

NEWSLETTER

G E O G R A P H Y

THE UNIVERSITY of TENNESSEE



A Dickens of a Time

Bruce A. Ralston, Head

“It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity...” Dickens’ opening to A Tale of Two Cities well describes the past year or so for the Department, and beyond. It has been the worst of times—we witnessed the horror of the September 11, 2001 attacks and, like all people, were affected in ways both obvious and subtle. We had students called away to duty immediately after the attacks, and we continue to have some of our ranks serving in Afghanistan. Some of us lost friends and colleagues in the crash at the Pentagon. The events of the past year have only highlighted the need for global understanding, the need for solid geographic education. In July of 2002, we were incredulous as the University was shut down because of a lack of funds; faculty, staff and research assistants had to apply for permission to come to work! We continue to struggle with issues such as graduate student funding, salary compression, inadequate compensation for staff, and more demand for our courses than we can currently handle.

Yet, it has been the best of times. In fact, there are so many good things happening in the Department that I can only mention a few. (Several of these are described in more detail in articles that follow.) We have added a new faculty member, Dr. Anita Drever—a bright, energetic, freshly minted Ph.D. from UCLA. (I remember being a freshly minted Ph.D. myself, but I don’t believe I ever had Anita’s energy level.) Anita brings her interests in Population Geography to the Department. Her appointment was made possible in part by the generosity of the J. Harrison and Robbie C. Livingston Endowment. We can now offer courses on Population Geography on a regular basis. In addition, Dr. Drever brings expertise in Urban Geography, Quantitative Methods, and Gender Studies to the Department. Anita is not the only new face around here. Rebecca Keller recently joined our administrative staff. While only with us for a short while, Rebecca seems like an excellent addition to our staff. She and Pam Sharpe have their hands full keeping up with the demands of running such an active department.

Research in the Department has continued at a brisk pace. The Research Initiatives announced in our last Newsletter give our faculty and graduate students

opportunities to team up with colleagues from across the campus on issues of common interest. Faculty members involved in the Initiatives include Drs. Grissino-Mayer, Harden, Horn, Orvis, Ralston, and Shaw, along with a host of students. Since the spring of 2001 (the date of last Newsletter), several faculty members have published books (Pulsipher, Shaw, and Ralston), interactive CDs (Bell and Gripshover), and numerous articles. Meanwhile, award-winning authors Aiken and Rehder have sent their latest book manuscripts off to their editors. Grants and contracts continue to come in and they span the breadth of the Department, from dendrochronology to biogeography to water resources to transportation to regional cultural diversity.

Our commitment to quality education is as strong as ever. Dr. Ron Foresta’s new Global Economy course is a timely addition to our curriculum. Henri Grissino-Mayer is gearing up new classes in dendrochronology (along with writing numerous successful grant applications, papers, and making \$20 million decisions!), and our courses at all levels remain very popular. Our upper division and graduate level courses attract students from across the campus as the relevance of Geography and the reputation of the faculty continue to grow.

Service plays a vital role in the life of the department. The Tennessee Geographic Alliance, under the direction of Kurt Butefish, continues to be a valued part of the Department, and I am pleased to report that even in these times of financial uncertainty, the University has seen fit to continue its support for the Alliance. This past summer the Alliance filled the Burchfiel Geography Building with teachers and students from around the country where they took part in several outreach programs. The Tennessee Electronic Atlas continues to serve people interested in our state. Our faculty members serve on numerous state, national, and international committees. In short, we are an energetic, engaged department.

The students who pass through our program, both undergraduates and graduates, continue to do us proud. The work of Esther Parrish, a recent M.S. student whose advisor was Carol Harden, was chosen as one of ten projects from around the world for display at the recent World Summit on Sustainable Development. The research of several of Dr. Harden’s

current students was awarded First Prize at a recent USGS water quality meeting. A group of Geography Majors, working with Lydia Pulsipher and some graduate student mentors, was awarded the Outstanding Undergraduate Research and Achievement Award in the Social Sciences for their short documentary film, "A Glimpse of Sutherland Avenue." Past Ph.D. students and adjunct faculty members Glen Harrison and Cheng Liu, along with current M.S. student Amy Rose and other colleagues received the Excellence in Applied Geography Award this past April. We continue to turn out excellent Ph.D. and M.S. students, and our students are in high demand. It is gratifying to watch the circular contagion of enthusiasm and commitment to Geography that takes place between our undergraduate students, graduate students, and faculty and staff. May that circle be unbroken!

The Burchfiel Geography Building continues to be the gift that keeps on giving, affecting people throughout the state. It aids in better teaching in our state's K-12 classes. It gives undergraduate students access to laboratory facilities, particularly in biogeography, hydrology, dendrochronology and GIScience, which keeps them on the cutting edge of teaching and research. It affords instructors the ability

to use educational technology. Since the move to the BGB, the number of Geography majors has increased over 140%. Before moving into the BGB, our typical incoming class of graduate students was about 8 or 10 per year. Over the past three years, it has been 15 to 18 per year. The building increases the sense of community--and morale--for all who work here and increases our competitiveness for grants and contracts.

Despite our successes, we continue to need your support and help. There are numerous ways in which to help the Department. Donations to the Geography Enrichment Fund help us cover shortfalls in our operating budget. The McCroskey Fund helps students and faculty defray the costs of research equipment and travel, while the Technology Fund supports research and teaching technology. Larger gifts, such as faculty salary supplement chairs, remain "the stuff dreams are made of." If you wish to donate to the Department (and I encourage you to do so!), contact me by phone (865-974-0406), mail, or email (bralston@utk.edu), and I will be happy to discuss the opportunities we have to support the Department. We continue to strive to fulfill the three pillars of our mission—teaching, research, and service—in both the best and the worst of times.

Research Initiatives Continue

The Department was fortunate to receive funding for several of the President's Research Initiatives for Teaching, Research, and Service. Now starting their second year, the Initiatives play an important part in the activities of faculty and students. Here are some highlights.

The Initiative for Computational Ecology. Dr. Shih-Lung Shaw continues his participation in the Initiative for Computational Ecology, along with M.S. student Melinda Vazzana. They are taking part in a study to integrate GIS with ecological modeling in an effort to enhance the representation, modeling, and display of ecological system processes. For example, Shih-Lung and Melinda have been working on the "Spatial Analysis and Decision Assistance (SADA)" project to help enhance the management and display functions of spatial data. Shih-Lung also works with other team members on pursuing GIS representations of spatiotemporal processes for ecological modeling.

The Global Environmental Change Initiative. Drs. Henri Grissino-Mayer, Carol Harden, Sally Horn, and Ken Orvis constitute half of the faculty behind the "Initiative for Interdisciplinary Study of Global Environmental Change," which also includes two faculty from Geological Sciences (Claudia Mora and Steve Driese) with expertise in soils and isotopes, and two from Ecology and Evolutionary Biology (Lee Cooper and Jackie Grebmeier) with expertise in marine sediments and chemical and isotopic tracers. This initiative was funded for \$500,000 over five years and fosters new, broader research possibilities that combine the knowledge and technological expertise of the participants and the capabilities of their laboratories. Faculty and students alike are benefiting. Geography grad Chad Lane is doing his M.S. research on stable isotope analysis of high-elevation Costa Rican lake and bog cores collected by Sally and Ken, using Claudia's stable isotopes laboratory and jointly advised by Sally and Claudia. Similarly, Henri and Claudia jointly advise the Ph.D. research of Geology grad Dana Miller, which involves

extracting hurricane histories from stable isotope signatures in the alpha cellulose of individual Georgia tree rings. The Initiative has provided Research Assitantships for geographers Philip Young and Jake Cseke as well as Chad. Undergrads Damian Kolbay, Bill Dennis, Colin Wolf, and Cindy Ellis participated in Initiative-related research via Geography 494, our undergraduate research experience-participation course. The Initiative has funded two expeditions to northwestern Costa Rica to study vertisol formation there, involving Sally, Claudia, Steve, a post-doc, and Geography grad student Lisa Boulton. Henri, Sally, and Ken will investigate tree-ring, lake-coring, and other climate-record research possibilities in the Bahamas this November on an Initiative-funded expedition, and Carol's trip to Ecuador with two K-12 teachers last summer was sponsored in part by the Initiative. Several recent proposals to NSF seek to leverage the opportunities provided by this Initiative, and many more opportunities and possibilities beckon.

