation* (GIS-T) book published by the Oxford University Press in 2001, were invited to give a tour of lectures in Beijing (at Beijing University, Tsinghua University, and Chinese Academy of Sciences), in Shanghai (at East China Normal University), and in Nanjing (at Nanjing University). Their hosts also arranged a tour for them to visit the Yellow Mountains (one of the most beautiful mountains in China with its unique landforms). For the second part of his trip, Shih-Lung was invited to Wuhan University where he met with an active GIS-T research group and gave a series of GIS-T lectures to graduate students. While in Wuhan, Shih-Lung also took a three-day cruise ship tour of the Yangtze River and the Three Gorges Dam. For the last segment of his visit, Shih-Lung returned to Beijing and worked with researchers at the Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences.

**Liem Tran.** Since moving to Tennessee in August 2006, Liem has been busy in developing and expanding his connections with colleagues at the Oak Ridge National Laboratory, TDEC, the Great Smoky Mountains National Park, and TVA. He is continuing to participate in the U.S. EPA’s Regional Vulnerability Assessment (ReVA) program and in the process of transferring ReVA funding to UT which covers 20% of his time and support for one graduate student. Liem is currently helping Thomas Burley in writing a proposal for TDEC to study the connection between land use change and water quality in Tennessee. Collaborating with Keith Langdon at the Great Smoky Mountains National Park, Tran has submitted a proposal to the Tallassee Fund to develop a GIS database for ecological vulnerability assessment of Tapoco Project’s operations. Currently he is working on an EPA proposal focusing on uncertainty analyses of models in integrated environmental assessments. Funded by EPA, he traveled to Chicago in early October to work with colleagues at EPA Region 5 on environmental integrated assessment of the Mid-West. He will attend the AAG 2007 Meeting in San Francisco to present one of his newly-developed methods for environmental integrated assessment. In terms of teaching, he is eager to share various new approaches/methods (e.g., data mining, neural networks) used in environmental studies with students in his new course Environmental Integrated Assessment scheduled in Spring 2007. Personally, his family has happily settled in the town of Farragut and adopted one lovely dog named Baby.

**Will Fontanez, Pam Sharpe, and Denise Stansberry** are all well and remain integral to the success of the Department.
Students, Faculty and Alumni in Action

This photo of Geography Department alumni was taken at the Binghamton Geomorphology Symposium, held at USC (Columbia, SC) in October 2006. From left to right: Dan Royall (UNC Greensboro), Evan Hart (Tennessee Technological Univ.), Carol Harden, Lisa Boulton (Univ. Alabama) and Judy Grable (Valdosta State Univ., GA). All Ph.D.’s!

[Right] Congratulations to undergraduate Geography minor Dena White who was elected Miss Homecoming 2006!

[Left] Carol Harden in Third Creek with two students from her Water Resources class (Abe Whalley, left, and Geography major Nicholas Feder, right).
Shih-Lung Shaw took this unique picture of the Three Gorges while touring the Yangtze River in China this summer. His question..."If it is worth putting on a ten Yuan note, should it be flooded?"

Shih-Lung was in China lecturing on GIS for Transportation among other research activities. Please see his write-up on page 14 for details.

Andrew Wunderlich and his Boss’ Boss at the National Geographic Society.

[Below] Shih-Lung Shaw

[Right] Look who Sally Horn ran into at the Atlanta airport! Mike Mitchell (M.S. 1990) is still in Texas and has the shirt to prove it. He works for Environmental Data Solutions Group, LLC in the field of information technology as applied to environmental, health, and safety issues. Mike is married to Joanna, to whom he was introduced by Joanna’s brother, former student Doug Baird. They have three children.
James Baginski is a first year M.S. candidate. He received his B.A. in the Geography Department at Indiana University of Pennsylvania in the spring of 2005. James is interested in many topics pertaining to human geography, with particular interests in transportation and retail. His work, with three PhD graduates of UT throughout his undergraduate career at IUP, influenced him to further his academic career in Knoxville. Every morning, James thoroughly enjoys his bicycle commute on the Third Creek Greenway to the Burchfield Geography Building.