The Southeast Water Policy Initiative. Dr. Carol Harden joined with faculty members from Political Science, Sociology, and Biosystems Engineering and Environmental Sciences to establish the Southeast Water Policy Initiative (SWPI) at UT in 2001. This is an interdisciplinary research and education partnership developed to shape innovative policies that anticipate, avert, and resolve disputes over the management and distribution of water. In spite of the humid climate, rapidly developing areas of the southeast, including metro Atlanta, and Tennessee's Cumberland Plateau, create intense competition for limited water resources. Following an active first year of compiling and organizing information, SWPI will soon become a web-based nexus (<http://bioengr.ag.utk.edu/swpi/>), providing a virtual library database, GIS resources, and links with social, biophysical, political, and digital mapping resources in support of efforts to avert, resolve, study, and increase awareness of water conflicts. Ongoing monitoring of water quality parameters in Third Creek in Knoxville by Harden and a group of undergraduates (funded by USGS) contributes to the work of the initiative, as does the thesis research of Alan Jolly and Philip Young. The initiation of this effort at UT is bringing greater visibility to water-related research by UT faculty and students, including geographers, and greatly facilitating interdisciplinary collaboration in water-related studies.

The Tennessee Electronic Atlas Project. Dr. Bruce Ralston continues to direct the Atlas Project working with students Hilary Martin and Hongbo Yu. They are building on the work of graduate students, David Ralston and Kendrick Curtis. During the past year Kendrick and David were responsible for rapid expansion of the site including the development of numerous thematic areas, inclusion of the latest Census 2000 data, and the creation of interactive maps of Metro Areas in Tennessee. Bruce, Hilary, and Hongbo will continue to expand the site.

The URL for TEA is <http://tnatlas.geog.utk.edu/tea>.

The Alliance Continues Its Stellar Performance

The Tennessee Geographic Alliance now has over 4,800 members, a large majority of whom are Tennessee Teachers. It has active chapters in Memphis, Nashville, Murfreesboro, Gallatin, Cookeville, Johnson City, Chattanooga, and Knoxville. Base funding for the Alliance comes from the University of Tennessee, the Tennessee State Department of Education and an endowment administered by the National Geographic Society Education Foundation (NGSEF). It is from these monies that the Alliance supports the annual Teacher Professional Development Workshop focusing on *Geography and Educational Technology* and another focusing on topics related to population. With the hiring of a full time coordinator in the summer of 2000, the Alliance has been able to expand its activities with wider and more diverse offerings. It has also continued to team with the Geography Department in seeking a variety of external funding.

In the summer of 2001, the Alliance/Geography Department team received a grant of \$44,390 from the Dwight D. Eisenhower Teacher Professional Development Program for a one-week summer workshop on the *Interaction Between Humans and the Environment*. Dr. Henri Grissino-Mayer was co-director with Kurt Butefish on this program for Tennessee teachers.

This past summer the Alliance and Geography Department welcomed 24 teachers from all over the U.S. to the Knoxville campus for a four-week institute on *Cultural Diversity of the American South*. The institute was funded by a \$151,136 grant from the

National Endowment for the Humanities with additional support coming from the NGSEF. The teachers came from as far away as Massachusetts, California, Louisiana, Alaska, and included four from Tennessee. Dr. Charles Aiken and Kurt Butefish were co-directors. Dr. John Rehder coordinated an ambitious field trip itinerary. Guest speakers were drawn from many units on campus including the English, Anthropology, Geology, History and Political Science Departments and the College of Law.

At the same time, the Alliance kicked off the first year of what we hope is a two-year program funded by a \$48,040 grant from the NGSEF. The title of the project is *Building a Toolkit of Skills: Immersing Teachers and Students in Experiential Learning*. We are working with the non-profit Discover Life in America, the Great Smoky Mountains National Park (GSMNP), UTK's Math and Science Regional Center's Upward Bound Program, and the North Carolina Geographic Alliance.

This summer we had two teachers and three graduate students teaching and mentoring the Upward Bound students. Some of the students completed special research projects in the GSMNP. All 58 students participated in a major research effort for the All Taxa Biodiversity Inventory (ATBI) on July 13th. The students learned to use Global Positioning Satellite Units to help gather data on certain plant species in the Park. They then input the data into a database for use by GIS software to create distribution maps of the plant species.

It is our hope that, based on the success of this summer's work, we can obtain funding for next summer to train 25 teachers in Tennessee and 25 more in North Carolina, so that they and their students become resources on which the ATBI can draw when hosting data gathering activities in the GSMNP.

The Alliance also received funding from the NGSEF to sponsor two teachers in fieldwork on *Water Resource Issues in the Andes* with Dr. Carol Harden of the Geography Department. Two Tennessee teachers spent three weeks in the Cuenca, Ecuador area with Dr. Harden examining the watersheds that provide drinking water to the city in light of regional hydrology and land use change. The \$5,000 grant from the NGSEF came in honor of Sid Jumper's extraordinary vision and efforts to offer teachers international field experience with research scientists during his 15 years as Alliance Coordinator.

This year saw the awarding of the first Geography Teaching Awards. The Beverly Award for K-6 teachers went to Jane Luhn of Rocky Hill Elementary School in Knoxville. The Mullane Award for teachers in grades 7-12 went to Charley McRorie of Morristown Hamblen High West.

The Alliance also remains active in the statewide Geography Bee held annually in Nashville, Geography Action! (formerly Geography Awareness Week), Earth Science Day, GIS-Day, and many other geography programs for students and teachers. If you would like more information or a copy of the latest Alliance newsletter, please visit our web site at <http://web.utk.edu/~tga/> or contact Kurt Butefish at (865) 974-4841 or kbutefis@utk.edu.

Majors Win Undergraduate Research and Achievement Award

Knoxville's Sutherland Avenue neighborhood, just west of the University of Tennessee campus, has played a changing role in the city. At the turn of the twentieth century, the neighborhood was a small, residential community for rural Appalachian migrants working in the marble and textile industries. Today, it hosts a multicultural community of working class urban residences and businesses, factories, institutions, and university housing used primarily by international graduate students and their families.

During the academic year, 2001, the advanced Cultural Geography class at the University of Tennessee (Lydia M. Pulsipher, Professor), studied archival materials, maps, reports, and videos, prepared by previous geography student researchers in the neighborhood. They interviewed a diverse range of residents and entrepreneurs and mastered video-making techniques from script writing and filming, to editing and narrating. Their final class project was a short video that discusses the changes that have been wrought in the Sutherland neighborhood since World War II, focusing especially on the recent past when global forces have become particularly evident.

The class entered this video into the University of Tennessee's Undergraduate Research Fair, where it won the Outstanding Undergraduate Research and Achievement Award in the Social Sciences Division. The video is also being presented at the November

2002 meeting of the Southeastern Division of the Association of American Geographers by its creators: Amy Hill, Claire Jamieson, Jessica Tharpe, Jackie McDermott, Chris Sigler, Eric Meadows and Denise Robertson

Geographic Nuptials

The study of Geography is an intense endeavor suited only for the dedicated few. Nonetheless, geography students somehow find time for a social life! Thus we are pleased to report the recent marriage of Susan Carney and Kyle Rector. The couple now lives in the Washington, DC area. Lindsey Holderfield and Brad Kreps, both recent M.S. graduates of our department, have become engaged and will marry in May 2003. They met at UT and now both live in southern Virginia.

Henri and the \$20 Million Question

The Violin Society of American asked Dr. Grissino-Mayer, along with two of his colleagues (Paul Sheppard and Malcolm Cleveland) to help settle a debate on the origins of the famous “Messiah” violin. Some experts believe that the violin was built by Stradivari, while others believe it is the musical

equivalent of a fake Rolex. The difference in the value of the violin can be as much \$20 million.

Henri and his colleagues studied and dated the wood used in the violin. Although they could not conclusively prove the violin was a “Strad,” they did prove that the wood used in “The Messiah” was of the age that it could have been crafted by the most famous musical instrument maker of all time. Their work has caused quite a stir, and has caught the attention of the scientific and popular media. Now, if Henri can only get a 10% cut on the value of all his decisions....

Necrology

Dr. Reece Jones of Macomb, Illinois died on April 10, 2001 at the age of 85. Dr. Jones received his bachelor’s and master’s degrees from UT. He later received a Ph.D. in geography from the University of North Carolina. Dr. Jones is survived by his wife Lynn. They were married in 1942 in Knoxville. Also surviving are two daughters, five grandchildren and three great-grandchildren. Lynn writes that Dr. Jones kept up with the activities of the department and was very pleased to learn about the Burchfiel Geography Building. Our condolences go out to Lynn and her family.

News From Faculty and Staff

Charles Aiken was invited to participate in an international conference on the concept of space in the humanities and social sciences at the University of Bonn held in August, 2000. Charles’ paper, “Socio-political Space” (coauthored with Kyle Rector) deals with changes in the concept of region in American Geography after the Second World War.

Mary Ann and John accompanied Charles to Germany and visited places that Charles enjoyed while he was Guest Professor at the University of Bonn during the spring term in 1994. The Aikens spent four days in Paris on the return trip.

Charles presented “Flags in the Dust: William Faulkner and the American Civil War” at the 2001 AAG Meeting in New York and “Total War: The Civil War in William Faulkner’s Yoknapatawpha County” at the 2002 meeting in Los Angeles. The papers are from Charles’ book manuscript on

Faulkner’s geography, which has been submitted to a university press. Charles is author of the chapter “Blacks in the Plantation South: Unique Homelands” in *Homelands: A Geography of Culture and Place Across America*, which was published by Johns Hopkins University Press in 2001.

In July 2001, Charles and Kurt Butefish received notice from Senator Fred Thompson that their proposal for a summer institute on *Cultural Diversity of the American South* had been funded by the National Endowment for the Humanities. The grant was for \$151,000 and is one of only a few grants from the National Endowment ever received by geographers. The institute was held in June and July 2002. Twenty-four elementary and secondary teachers from various parts of the nation were selected for the institute.

The Aiken’s son Charles and his wife Amy live in New York and apparently will be there for the near

future. Both passed the New York bar examination in February, 2002. Amy works for a law firm in a building facing Battery Park at the tip of Manhattan, and Charles is at the United States Court of International Trade, which is a few blocks on the other side of the World Trade Center. Charles was on the subway, returning to get Amy, after the planes hit the Trade Center towers. Amy had already returned to their home in Brooklyn. The first tower fell as Charles' train pulled into the Wall Street Station, and the second one fell as he and a large group of people were running down Fulton toward the East River. Charles was covered with dust but was not injured. He was handed a dust mask by a person on the street and taken in by a couple with an apartment on Fulton until the dust settled.

The Aiken's other son, John, began his senior year at Embry-Riddle Aeronautical University in Daytona Beach Florida in September. John spent the summer as a flight instructor at Volunteer Aviation at the Knoxville Airport.

Tom Bell and Peggy Gripshover (a.k.a. "The Dynamic Duo") saw publication of their CD-ROM *GeoDiscoveries* this past year. The CD, which they developed to accompany the latest edition of deBlij and Muller's world regional geography textbook, has been very well received. They also finished a chapter on "Industrialization and Globalization in Economic Geography" for a forthcoming book designed for teachers of AP courses in human geography edited by Bob Bednarz. This summer was a productive one with Peggy and Tom traveling to Iowa to put the finishing touches on two funded research projects that they started last year. The first deals with the devolution of the specialized onion-growing district in eastern Iowa. They have subsequently presented two papers on onions at professional meetings and, needless to say, many tears were shed. (Note: Their colleagues were puzzled to hear Tom and Peggy were going to Iowa to study smut. We were relieved to learn that this is an onion disease!) The second project that Tom and Peggy are working on is a study of central place retail changes in small towns in central Iowa between 1970 and the present, an update of Tom's dissertation research. Tom and Peggy were also given a professional development award this year to revisit the southeastern field trip route laid out by John Fraser Hart and Eugene 'Cotton' Mather fifty years ago when the IGU meetings were held in Washington,

DC. They plan to traverse the same 2,200 mile route as closely as they can (given changes in the highway system) and document the changes. Tom's article on grunge music ("Why Seattle?") will soon be published as a chapter in the fourth edition of George Carney's reader on music geography. As a further foray into the geography of music, Tom will present a paper at the 2003 New Orleans AAG meeting on, "emo" (i.e., emotional) music, a genre of rock music. His daughter Leia, who works with emo groups as a graphic artist and music venue manager in Salt Lake City, will co-author the paper. Also at the New Orleans AAG meeting, Peggy will present a paper on how reproductive science belief systems contributed to 19th century mule breeding specialization in middle Tennessee. Tom and Peggy will be quite active at the November 2002 meeting of the Southeastern Division of the AAG. Both serve on the World Geography Bowl Committee and will be presenting papers as well. Tom's is on the phenomenological experience of travel (with Howard Pollio and Norris Smith of UT's Psychology Department). Peggy's is on geographical prestige in Knoxville titled "West is Best and East is Least."

In between their research projects, Tom wrote a review of Edward Soja's new book *Postmetropolis* for the *Annals of the AAG* and Peggy wrote a review of historian Stephen Wallace Taylor's book *The New South's New Frontier* for the *Southeastern Geographer*. Together with Dr. Larry Gorenflo, Tom is putting the finishing touches on a comprehensive review of geographers' contributions to the study of archaeological settlement patterns for the *Journal of Archaeological Research*. In addition to their regular teaching duties, Tom and Peggy jointly taught a freshman seminar in the Honors program about urban morphology. The course involved a series of local field trips around Knoxville after which the students presented photo essays reflecting their observations.

The big news of the past year was that Tom became a grandfather for the first time as his daughter Leia gave birth to a bouncing baby boy named Cortez Cooper Sherburne. "The Coop" was born in late November and Peggy and Tom jetted out to Salt Lake City soon after finals were over in early December to see the little guy. Tom's son Brian continues to record and travel with his band Weezer. Peggy and Tom caught up with Brian in St. Paul, MN, and later for a second concert in the Washington, DC area. Brian is

now back in the studio putting the finishing touches on Weezer's fifth album (the third in less than two years).

To celebrate their first wedding anniversary, Tom and Peggy took a trip to Ottawa, Canada. It is one of the most beautiful cities in North America with many fantastic cultural resources—go there someday if you can. Next July, it is Tom's turn to choose the secret location for a getaway. Any suggestions? Also this year, Tom has picked up Peggy's passion for tennis but, unfortunately, not yet her ability! He is quickly learning that "love"—at least in tennis—hurts.

Kurt Butefish is Coordinator for the not-for-profit Tennessee Geographic Alliance housed in the Department of Geography. The primary mission of the Alliance is to improve the quality of geography education in Tennessee's K-12 schools. Kurt has B.A. (1984) and M.S. (1986) degrees in Geography from the Department and was hired in June 2000 after 14 years in business development at the Intergraph Corporation in Huntsville, AL. His primary responsibilities include running the Alliance office, procuring funding for programs, and coordinating Alliance sponsored events such as teacher professional development workshops. Under his direction, the Alliance has successfully teamed with the Department of Geography to obtain grants from the Dwight D. Eisenhower Teacher Professional Development Program and the National Endowment for the Humanities. This past summer the Alliance partnered with Discover Life in America, the Math and Science Regional Center and the Great Smoky Mountains National Park to obtain funding from the National Geographic Society Education Foundation to involve teachers and their students in the All Taxa Biodiversity Inventory going on in the GSMNP.