Andy Baker is a second year Ph.D. student working under the tutelage of Tom Bell. He received his B.S. in Geography and a B.S. in Finance from Eastern Illinois University in the spring of 2003. In June 2005, Andy completed his M.A. in Geography at Ohio University where he studied both the historical and cultural geography of NASCAR. As a graduate student in the UT Geography Department, Andy is considering research in urban and cultural geography, adding a specialization in Geographic Information Science. His current research on commuter patterns in Metropolitan Knoxville was and will be presented at the East Tennessee GIS Users Conference, the SEDAAG regional meeting, and the AAG Annual meeting. In 2006, Andy became a Teaching Associate at UT, instructing the introductory World Regional Geography course, which he has instructed the previous two summers at Ivy Tech Community College in his hometown of Indianapolis, IN.

Michelle Brym is a fourth year Ph.D. graduate student. She received her M.A. in Geography from Miami University in 2002 and her B.A. in Diplomacy and Foreign Affairs with a minor in Latin American Studies also from Miami University in 2000. Her Master thesis entitled, “Ecotourism and Sustainable Development” explored the benefits and disadvantages of ecotourism for conservation and development projects in the Northeastern Brazilian state of Bahia. She is currently working on her dissertation research which focuses on the express of national identity by Polish migrants working in Germany but living in Poland. This topic combines her interests in European Union expansion, borderlands and migration. For the last three summers she has traveled to Central Europe as part of her preliminary research with support from the W.K. McClure Fund, McCloskey Fund and the University of Viadrina.

Thomas Burley is a first year M.S. student. He graduated cum laude from the University of Tennessee with a B.S. in Business Administration/Supply Chain Management and a B.A. in Geography in December 2004. He is currently a full-time staff Research Associate with The Institute for a Secure and Sustainable Environment (ISSE) at the University of Tennessee. He has been working with the National Biological Information Infrastructure-Southern Appalachian Information Node (NBII-SAIN) Program of the U.S. Geological Survey-Biological Resources Discipline since June of 2004 on projects focused on biological informatics and adaptive natural resource management. His current research work and interests encompass geographic information science; development of standards; data visualization, interpretation, and management; and decision support. He is also an FGDC metadata trainer with the NBII national metadata training program. His graduate work and future work interests include examining land use change and its effects on water quality; predictive and suitability modeling; and human and environmental risk assessment.

Kendrick Curtis is a third year Ph.D. student. He graduated with a B.S. from the University of North Alabama in the spring of 2000. In December 2003 he graduated with a M.S. in geography from the University of Tennessee. From 2002 until 2004 Kendrick was employed as a Community Planner with the Tennessee Department of Economic and Community Development’s
Local Planning Assistance Office. His research interests include land development on the urban/rural fringe and GIS. Kendrick’s dissertation research concerns the emerging use of decentralized wastewater treatment technology and its potential for freeing development from conventional wastewater infrastructure constraints. In August of 2006 the Tennessee Advisory Commission on Intergovernmental Relations (TACIR) granted Kendrick funding to research the relation of these “decentralized” developments to the state’s comprehensive growth policy under Public Chapter 1101.

Angela Danovi is a second year M.S. student. She received her B.S. in Plant and Soil Sciences from the College of Agriculture at the University of Tennessee in May 2003. Currently, Angela is pursuing her thesis research in phosphorus loading of stream bed sediments. She proposes that phosphorus loads in sediments can signal differences in land uses and stream inputs of phosphorus. Angela is being supported this year through a graduate research fellowship provided by the GK-12 National Science Foundation grant. As a GK-12 fellow, Angela is working with Ms. Betsy Tillett and her 6th grade students at Carpenter’s Middle School in Blount County, Tennessee. Twice per week Angela works directly with Ms. Tillett’s science classes by creating interactive labs, providing enhanced curriculum content, and developing opportunities for students to participate in ongoing science research. Angela will complete her fellowship in summer 2007 and also plans to finish her degree in 2007.

Jeff Dahoda is a M.S. student focusing on GIS applications in water resources, working with advisor Carol Harden. His thesis, GIS Analysis of Factors Affecting Acidity in Crab Orchard Creek Watershed, Cumberland and Morgan Counties, Tennessee, analyzes flow paths to TDEC sampling sites relative to the spatial distribution of surface mining and other factors affecting stream acidity. He previously received a B.A. in Geology from Miami University (1980) and a M.S. in Exercise Physiology from the University of Wyoming (1996). In addition to being a graduate teaching assistant, Jeff has worked as a GIS Analyst on UT contracts for the Southeastern Water Policy Initiative, the Beaver Creek (TN) Watershed Plan, and the New River (TN) Sedimentation Model Project. He began working for Tetra Tech, Inc. in Oak Ridge this fall while finishing his thesis.