Anita Drever is delighted to have joined the UTK Geography Department this fall. (We are delighted to have her here.) She is a population geographer whose past research has centered on housing and neighborhood issues for immigrants in Germany. She spent a very busy summer working furiously to finish her dissertation but was able to get away to Berlin for a week to present a paper at a conference for German Socio-Economic Panel users sponsored by the German Institute for Economic Research (DIW). Anita was also honored to have been nominated to be a research affiliate for the DIW-Berlin, currently one of the top economic research institutes in Germany.

She and her advisor, William Clark, have a joint paper on housing access for minorities in Germany that will be coming out in *Urban Studies* in the fall.

Anita is currently teaching a section of the Introduction to World Regional Geography course, and she very much enjoys working with her students. While Anita is continuing her research on minority communities in Germany, she also plans to begin doing more local work. Specifically, she is interested in looking at immigrant minority communities in more rural areas of the United States.

Ron Foresta spent stints in the field the past two summers collecting data for a book on the place building of newly recognized Indian tribes of the eastern United States. The project has taken him from South Carolina to northern Maine. He and his collaborator, UT Alumnus Roger Dendinger, will present a paper on the project at the SEDAAG meeting in November.

Ron has been pushing ahead his long-term writing project "Buried Terrain: The Land Between the Lakes and the Lost Progressive Future." He presented a paper on it at the New York meeting of the AAG in March 2001 and will present another at the New Orleans AAG meeting in March 2003.

He gave a paper entitled "Mass War to Mass Peace: World War Two and the American Consumer Suburb" at the Second International Conference on Societies in the Aftermath of War, held in Knoxville, in June of 2002. It will be published in the proceedings later this year.

In addition to teaching his normal suite of courses, Ron developed and taught a new undergraduate course, Global Economy in the spring of 2002. He also taught the Senior Seminar in Urban Studies for the Urban Studies Program and a field-emphasis course, Exploring the City, for the University's Honors Program.

Around the University, he has served on the Vice Provost's Committee on International Enrollment, the faculty advisory board of the Urban Studies Program, and various interview committees for the Center for International Education. He continues to browbeat his two Ph.D. students, Jenny Rogalsky and Ola Johansson, although he has found it more difficult since they found jobs in New York and Pennsylvania respectively. They now send him taunting e-mails bragging about their lack of progress on their dissertations.

Henri Grissino-Mayer has been involved recently in several research projects that have received media attention. In 1999 he was contacted by the Violin Society of America (VSA) to provide a lecture at their annual convention about the use of tree-ring dating in archaeology, because a recent study used tree-ring information to show that the most famous violin in the world, Stradivari's "Messiah," was perhaps a fake made in the middle 1800s. He was recruited to analyze the violin at the Ashmolean Museum in Oxford, England, and in the summer 2001, traveled there with colleagues Dr. Paul Sheppard (University of Arizona) and Dr. Malcolm Cleaveland (University of Arkansas). After analyzing the tree rings on the violin top, they presented their results at the VSA convention in November 2001. They reported that the tree rings dated to 1577-1687 and are therefore contemporary with Stradivari's lifetime (1644-1737), and also contemporary with the label date of the violin (1716). This research has been submitted to the *Journal of Archaeological Science* for publication.

Henri continues his research on fire history and climate reconstruction, mostly in the western United States, from tree-ring data. He recently completed a final report for the USDA Forest Service concerning multicentury trends in past rainfall for central New Mexico from a network of millennium-length tree-ring chronologies back to AD 622. This work will soon be submitted to the journal *Climatic Change*. Over the summer of 2002, Henri completed a final report for the Forest Service concerning the influence of both humans and climate change on fire regimes in the San Juan National Forest. This was submitted for publication in the journal *Ecology*. He is also continuing his research on past climate from trees growing at El Malpais National Monument (New Mexico), and he recently submitted a proposal to the NSF (with colleague Paul Sheppard) to investigate past changes in summer monsoonal rainfall from tree-ring data. Former alumnus Charles Lafon has teamed with Henri to initiate long-overdue research on the fire history of the southern and central Appalachians from tree-ring data. They have recently been awarded a three-year grant to conduct this vital research from the National Interagency Fire Center in Boise, Idaho.

Henri has attracted a cadre of enthusiastic students. David Mann recently completed his Master's research using tree-ring dating to analyze a famous

log structure in eastern Tennessee. David found that the "Swaggerty Blockhouse," supposedly built in 1787, was instead a small cantilever barn built in 1860 used for hog production. David and Henri also recently worked on dating shrub species at Thomas Jefferson's Poplar Forest Plantation in Lynchburg, Virginia. Another student, Michael Armbrister, also completed his master's research using tree-ring dating to analyze the successional status of Table Mountain pine in the Great Smoky Mountains National Park. He found that the pine, not surprisingly, is no longer able to recruit without periodic fires.

Carol Harden joined Drs. Horn and Orvis in March 2001 on a research expedition to examine the legacy of glaciation in Chirripó National Park (Costa Rica). Then, in May 2001, she returned to the Talamanca Range with Orvis to complete a set of rock and water samples at high elevations in the park and to examine sediment deposits on the flanks of the range. She presented preliminary findings in a paper (co-authored with Orvis) at the AAG meeting in Los Angeles ("Alluvial fans flanking the Talamanca Mountains, Costa Rica: Interpreting Geomorphological Evidence"), and plans to continue to study the relationships between these fans and glaciation in the highlands above.

In Summer 2002, with a grant from the AAAS, Carol traveled to Ecuador to work with Dr. A. Borrero of the Universidad de Cuenca to develop a collaborative project focused on better understanding the physical and human dynamics of watershed management in Andean watersheds that supply drinking water and provide power to the city of Cuenca. She was accompanied by two Tennessee teachers who helped her conduct a baseline survey of water quality and stream reach condition in three watersheds upstream of Cuenca. In December 2002 she will return to Ecuador to participate in an international symposium on land use change and geomorphic, soil and water processes in tropical mountain environments.

In Fall 2001 Carol directed the work of a graduate seminar that examined the history of land use in the Conasauga River watershed, on the Tennessee-Georgia border. This GIS-based project was awarded First Prize at the Tennessee meeting of the American Water Resources Association.

With support from a Center for Undergraduate Excellence award, a grant from the USGS Water

Resources program, and assistance from the City of Knoxville, Dr. Harden's spring 2002 Water Resources class monitored water quality at ten sites on Third Creek in Knoxville. Students sampled weekly and conducted the laboratory analyses. Results of their work have helped the City of Knoxville target specific areas for further analyses.

Since Fall 2001 Harden has had two papers published: Harden, C. P. and Mathews, L. 2002. "Hillslope Runoff and Soil Erosion Following Reforestation in the Copper Basin, Tennessee, USA," *Australian Geographical Studies* 40(2):130-142; and Harden, C.P. 2001. "Sediment Movement and Catastrophic Events: The 1993 Rockslide at La Josefina, Ecuador" *Physical Geography* 22(4):305-320. A third paper is in review. She served on the National Research Council Committee on Research Priorities in Geography at the U.S. Geological Survey in 2001-2002. The final report of that group is the book, *Implementing a New View of Geographic Research: Institutional and Management Implication*, now in press (National Academy of Sciences, 2002). With Glenn Hyman, Carol wrote a chapter (now in revision) on agriculture and soil erosion for T. Orme, T. Veblen and K. Young (eds.) *The Physical Geography of Latin America* (Oxford University Press, expected in 2003). Harden also contributed an extended entry on "Terraces, River" to the IAG Encyclopedia of Geomorphology, A. Goudie (ed.) (Routledge, expected in 2003), with excellent illustrations by staff cartographer, Will Fontanez.