Sarah Deane is a second year M.S. student. She received her B.A. in Geography from the University of Tennessee in the spring of 2003. After graduating, Sarah worked in Fairfax, VA as a Hazard Mapping Analyst for an engineering firm. Her current interests include climatology and conservation as well as environmental GIS. Sarah’s thesis work involves paleoclimatology and the study of quartz sand grains using a scanning electron microscope. Specifically, she is most interested in analyzing possible glacigenic samples from Costa Rica and the Dominican Republic, and establishing a true statistical test and protocol for sediment provenances based on quartz sand grain microtexture. Currently, she is working as a graduate fellow with Seymour Middle School as part of the National Science Foundation’s GK-12 grant.

Kristian Dennis is a third year M.S. student. Kristian received his B.S. in Communications in 1995 and his B.A. in Geography in 2004 from the University of Tennessee. His research interests include, urban geography, and economic geography. The topic of Kristian’s thesis is “Testing Heterolocalism: an Assessment of Hispanic Population Patterns in the Southeastern United States” in which he will examine the rapid growth settlement patterns of the Latino population in 15 cities across the U.S. South. Previously, Kristian has worked on “The Beaver Creek Green Infrastructure Plan” through the School of Architecture and the KGIS M2E (Migration to ESRI Enterprise) upgrade project in conjunction with CH2M Hill. Kristian plans to graduate in Spring 2007.

Georgina DeWeese is a fifth year Ph.D. candidate in the Geography Department. She entered the Ph.D. program to study fire regimes in eastern yellow pine stands after a long, unsatisfying career in GIS. Her dissertation work is related to reconstructing the historic fire regimes of yellow pine stands in the Virginia Appalachians. Georgina has
given numerous workshops and talks on the subject for the Nature Conservancy, Park Service, and Forest Service. She is also interested in dendroarchaeology in the southeast and has participated in work at The Hermitage, Nashville and Rocky Mount, Johnson City.

Timothy Green is a first year M.S. student. He received his B.A. in Geography from the University of Tennessee in the spring of 2006. Tim’s academic interests focus on using geographic technologies such as GIS and Remote Sensing to study environmental processes. This past summer he traveled to Beijing, China, and Ulaanbaatar, Mongolia, to attend the 7th annual International Conference on Dendrochronology. This trip was funded by the University of Tennessee International House with the W.K. McClure Fund for the Study of World Affairs. He currently works as a research assistant for Tennessee Valley Authority.

Joe Guttmann is a Ph.D. student working with Dr. Tom Bell. He received his B.A. in History from Wake Forest University in 1995. After attending Marshall University, he earned his M.A. in Secondary Education in 2000 and a M.A. in Geography in 2001. Joe’s doctoral research will focus on the factors that affect a farmer’s decision to either continue or exit agriculture using the eastern U.S. apple industry as a case study. Beginning in spring 2006, Joe has been teaching world regional classes at Clemson University where he joined a faculty that includes Tennessee alumnus Christa Smith. This past summer, Joe worked as cave guide at Mammoth Cave National Park where he enjoyed telling visitors all about the wonders of karst topography interspersed with some bad cave jokes – the lowest form of humor. This was Joe’s sixth season with the National Park Service.

Justin Hart is a third year Ph.D. candidate with concentrations in Biogeography and Forest Dynamics under Dr. Henri Grissino-Mayer. Justin plans to complete all degree requirements in May and graduate August 2007. He received a B.S. degree in Environmental and Earth Science in 2002 from the University of Memphis. In 2004, he received a M.S. degree with concentrations in Biogeography and Environmental Science under Dr. David Shankman at the University of Alabama. Justin’s dissertation research concerns disturbance dynamics in secondary hardwood forests on the Cumberland Plateau in Tennessee. During the past year, he also conducted research in forests on the Western Highland Rim, the Ridge and Valley, and the Coastal Plain.

Chad Hellwinckel grew up in Olathe, Kansas and attended St. Olaf College in Minnesota. He has worked on agricultural energy issues at the Land Institute in Salina Kansas, as a fire lookout on the North Rim of the Grand Canyon, as part of the wilderness trail crew in Gila National Forest, and as a Peace Corps Volunteer in Panama. He is currently a research associate at the Policy Analysis Center at the University of Tennessee and a fourth year graduate student in Geography. Chad is building a joint economic-biogeophysical model of the U.S. agricultural sector, for the purpose of estimating the amount and location of carbon sequestration potential in agricultural soils. His research is funded by a four year NASA grant. The model will also estimate regional incentive levels and total costs to motivate farmers to adopt no-tillage practices in order realize the potential sequestration of atmospheric carbon within U.S. agricultural soils. Chad hopes that his research will be of use to policy makers in the creation of an agricultural carbon sequestration market.