Responding to special solicitations to commemorate the year 2002 as the International Year of Mountains, Harden gave invited presentations at the International Workshop on Applied Montology in Athens, GA, and the Binghamton Geomorphology Symposium in Chapel Hill, NC. She also contributed a chapter on Mountain Soils to the volume *Mountains and People*, A. Byers, D. Friend, and L. Price (eds.) to be published in 2003 (University of California Press).

In August 2001, Harden traveled to Tokyo as the United States representative to the International Association of Geomorphologists, an organization that meets once every four years. She presented a paper and participated in the decision-making meetings of the Council. In her capacity as the U.S. representative, she received a number of messages of solidarity and sympathy from geomorphologists throughout the world following the terrorist attack of September 11,

2001.

Sally Horn has been working hard to realize the exciting potential of the new advanced physical geography teaching laboratory in the Burchfiel Building—a resource we never had before. With funds from the UTK Center for Undergraduate Excellence, Sally purchased microscopes, soil corers, and other equipment to add field and laboratory exercises to her Biogeography and Plant Geography courses. Local class field projects on fire and land use history complement the research on landscape history that Sally and her faculty and student collaborators are carrying out in Central and South America and the Caribbean. With principal funding from The A.W. Mellon Foundation, Sally made research trips to Costa Rica during 2000–2002 with Ken Orvis, Carol Harden, and graduate students Marty Arford, Kevin Anchukaitis, Duane Cozadd, Lisa Kennedy, and Jake Cseke to collect sediment cores and tree-ring and soil samples at study sites, ranging from sea level on the Pacific coast to the glaciated highlands surrounding Cerro Chirripó (3819 m), Costa Rica's highest peak. She also helped postdoc Cindy Stiles investigate soils in Palo Verde National Park as part of activities funded through the Initiative for the Study of Global Environmental Change. During the summers of 2001 and 2002, as part of National Geographic-funded research on climate and environmental history co-led by Ken Orvis and Sally, they and graduate students Duane Cozadd and Chad Lane surveyed and cored lowland lakes and swamps in the Dominican Republic. In May of 2002 Sally traveled to Belize to participate in a conference on fire in tropical pinelands, where she shared results from collaborative research on fire ecology and fire history in highland Dominican pine forests carried out with Ph.D. student Lisa Kennedy, Ken Orvis, and Mike Clark of UTK's Geological Sciences Department.

Sally authored or co-authored several articles on Costa Rican lakes, sediment-records of long-term vegetation and climate history, and Dominican vegetation and geomorphology during the past two years. She is presently co-editing a book (with Maarten Kappelle and Adelaida Chaverri) on the treeless páramos of Costa Rica's highest mountain peaks.

Ken Orvis has been actively engaged in research on several fronts. He's just at the stage of writing up results (presented at AAG 2002) from the Dominican

Republic that show there were once glaciers there (the next step is to figure out what that implies for the study of global climate), and he and Sally Horn have been collecting sediment cores from lakes in the lowlands of the country to see what new clues they yield on vegetation and climate history (funded by National Geographic). Working with Mike Clark (Geological Sciences), they are studying evidence of severely dry highland climate lasting from maybe 8,000 to 4,000 years ago. Ken has just been gathering digital climate data from the Dominican government so that he can start analyzing modern spatial patterns, and he's applied for \$160,000 from the National Science Foundation for work on tree rings collected from one of the mountains with Jim Speer and Henri Grissino-Mayer.

In Costa Rica Ken thinks he's now hot on the trail of evidence for a very old glaciation—much bigger than the well known, recent ones—that he had previously suspected based on subtle clues. For several years he's been collecting all kinds of rock samples (with help from Charles Lafon, Brandon League, Sally Horn, and Carol Harden) to let us put a time frame on glacial history there (the rocks can be dated using cosmogenic nuclides). He wants to try to get the preparation part of that technology, at least, going in our UT labs, so he also asked NSF for \$240,000 to do that—we'll see! Another Costa Rican mystery is some big piles of what looks like loess (windblown silt that's not volcanic ash) where the mountain oak trees are now about 200 feet tall—what the heck is that stuff, and what's its story? Carol Harden and Ken also went to Costa Rica last year to examine some big debris flow deposits in the foothills, and bumped into evidence of truly gargantuan ancient floods. Finally, Ken is writing a paper on evidence that lakes on Costa Rican mountaintops show the climate has been warming rapidly in the recent past. Will there be páramo for long, or not? Stay tuned.

On other fronts since the last Newsletter, Ken has authored or co-authored several papers and book chapters, participated in a new Research Initiative, spoken to community groups, served on NSF panels, won a department Outstanding Faculty Teaching Award, and helped shepherd eight M.S. students and five Ph.D. students through their degrees (including three of his own advisees: Jen Krstolic, M.S., Jim Speer, Ph.D., and Roger Tankersley, Ph.D.).

Lydia Pulsipher and her family of geographers finished the 2nd edition of their college textbook *World Regional Geography: Global Patterns, Local Lives* (W.H. Freeman, 2002). Alex Pulsipher, now doing a Ph.D. at Clark University is a co-author and husband, Mac Goodwin, an archaeologist/anthropologist acted as what might be called the producer: he managed the map and illustration program and financial issues. Will Fontanez's cart shop in the UT Geography Department made all the beautiful maps. Jennifer Rogalsky, Ph.D. candidate in our department co-authored with Dr. Helen Ruth Aspaas, both the Student Study Guide and Instructor's Resource Manual to accompany the textbook. Kim Crider, an M.S. student edited the testbank for the 2nd edition.

Lydia spent every spare moment over the last year preparing to teach two sections of World Geography this fall semester, using the 2nd edition of her textbook. While obviously she knows the content well, the effort has been to improve the overall pedagogy for this course by judiciously using a range of online course functions and all the supplements that accompany the textbook. The ultimate purpose is to help others across the country who are using the book to make the best possible use of it (the book is used in many colleges and universities in at least 34 states). After a few weeks of the fall semester, the prognosis looks good, but courses with an online component take much more time than traditional lecture courses.

Lydia is continuing her work in Montserrat, having just completed a proposal to the British development agency (DIVDEV) to begin excavations on a new research site to replace Galways which was entirely lost to the volcano. (Publishing on the completed research at Galways continues.) In November she will give an invited paper at a University of the West Indies Conference in the Eastern Caribbean in which she proposes a unique development strategy for post-volcano Montserrat. She is also doing research on some geographic aspects of the post-Communist economy in Slovenia (in Central Europe), a place she has visited many times since childhood. In September 2002, she was invited to report on her preliminary research with new Slovene women entrepreneurs at the Celje International Conference on Entrepreneurship in connection with the Celje, Slovenia Trade Fair.

Aside from these activities, Lydia and Mac are the indoor gardeners for the Department, keeping the new Burchfiel Building supplied with tropical plants. Son Anthony and his wife Nancy have moved to San Francisco to take up new exciting jobs. Alex is enjoying working with Billy Lee Turner at Clark and is developing (in Mexico) a dissertation topic related ultimately to global climate change, but focused on local responses to climatic hazards.

Bruce Ralston continues his duties as Department Head. He reports that he is slowly learning the secret to administrative success. He meditates daily, repeating his mantra “Go ask Pam, Go ask Pam.” In late 2001 his book *Developing GIS Solutions with MapObjects and Visual Basic* was published by OnWord Press. He traveled to Hong Kong last March to take part in a GIS and Logistics workshop (with Dr. Shaw), attended the AAG where he gave two papers, his first University Consortium for Geographic Information Science meeting (again with Dr. Shaw), and ESRI User Conference. He made presentations on GIS and logistics at the last two AAG meetings and has attended a host of other symposia. Bruce teamed up with Dr. Shaw and Ben Zhan of Southwest Texas State on a research proposal for the UCGIS, and he and Dr. Shaw are working on a paper for the Action Oriented GIS workshop. He continues as director of the Tennessee Electronic Atlas Project and as Associate Editor and North American Editor of the *Journal of Transport Geography*. He wrote a chapter on GIS and logistics for Miller and Shaw’s *Geographic Information Systems for Transportation: Principles and Applications*. Bruce continues his work with the County Technical Assistance Service, working with Kim Raia and Mike Meyers. M.S. student James Cunningham finished his degree this past summer with Bruce as his advisor, and he hopes to see other students finish their degrees soon.

Bruce is currently working on updating his GIS software, writing a text on web-based GIS, and exploring the use of agent-based models for logistics and transportation problems.

John Rehder begins his thirty-sixth year this fall in 2002 at the University of Tennessee’s Department of Geography. Busy researching and writing books, John recently completed the manuscript for a book entitled *Folk Culture in Southern Appalachia* for the Johns Hopkins University Press. The book is a nine-chapter 129,000-word tome with 85 illustrations. He seems to

have printer’s ink in his veins as he has started another book project on *Log Architecture in Tennessee*. (You may recall that John’s 1999 book, *Delta Sugar: Louisiana’s Vanishing Plantation Landscape* received the Abbott Lowell Cummings Award in 2000. Awarded by the Vernacular Architecture Forum.)

John serves on the editorial board of the University of Tennessee Press and on the UT faculty senate. This summer, he worked with Charles Aiken and Kurt Butefish on the Tennessee Geographic Alliance’s NEH Institute on *Cultural Diversity in the South*. He still teaches a large number of classes. In the past four years, he taught the equivalent of 44 classes, 36 of which were genuine inhale-the-chalk-dust lecture classes.

The Rehders continue to enjoy their house with its view of the Great Smoky Mountains and Lake Loudon. John still finds time to trout fish occasionally and always be “Opah” to his two grandchildren, Allen (4) and Emma (2) who are Ken and Angie’s kids. Ken has a dental practice in the practice of Harris, Horton, Mabry and Rehder in Lenoir City, TN. Judy is still principal at Chilhowee School and Karen is an eighth-grade English teacher at Farragut Middle School.

Shih-Lung Shaw, Associate Professor and Associate Head, is in his fifth year with the Department (He joined the Department in Fall 1998 when UT won the national football championship. Coincidence? I think not!) In 2001 Oxford University Press published his book (co-authored with Harvey Miller) *Geographic Information Systems for Transportation: Principles and Applications*. He learned a great deal from this book writing and publishing experience. In 2002, he has published a book review article in *Journal of Regional Science* and a co-authored paper (with Xiaohong Xin) in *Proceedings of the ESRI Conference*. In addition, he has another article accepted for publication in *Journal of Transport Geography*. On funded research projects, Dr. Shaw completed a project funded by the Tennessee Department of Transportation (TDOT) in 2001 that evaluated the use of LIDAR data for the creation and maintenance of TDOT’s base maps. In 2001 he also received funding from the Knoxville/Knox County Metropolitan Planning Commission to develop an Internet GIS-based agenda notification system. Mo Chatterjee was the graduate research assistant (GRA) on this project and incorporated this project into his thesis research. In

addition, has been working on a 2-year research project, funded by the Florida Department of Transportation, to develop spatiotemporal analysis methods for studying land use and transportation interactions. In the summer of 2002 he made two trips to Florida for project presentations and meetings. Xiaohong Xin worked as a GRA on this project and is close to completing her Ph.D. dissertation study built upon this research project. Dr. Shaw also is involved in the Research Initiative of Computational Ecology funded by the UT President's Research Initiatives Program. Melinda Vazzana has been working as a GRA through this Research Initiative. For the summer of 2002, Dr. Shaw received funding from the UT Scholarly Activity and Research Incentive Funds (SARIF) to conduct research on "Teleworking, Urban Travel Patterns, and Changing Urban Forms: A Pilot Study of the Atlanta Metropolitan Area". Jessica Tharpe was the GRA working on this project and will continue to work on this topic as her thesis research.

Dr. Shaw also has been busy with other research and professional activities. In January 2002, he was invited and funded to attend a workshop at the National Science Foundation (NSF) that involved forty transportation researchers from United States, Canada, and Europe to discuss the future research agenda of the effects of information and communications technologies on transportation. Through funding provided by the Chinese University of Hong Kong, Dr. Shaw also organized a GIS for Logistics workshop in Hong Kong. In March of 2002, he went to Hong Kong with Bruce Ralston and Dr.

Chuck Noon (Management Science Program) to deliver lectures at this workshop. Graduate student David Ralston went with them on this trip to assist during the workshop and to see a different part of the world. On his way back to Knoxville, Dr. Shaw stopped by Los Angeles to attend the annual AAG meeting. He delivered a paper and fulfilled his official duties as the Chair of the Transportation Geography Specialty Group at the AAG meeting. In June of 2002, Drs. Shaw and Ralston attended a University Consortium for Geographic Information Science (UCGIS) meeting held at the University of Georgia. In May of 2002, he also wrote a proposal with Dr. Ralston for an Action-Oriented GIS research workshop sponsored by the National Science Foundation. The proposal was reviewed and selected. Dr. Shaw has been invited and funded to attend this research workshop in Maine this November. The theme of this research workshop is to discuss new approaches to modeling time and processes in GIS.

In the Geography Department, Dr. Shaw continues his responsibility as Chair of the Graduate Program Committee. His role as the Associate Head of the Department started in 2001. The most exciting experience of serving as the Associate Head happened during a 3-day period when the State of Tennessee had a partial shutdown while Dr. Ralston was attending a conference. Fortunately, with help from faculty members, staff (especially Pam Sharpe), and students, he survived through this partial shutdown period and learned more about administrative tasks than he ever wanted to know!

News from Graduate Students

Toby Applegate is a new M.S. student in geography. His main research interest is studying connections between items of material culture, such as agricultural buildings, on the landscape of Slovenia and national identity. Specifically, he studies the kozolec, which is a permanent, free-standing device primarily made of wood used to dry hay and to store fodder for animals, and, sometimes, humans. Nine primary types of kozolec are distributed throughout the Slovene cultural hearth. They are seen everywhere but the Karst region of Western Slovenia and the Pannonian plain of the Northeast.

Marty Arford has been busy since the last Newsletter. He defended his thesis (Environmental

History and Tephrostratigraphy in Northwest Costa Rica: A 4000 Year Record from Lago Cote) in May 2001, and received his M.S. in August 2001. Currently Marty is working on his dissertation research which involves analysis of sediment records, including pollen and charcoal microfossils, from six lakes on the lower Pacific slope of Miravalles volcano, Costa Rica (funded by a grant to Sally Horn from The A.W. Mellon Foundation). He is reconstructing temporal changes in climate, fire history, vegetation, and human activity at local to regional scales over the approximately 8000 years represented in the lake sediments. In March 2001, Marty completed his third field expedition for the

research, with immeasurable assistance from fellow grad students Kevin Anchukaitis, Duane Cozadd, and Lisa Kennedy, and guidance from Sally Horn (muchas gracias, y'all!).

At the 2001 AAG meeting in New York City, Marty presented an illustrated paper titled "Tephrostratigraphy at Lago Cote, Costa Rica: Intrabasin and Extrabasin Comparisons" from his Master's thesis work. During fall semester, 2001, Marty taught a lecture section of Geography of the Natural Environment (131), which was his first teaching opportunity, and subsequently received an departmental Outstanding Teaching Associate award in April 2002. During 2000-01, Marty served on the SGA Student Senate; then, in 2001-02 he was the Geography Department representative for the Graduate Student Association. Since beginning his Ph.D. program a year ago, Marty has taken his specialty exams and defended his dissertation proposal. Now, he spends most of his time sitting at a microscope identifying pollen grains and counting charcoal fragments, and says he really enjoys it.