Xia Huang is a first year M.S. student. She received her B.S. in GIS from Beijing Normal University in July, 2006. Her interests include GIS, Time Geography and Transportation. Her current focus is on temporal GIS and Time Geography. Xia is a research assistant on an NSF project whose topic is “Towards a GIS-based Analytical Time-geographic Framework with Physical and Virtual Activities.” She is extending the time geographic framework in both virtual and physical spaces and designing a space-time geographic information system to implement it.

Kevin Kempf is a M.S. student in the Geography Department. He is studying the Geography of American big-college marching bands with emphasis on their historical devel-
opment and regional variations and styles. Having worked happily for two years as a teaching assistant within the department, he is now a research assistant for NBII-SAIN, where he has a hand in the creation of AXL files and ASP-generated XML web service files, as well as the proper management and display of geographic data stored in geodatabases.

Sara Beth Keough is a fourth year Ph.D. student in the Geography Department. She received her B.S. in History and B.A. in Spanish from Jacksonville University (2000) and her M.S. in Geography from Virginia Tech (2003). Sara Beth’s research interests lie in cultural policy and the influence of media, culture and technology, qualitative and quantitative methods, and urban and economic geography with a regional specialization in Canada. Her dissertation, Canadian Cultural Policy and Newfoundland Music on the Radio: Local Identities and Global Implications, looks at the impact of Canada’s cultural policy for radio on the radio market in St. John’s, Newfoundland. She has spent the last four summers in Newfoundland interviewing radio station managers, DJs, music librarians, programmers, and listeners to understand the links between a federally-implemented cultural policy, local (Newfoundland) interpretations of the policy, and the ways in which the policy has brought local music to an international (global) level. Sara Beth received funding from the Canadian Government, the AAG, the Society for Women Geographers, the W.K. McClure Foundation, and the UT Geography Department for her research. She was also one of only two geographers invited to attend the Connect Seminar in Ottawa for social scientists whose research focuses on Canada. When she’s not in Canada, Sara Beth is busy writing the remaining chapters of her dissertation and applying for jobs, as she hopes to finish her degree in 2007.

Lisa B. LaForest is a fourth year Ph.D. student working in the Laboratory of Tree-Ring Science with Dr. Henri Grissino-Mayer. For her dissertation research, she is investigating historic fire regimes and stand structure dynamics in yellow pine and mixed hardwood-pine forests in the Great Smoky Mountains National Park. This study is funded by the Joint Fire Science Program, a partnership of six federal agencies within the Department of the Interior. Data and interpretations from this research will be provided to park personnel for inclusion in land management plans. Lisa has experience in paleoecological research using sediment cores with Dr. Sally P. Horn at U.T. in addition to degrees in Biology (B.S.) and Environmental Studies (M.S.) from George Mason University and Longwood University, respectively. In her spare time, Lisa is enjoying life with her new husband and “bonus” family.

Chad Lane is a fourth year Ph.D. candidate. He received his M.S. in Geography at the University of Tennessee in the spring of 2003 and received his B.S. in Environmental Science from the University of Denver in the spring of 2001. Chad is interested in human-environment interactions, variations in tropical vegetation through time, and climate change. Past variations in climate have had drastic impacts on human populations and vegetation worldwide and will continue to do so well into the future. Understanding these climate variations and their environmental impacts is essential for predicting and preparing for future climatic changes. Chad’s study sites are small lakes located at mid-elevations on the southern flank of the Cordillera Central in the Dominican Republic. Chad is analyzing stable isotopes in organic matter and calcareous deposits, fossil pollen grains, and fossil charcoal fragments in sediment cores from multiple lakes to reconstruct human, climate, and vegetation history. His dissertation research grew from a National Geographic Society-funded project on environmental history in the Dominican Republic directed by Professors Ken Orvis and Sally Horn. Chad is also co-advised by Dr. Claudia Mora in the Department of Earth and Planetary Sciences. Chad’s research has been funded by the Global Environmental Change Research Group at the University of Tennessee, a Hilton-Smith Fellowship, a Yates Dissertation Fellowship, and a NSF grant awarded to Drs. Horn, Mora, and Orvis. Chad has also received two dissertation grants, one from the Association of American Geographers (AAG) and one from the Biogeography Specialty Group of the AAG. Last year, Chad also acquired a grant from the
Academic Keys Foundation to fund two undergraduate research assistants in the Laboratory of Paleoenvironmental Research (LPR). In addition, Chad has been reelected to his second term as the Graduate Student Representative for the Biogeography Specialty Group of the AAG. Chad is currently a graduate research assistant in the LPR.

**Mike Meyers** is a third year Ph.D. student. He received his M.S. in Geography in 2004 from the University of Tennessee. His research interests are climate-human health interactions; demography of the human sex ratio at birth; and epidemiology and geographic information systems. He is currently employed by the University of Tennessee Institute for Public Service and plans to continue in that position following graduation in 2008. His previous employment includes eight years as a regional planner for the U.S. Department of Interior and six years as a partner in an environmental consulting firm.

**Alison Miller**, received her B.S. in Environmental Geography from Valdosta State University in spring of 2000. She then worked for the South Georgia Regional Development Center as a Regional GIS Project Manager until 2003, when she joined the Department of Geography at UT to pursue her M.S. Even as an undergraduate student, she was interested in dendrochronology, or the science of tree-ring dating. She co-authored a paper title “Tree-Ring Dating and the Ethnohistory of the Naval Stores Industry in Southern Georgia” that was published in Tree-Ring Research in 2001. While Alison has analyzed tree rings from Oregon, Georgia, Dominican Republic, and Switzerland, she chose The Bahamas as the site of her main research. Specifically, she is studying the fire history of Bahamian pine (Pinus caribaea var. bahamensis) (Griseb. W.H. Barrett & Golfari) forests on Abaco Island. Alison plans to graduate in fall 2006. She is currently employed by the University of Tennessee Graduate School as an IT Specialist I.

**Christopher Morris** is a first year M.S. student. He received his B.S. in Geography (emphasis in Meteorology) with minors in Mathematics and Physics from Ohio University in Spring 2006. Included in his under

**Young-Sook Noh** is an M.S. student studying GIS. She received her B.S degree in Food Science at Seoul Women’s University and master of Engineering degree in Food Biotechnology from Yonsei University in Seoul, Korea. She spent several years working as a researcher for a food company. Currently, Young-Sook is working with Dr. Ralston to complete her current project of developing Census 2000 based-digital databases for Legal Aid areas throughout the United States along with a web-based mapping service. The purpose of this project is to provide racial and ethnic, socioeconomic and housing databases for the Legal Aid districts, which support and give an equal justice for the elderly, abused, and low-income people, by providing a broad scope of legal assistance. Young-Sook graduated in December 2006.

**Melany Noltenius** is a third year Ph.D. student studying Transportation Geography and GIS. Her previous degrees include a M. S. in Transportation Planning in 2005, and a B.S. in Communications. She is researching how the inner city trips taken after a mandatory evacuation order has been given, but before evacuation takes place, effect the calculation of the estimated time of evacuation. In 2005, she worked as a research assistant for the Center for Transportation Research analyzing an urban land use—transportation modeling system. She currently serves as Secretary to the student chapter of the Institute of Transportation Engineers, and is working at the Innovative Technology Center at UTK.

**Jamie Phillips** is a second year M.S. student. He graduated from the University of Tennessee with a B.S. in Geology. Jamie’s research interests are in GIS and water resources. Currently, he is working with Dr. Harden using GIS to classify headwater catchments in the Little River Watershed in Blount County, Tennessee.
Tracy Pollock is a first year M.S. student. She received her B.S. in Geology at the University of Tennessee in May, 2003. After completing her Bachelor’s degree, she spent 3 years doing soil analysis and studying karst topography for Geotek Engineering in Nashville, TN. Her current interests are in cartography and GIS. She is currently a T.A. for Physical Geography 131.

Robert Stewart is a Ph.D. student in the Geography Department and a senior research associate at the University of Tennessee. Robert is developing geospatial decision models that incorporate various and sometimes uncertain sources of qualitative and quantitative information. In many cases, the primary information needed to support a decision, is either too costly or too dangerous to acquire. Secondary forms of information that are related to the primary attribute may be easier to collect and may provide adequate support in the decision process. Examples include assessing subsurface radiological contamination through related geophysical knowledge. Robert is employing a variety of spatio-temporal methods from random field modeling, risk assessment, and GIS to accomplish this. In addition, he is building a software package to support these activities. This research is also part of the federally sponsored work that he does here at UT as a research associate.