Beth Atchley is a third year M.S. student. Beth is currently working with Dr. Henri Grissino-Mayer in the University of Tennessee Laboratory of Tree Ring Science. She is researching an endangered tree, *Torreya taxifolia*, which grows in a small area of northern Florida and Southern Georgia. She is examining tree ring patterns to determine whether or not factors in the local environment are having a detrimental effect on tree growth within the habitat. Beth is also a GTA for Dr. Sally Horn's 131 class.

Kevin R Birdwell is currently working toward a Ph.D. in Geography. His research interests include: climatology and climate change, mountain meteorology, atmospheric dispersion, GIS and remote sensing. Kevin is married to wife, Marsha, and has two children, Keith, 7 and Kyle, 3. His academic accomplishments and program involvement include: employment as a meteorologist at Oak Ridge National Laboratory, researching mountain meteorology in Eastern Tennessee, and involvement in Sensornet, a program to establish a nationwide network of meteorological towers for the purpose of providing an early warning detection system of biohazard and chemical releases.

Lisa Boulton, a third year Ph.D. student, has completed her coursework and is preparing to take her comprehensive exams. In the spring and fall semesters

of 2002, Lisa taught a section in each semester of Introductory Physical Geography. She also served as a field research assistant during Spring Break on a research trip to Costa Rica to study vertisols for research being conducted by members of the Initiative for the Study of Global Environmental Change. Between the spring and fall semesters, she taught an Earth Science class and mentored a small group of high school students participating in a pre-college training camp for students gifted in math and science. The high school students Lisa mentored conducted a research project in the GSMNP, which focused on changes in surface hydrology caused by excessive use of trails. The students won an award for the best research project. Other geography graduate students that participated in the program as instructors and mentors include Andrew Dye and Jody Sumner. As for her dissertation research, Lisa is tentatively planning on studying a large gully (the size of a football field!) in south-central Mississippi in the hopes of connecting environmental changes, both natural and human-induced, to the geomorphic processes significant to the gully's formation and continued growth. The research has potential for furthering our understanding of human interaction with the physical environment and in understanding the role of weather and climate characteristics in the formation of geomorphological features. She hopes to begin the fieldwork portion of her research in Fall 2002.

Neil Cadle is an incoming Ph.D. student from Ravenswood, West Virginia with interests in economic geography, GIScience, cartography, and Appalachian culture and development. He received his Bachelor's and Master's degrees in Geography from Marshall University in Huntington, West Virginia and has completed some doctoral work at Southwest Texas State University. Neil was the Geographic Information Specialist at FIVCO Area Development District, a regional economic planning and development agency in eastern Kentucky, during the past two years. He hopes his research will enable him to collaborate with FIVCO and similar organizations, as he plans to study industrial and economic development in Appalachia.

Kim Crider is a third year M.S. student studying biogeography. She received her B.S. in Environmental Science from Indiana University. The US Forest Service's Southern Research Station currently

employs Kim. Her thesis work focuses on the effects of various forest management practices on plant species diversity over time. Last year she assisted in editing supplements to the second edition of Lydia Pulsipher's *World Regional Geography* textbook. She is currently a GTA for Geography 101.

Marianne Chrystalbridge completed her work on the Education for Sustainable Development (ESD) Toolkit this summer. The Toolkit emphasizes education for sustainability, and is based on the idea that communities and educational systems need to dovetail their sustainability efforts. The ESD Toolkit was cited in a recent statement by United Nations Secretary-General, Kofi Annan, as one of the "few successful working models of education programs for sustainable development" currently available. Marianne's contributions to the Toolkit include seven exercises designed to help people who desire to initiate change in their community. These exercises examine some essential elements of change and help to organize ideas for projects into action plans. She wrote a chapter on public participation. She also contributed a review of over thirty related websites. The Toolkit is on the Web at: <http://www.esdtoolkit.org>, and was produced by the Center for Geography and Environmental Education with Adjunct Professor Dr. Rosalyn McKeown.

Marianne recently moved into the historical Boyd's Creek Community in Sevier County this summer. This fall she is finishing her thesis on non-objective ways of knowing nature, based on interviews of 50 natural scientists at field stations in Costa Rica and Virginia, and at the University of Tennessee. Marianne has also been known to lead tours into the more rural areas of east Tennessee in search of locally-made, value-added corn products.

Jake Cseke (a.k.a. Jack) is a third year M.S. student. He plans to graduate this semester and to continue working for Southern Appalachian Man and the Biosphere (SAMAB) project until April. He then plans to do some extensive traveling after which he will look for a job. Jake's thesis is titled "A Dendroecological Approach to Dating Individual Canopy Gap Events in the Cove Forests of Great Smoky Mountains National Park." This research revolves around the notion that canopy disturbance events are recorded in individual trees within and on the perimeter of gaps. Growth suppressions and releases are recorded within each tree's rings.

Suppression occurs if the tree is injured by a fallen limb or entire tree, and a growth release occurs when a tree benefits by the additional resources provided by the gap, such as light and rainfall. Tree cores were taken from trees that were most likely to show the above changes in growth within each canopy gap. An exact date was assigned to every ring and the width of each ring was measured. After comparing ring-width data to climate data, the formation date and, in some cases, the duration of the canopy gap will be determined. This research will provide a temporal framework for assessing the changes in vegetation diversity and density that occur as canopy gaps age.

Andrew Dye is a second year M.S. student. He received his B.S. in Environmental GIS from Samford University in the Spring of 2001. His current focus is on GIS and remote sensing applications in the Great Smoky Mountains National Park (GSMNP). Specifically he is researching acid deposition effects on land snail populations in the park and using GIS to model the distributions as well as manage all the data associated with the project. He is using remote sensing to locate probable land snail habitats as well as to look for patterns in the acid deposition areas. This past summer Andrew worked for the Federal Upward Bound program working through a grant from National Geographic in conjunction with the Tennessee Geographic Alliance. The program worked hand in hand with the All Taxa Biodiversity Inventory (ATBI) currently being conducted in the GSMNP. He led a group of Upward Bound students through a project modelling fern data from the ATBI using GIS and also taught a GIS class for the program.

Joe Guttmann is a first year Ph.D. student. He has earned M.A. degrees in geography and secondary education from Marshall University and a B.A. in history from Wake Forest University. During his last semester at Marshall, he had full teaching responsibilities for a cultural geography course and enjoyed the challenge. In March, Joe presented his first paper, "The Catholics are Coming: Explaining Catholic Increases in West Virginia's Eastern Panhandle," at the Conference on Appalachian Geography. Joe has worked the past three summers for the National Park Service at the Jefferson National Expansion Memorial in St. Louis. As a park ranger, he worked at the top of the Gateway Arch and gave visitor programs in the underground Museum of Westward Expansion. Joe enjoys participating in the

World Geography Bowl competitions and has won the 2001 National MVP award (New York AAG) and a National team title as SEDAAG's team captain in 2000 (Pittsburgh AAG). He also won last year's SEDAAG MVP award in Lexington where his West Virginia team was upset in the finals by the Tennessee team. If you can't beat 'em, join 'em.

Chad Hellwinckel is a first year student in the Ph. D. program. Chad received a B. S. in economics and urban studies from St. Olaf College in 1991. After graduating he worked as a cashier at US military European Headquarters in Stuttgart, Germany before spending three years at the Land Institute researching perennial polyculture as a future solution to annual monoculture in agriculture. Chad received his M.S. in Agricultural Economics from the University of Tennessee in 1996. During the last few years Chad has worked for the National Forest Service as a Fire Lookout in Arizona, a trail crew member in New Mexico, and as a Peace Corps Volunteer in Panama. Chad is presently working for the Agricultural Policy Analysis Center of the university. His work includes modeling the agricultural economy in conjunction with ecosystem models to simulate the effect of policy changes upon the physical and economic landscape. He is interested in finding Atlantis, but feels this may be too risky as a dissertation topic. Alternatively, he is interested in the interactions of fire, soil, water and plant growth.