Tom Strange is a first year Ph.D. student and recently moved to Knoxville in August 2006. He received degrees from the University of Southern Mississippi in Geography. His M.S. research focused on the inter-annual variability and seasonality of pollen deposition on the Quelccaya Ice Cap, southern Peru. As a physical geographer, Tom’s interests focus on Quaternary paleoecology, palynology, paleoclimatology, global environmental change, and biogeography. Tom’s dissertation studies will focus on Holocene vegetation and climate change in the N.E. Caribbean by analyzing lake sediment cores from the Dominican Republic. This research is funded by an NSF grant directed by Professors Sally Horn and Ken Orvis. Tom is currently a Teaching Assistant for Geography 131 as well as a Research Assistant in the Laboratory of Paleoenvironmental Research.

Zack Taylor is a second year Ph.D. student working in the Laboratory of Paleoenvironmental Research. Zack received a M.S. from UT in 2005 and B.S. from the University of Denver in 2003. His research uses a variety of techniques to analyze lake sediment cores such as pollen, charcoal, and stable carbon isotope ratios. Zack’s M.S. thesis work used these methods to compile a 5500 year record from a lake in eastern Bolivia. For his dissertation, Zack is building on earlier work done at UT using stable carbon isotope ratios of organic matter in lake sediments to estimate the extent of prehistoric agriculture. This academic year Zack is a NSF GK-12 Graduate Fellow, spending ten hours a week at Heritage Middle School assisting earth science education. Though the middle school classroom is quite different from UT, the experience has been rewarding. In addition to presenting at the AAG meeting in San Francisco, Zack is also preparing manuscripts for Palaeogeography, Palaeoclimatology, Palaeoecology and the Journal of Biogeography.

Saskia L. van de Gevel is a Ph.D. candidate working in the Laboratory of Tree-Ring Science under Dr. Henri Grissino-Mayer.

Chris Underwood is a M.S. student. He received his B.S. in Environmental Health from East Tennessee State University in the fall of 1997. His current focus is on dendrochronology and climatology in central Oregon. Specifically, he is using tree rings to reconstruct the climate history in the Pacific Northwest. Upon finishing his M.S. requirements, he plans to remain in the Department of Geography here at UT and obtain his Ph.D. His dissertation research will focus on the use of soil charcoal to reconstruct forest-fire histories in the Great Smoky Mountains National Park. Chris is a GK-12 Fellow, and is working with Mr. Greg Metcalf’s seventh grade classes at Heritage Middle School in Maryville. The GK-12 program is funded by the National Science Foundation and places graduate students interested in the earth sciences in secondary school classrooms. The Fellows provide valuable opportunities to the secondary school students by introducing examples of current scientific research into their classrooms.

Saskia L. van de Gevel is a Ph.D. candidate working in the Laboratory of Tree-Ring Science under Dr. Henri Grissino-Mayer.
She received her B.S. degree in Forest Science from Pennsylvania State University in 2000 and during that time she participated in internships at Harvard Forest and Tall Timber Research Station and worked on dendroecological projects in Dr. Marc Abram’s Forest Ecology Laboratory. In 2002, Saskia received a M.S. degree in Forest Ecology from Southern Illinois University under Dr. Charles M. Ruffner. Her thesis research investigated the influence of land-use history on the forest development of the Illinois Ozark Hills. Saskia has been involved with many research projects at UT’s Laboratory of Tree-Ring Science including dating historical structures and quantifying land-use history through forest composition changes in Tennessee. Currently, her dissertation research investigates the complex stand dynamics and disturbance history of endangered whitebark pine ecosystems in the northern Rocky Mountains. Saskia’s whitebark pine research has been supported by the Global Environmental Change Research Group at the University of Tennessee and a National Science Foundation Doctoral Dissertation Research Improvement Grant. This fall, Saskia was awarded a GK-12 fellowship through an NSF grant awarded to Drs. Sally Horn, Ken Orvis, and Lynn Champion to help bring the excitement of climate and environmental history research to rural middle schools in east Tennessee.

Anne Wambersie is a first year M.S. student. She received a B.A. in Geography from the University of Mary Washington in May 2006. She is focused on fluvial geomorphology and human impacts on the environment especially in relation to coal mining and acid mine drainage. She is currently a teaching assistant for Economic Geography and the Geography of Tennessee.

Brian Watson is a first year M.S. student. He received his B.A. in Environmental Studies, an interdisciplinary program, from the University of Tennessee in the spring of 2006. His current research interests include fluvial processes and human interactions with the physical environment. Brian has worked in the Laboratory of Tree Ring Science on a project for the Siskiyou National Forest in Oregon, and has assisted Saskia van de Gevel with her research in Northwest Montana during the summer of 2006. Brian has also had three years of student organizing experience with the organization, Students Promoting Environmental Action in Knoxville (SPEAK).

Jonathan Witcoski is a third year M.S. student. He obtained a B.A. from Penn State in Anthropology and Geography with a minor in GIS. His Thesis is entitled “An Analysis of the Spatial Distribution of Chiefdom Settlements: Modeling the Mississippian Culture in the Tennessee and Little Tennessee River Valleys”. His projected graduation date is May 2007. After graduation Jonathan plans to enter into the real world by finding a job in the GIS field.

Ling Yin is a first year Ph.D. student. She received her M.S. in GIS and B.S. in Geography from Nanjing University in China respectively in 2005 and 2002. Her research interests include GIScience, transportation, and environmental modeling. Now, she is a research assistant in the grid computing project for ecological modeling and spatial control, which is funded by National Science Foundation. Specifically, she is developing a GIS-based Cellular Automata model of fire spread simulations within the ArcGIS environment via ArcObjects. Based on those work, she hopes to provide useful extensions to the development of GIS functions for simulating complex real world processes. Meanwhile, as a research collaborator of another National Science Foundation project about GIS-based analytical Time-geographic framework, she is also studying the intersections between physical space and virtual space to extend the classical analytical framework. In the future study, she plans to research the transportation and Time-geographic framework with physical and virtual activities, and do her dissertation on related topics. In the last four years, she joined several research programs in land use management, land use planning and land use planning information systems in China.
Alumni Updates

We heard from a few of our alumni after the request went out in the Spring 2006 edition of the Newsletter. Some sent brief updates (below). Thank you for letting us know how you are doing. If you would like to provide an update for the '07/'08 newsletter, just email it to Kurt Butefish at kbutefis@utk.edu or complete the form on page 27 and mail it to the department.

Doug Baird
B.A. 1987, M.S. 1990

After spending 11-years (yes, that’s eleven years), in Alaska – Doug has been displaced to Maryland by his employer - National Oceanic and Atmospheric Administration (NOAA). He was promoted to the rank of Commander in the NOAA Corps earlier in 2006, and is currently assigned as Chief of the Operations Branch in the Office of Coast Survey. (Coast Survey celebrates 200 years of science and service to the nation in 2007. Starting with the establishment of the U.S. Coast and Geodetic Survey in 1807 by Thomas Jefferson, much of America’s scientific heritage is rooted in NOAA.) Doug is married and has two sons.

John Benhart, Jr.
Ph.D. 1972

John has a new book published by the University of Tennessee Press entitled “Appalachian Aspirations: The Geography of Urbanization and Development in the Upper Tennessee River Valley 1865-1900.” John plans a visit Knoxville during March 22-25 to promote the book with a book signing, possibly to do a colloquium on Thursday March 22, and to attend the Appalachian Studies Association annual meetings in Maryville, Tennessee. Some of you might recall that, John’s dad, John Benhart, Sr. is also a PhD graduate of our department.

Charles P. Benziger
B.A. Geology 1948

Charles is retired after 36 years as Chief Geologist from Chas T. Main, Inc. of Boston, Massachusetts. He has returned to Tennessee, lives in Farragut and now consults on hydroelectric projects, worldwide.

Walter Bramkamp
M.S. 1978

Walter is still doing real estate work for the FAA and volunteering at the Central Park Zoo in New York City. He is on the membership task force of South Street Seaport Museum in NYC as well and is currently taking sailing classes.

Sheila Carman
M.A. 1996

[Submitted by Lydia Pulsipher] Sheila continues to do pro bono work in Jamaica, where she served as a Peace Corps volunteer shortly after completing her M.A. in Geography at UT. As you can see from the communication following, she continues to be an activist for her Jamaican community.

“I submitted a proposal to the Atlanta chapter of Engineers Without Borders in June. They awarded the grant in August 2006. The project is in my Peace Corps assigned community here. I have continued to stay involved with the group. The current road is not drivable and hinders development including proper electric service. I am the facilitator/ liaison. This is all gratis work. However, I am agreeable if they want to sponsor me to come back during the actual construction.”

“I connected with a small non-profit in Chattanooga. (Caribbean Student Environmental Alliance). Mary Beth, director and only real employee, has been supportive and helped me research funding opportunities. She was the founder and first director of the Chattanooga Nature Center. We now consider me a program manager. It may lead to some income
for me if the alliance continues to grow. The web site is: www.caribbean-sea.org.”

“I am working on a proposal to the Environmental Foundation of Jamaica for a nature trail and guided tours through my community and into the bush. It is the closest “country” area to the center of town and the new marina. Small cruise ships are coming regularly in the winter. In addition, Michael Chin, director of NCB BANK, is from Portland. He is building a new courthouse here and has plans to build a large hotel. Also, the Port Authority continues to develop sites here. The general feeling is that Port Antonio will be attracting more tourists.”

Please Keep Us Up To Date

Please share your news with us, and other alumni, *especially if you have a new address*. Return this form to Kurt Butefish, 304 Burchfiel Geography Building, Knoxville, TN 37996-0925, or email to kbutefis@utk.edu. We’ll include your update in the next newsletter.

Name: ________________________________________________________________

Degree(s) if any; and Year(s): ____________________________________________

Address: __________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Email: _____________________________________________________________________

NEWS… (employment, career activities, family, achievements, awards, publications, travel, other... please attach additional sheets as necessary):
Degrees Granted Since December 2005

The following is a list of the Ph.D. and Masters Degrees awarded by the Department since December 2005. The person granted the degree, dissertation or thesis title, and committee chair are included.

PhDs

Boulton, Mary Alice  (Dec. 2005)
Spatio-temporal Patterns of Geomorphic Adjustment in Channelized Tributary Streams of the Lower Hatchie River Basin, West Tennessee.
Carol Harden

Lafrenz, Martin D.  (Dec. 2005)
A Watershed Classification System Based on Headwater Contributing Areas in Great Smoky Mountains National Park
Carol Harden

Stork, Allison J.  (Aug. 2006)
A Paleoecological History of West Pond on Great Abaco Island, The Bahamas, Based on Pollen and Charcoal Analyses of Lake Sediments
Sally Horn

Hill, Amy S.  (Dec. 2006)
Governing the Soil: Explaining the Distribution of Preserved Farmland in Pennsylvania
Charles Aiken

McDaniel, Paul N.  (Dec. 2006)
An International Corridor in the Making: Immigrant-owned Entrepreneurial Establishments in Birmingham, Alabama
Anita Drever

Noh, Young-Sook  (Dec. 2006)
Non-thesis Project – The Legal Aid Mapping Project
Bruce Ralston

Trail, Elizabeth R.  (Dec. 2006)
The Spatial Form of Cape Town in Post-Apartheid South Africa
Ron Foresta

White, Melanie J.  (Dec. 2006)
Non-thesis Project – Using Geographic Information Systems as a Tool for the Installation Restoration Program at the 45th Space Wing, Cape Canaveral, Florida
Bruce Ralston

Masters

Spatiotemporal Variations in the Fire Regimes of Whitebark Pine (Pinus albicaulis Engelm.) Forests, Western Montana, USA, and Their Management Implications
Henry Grissino-Mayer

Mortality in Great Smoky Mountains National Park: An Assessment of Potential Impacts to Riparian Ecosystems
Ken Orvis

Smith, Matthew D.  (May 2006)
Spatiotemporal Modeling of Shorebird Habitat Availability at Rankin Wildlife Management Area, Tennessee
Ken Orvis
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The University does not discriminate on the basis of race, sex, or disability in its education programs and activities pursuant to the requirements of Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1979, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act (ADA) of 1990.

Inquiries and charges of violations concerning Title VI, Title IX, Section 504, ADA or the Age Discrimination in Employment Act (ADEA) or any of the other above referenced policies should be directed to the Office of Equity and Diversity (OED), 1840 Melrose Avenue, Knoxville, TN 37996-3560, telephone (865) 974-2498 (V/TTY available) or 974-2440. Requests for accommodation of a disability should be directed to the ADA Coordinator at the UTK Office of Human Resources, 600 Henley Street, Knoxville, TN 37996-4125.