Amy Hill is a second year M.S. student in geography. She received her B.S. at Shippensburg University in Pennsylvania, in geoenvironmental studies and history. Her experiences there led to an interest in the dynamics of urban expansion, in terms of economics and demographics, at the interface between the megalopolis cities of Baltimore and Washington, D.C. and the more rural, mountainous regions to the west. Since arriving in Knoxville, she has completed the groundwork needed for approaching her field of inquiry and assisted in the creation of the award-winning video *A Glimpse of Sutherland*. She looks forward to furthering her classroom experience in World Regional Geography 101 and to collaborating with the Innovative Technology Center on campus to further the inclusion of technology in the classroom.

Claire Jamieson is a second year M.S. student from Kiawah Island, SC. Claire received her B.A. from Clemson University in History in May of 2001.

Her research interests focus on the American South, and her thesis is on the effect of the collapse of the textile industry on communities in South Carolina. Last year Claire worked on the award winning video, *A Glimpse of Sutherland*.

Alan Jolly is a second year M.S. student. Alan's research interests are varied, but tend towards physical geography. Currently he is involved in assessing the ability of three easily measured semi-conservative water parameters to characterize the quality of 'first-flush' storm water runoff. Additionally, he hopes to establish a relationship between these chemical characteristics of storm water runoff and the amount of impervious cover in the contributing sub-basin. Should alkalinity, hardness, and conductivity be useful in describing the quality of urban and storm water they would be ideal parameters for community monitoring projects. Tests for these parameters are inexpensive and relatively easy to perform. Alan is also involved in a project to date specimens of western juniper collected in central Oregon which may extend the dendrochronological record for this area and contribute to on-going climate research.

Martin Lafrenz is pursuing his Ph.D. in Geography at the University of Tennessee with an emphasis on watershed dynamics and GIScience. His research interests involve the classification of watersheds and the investigation of scale invariance in fluvial systems. He received his M.S. degree in Geography from Portland State University in Portland, Oregon with a thesis titled, "The Neoglacial History of Mt. Thielsen, Southern Oregon Cascades."

Chad Lane is a second year Master's student working with Sally Horn and Claudia Mora (Geological Sciences) studying stable carbon isotope signatures in Costa Rican lake sediments in an effort to detect changes in vegetation and climate over the last 10,000 years. He is part of the interdisciplinary Global Environmental Change Research Group. Chad has also been working with Ken Orvis on a technique to create modern charcoal samples that can be used as reference material for identifying charcoal fragments in ancient lake sediments, thereby assisting in vegetation change interpretations. This past summer Chad helped Sally Horn and Ken Orvis collect sediment cores from a beautiful lake and a not so beautiful swamp in the Dominican Republic. Chad's interests in vegetation and climate change stem from his undergraduate work with Donald Sullivan at the

University of Denver (who was a teaching assistant in the first physical geography course Sally Horn ever took!) studying climate and vegetation change in the Rocky Mountains of Colorado. Chad plans on presenting his research at the annual meetings of both the Geological Society of America and the Association of American Geographers this year.

Daniel Lewis is a third year M.S. student who is currently a Graduate Teaching Assistant for Geography 131-132. During the 2001-2002 year, he served as a Graduate Research Assistant in the Laboratory of Tree-Ring Science on a grant he co-authored with his advisor, Dr. Grissino-Mayer, for his thesis topic: Fire History and Age Structure of Kipuka Forests in El Malpais National Monument, New Mexico. His thesis seeks to examine the effects of human-related disturbances on the fire regimes of the monument using relict areas known as kipukas. Kipukas can be thought of as islands of older substrate material surrounded by younger lava flows. The data from these minimally disturbed areas may help to quantify the anthropogenic changes that have occurred to fire regimes in the malpais area.

David Mann is a Ph.D. student who received his M.S. from geography at UT this past spring. His studies focus on the use of tree rings to date historical structures and archaeological sites. He is also using these rings to extend the climate record in the Eastern United States further back in time. David's future work will include the collection of hardwood samples to develop sapwood estimates in the southeast. Currently he is on deployment to the Middle East with the U.S. Army.

Hilary Martin is a second year M.S. student studying GIS for Transportation. Hilary's current focus of research is in applications of GIS and GPS for aviation safety. Last year, in addition to her course work, she was heavily involved in the cartography for Lydia Pulsipher's *World Regional Geography* textbook. This past summer she worked on the Tennessee Electronic Atlas, updating and creating maps, primarily for the Transportation section.

Chris Moniodes is a new M.S. student at UT. His research interests lie within the fields of physical geography and geographic information science. Chris is particularly interested in using GIS to store, manage, manipulate and model information concerning water resources and forest dynamics. He is

originally from Pittsburgh, PA and received a B.S. degree in Regional Planning from Indiana University of Pennsylvania in December of 2000. He worked as a GIS analyst at the Southwestern Pennsylvania Corporation (a transportation planning firm) in Pittsburgh for 6 months before beginning his graduate career at Florida Atlantic University during Fall 2001. After living a hard life two steps from the beach for a year, he decided to transfer to the Geography Department at UT. He is currently working as a research assistant at TVA in Norris, TN and exploring different thesis avenues.

Julie W. Townsend is pursuing a M.S. in Geography. Her specialties are the indigenous peoples and landscapes of North America, with temporal foci both historical and contemporary. Currently, she is analyzing 20th century population change and spatial redistribution of Native Americans, the emergence of the non-native "wannabees", and the impact, economic and otherwise, that this misappropriation of identity has on American Indian tribal members. Julie's most recent academic accomplishment is her transition from a member of the UT administrative staff to that of a full-time graduate student, complete with a Teaching Assistantship for which she is very grateful.

Melinda Vazzana is a second year M.S. student. Her area of interest is in GIS-Transportation with specific interest in the Traveling Salesman Problem and the enhancement of this model to be more applicable to the real world. Currently, Melinda is a Research Assistant on the Spatial Analyst and Decision Assistance (SADA) software developed by the Institute for Environmental Modeling at the University of Tennessee and funded by the EPA and the US Nuclear Regulatory Commission. Her duties for SADA include assisting the continuing software development of this freeware product to be more compatible with ESRI products.

Daryl Wenner is a third year Ph.D. student. Daryl's dissertation research focuses on sports geography and the growth of hockey in the Sunbelt. He is currently an instructor teaching Geography 101. Daryl is also involved with the Tennessee Geographic Alliance and Geography Awareness Week.

Georgina DeWeese Wight entered the Ph.D. program this fall to study biogeography. She earned her B.S. and M.S. in Geography from Louisiana State

University in Baton Rouge. Her master's thesis was entitled: Bottomland Forest Reconstruction and Classification using General Land Office Surveys, Remote Sensing, and Geographic Information Systems.

Hongbo Yu is a Ph.D student whose research interests include transportation geography,

Geographic Information System, and logistics. Hongbo received his M.Phil. in Geography from The Chinese University of Hong Kong. He currently works with the Tennessee Electronic Atlas and as a GIS lab TA.

News From Alumni

John H. Bounds (Ph.D., 1966) is retired from college teaching and now does volunteer work with public schools as a mentor. John still does research, and completed approximately 200 publications in his 40-year working career. He added three more publications to the list since retiring. One research topic is ongoing, but he hopes to finish it in his lifetime. Dr. Bounds gets many requests for additional research topics, and even employment, but declines most of these.

Dr. Bounds is a Korean War Army veteran, having served from 1951-54. His last Army assignment was in Intelligence and Operations at Ft. Meade, MD, where he was involved in the military defense of the Washington, D.C. area.

Kevin Floyd Burris (1988) and Tom Casey, co-owners of Chattanooga Pepper Company are heating things up on Frazier Avenue. Their new shop becomes home to 50 brands of hot sauces and other pepper concoctions. Grand opening was December 9, 2001. While attending UTK, both Kevin and Tom were members of Chi Phi fraternity.

Store hours are 10:00 – 6:00 Monday through Saturday, and 1:00 – 5:00 on Sunday. In addition to hot sauce, the store carries lots of pepper paraphernalia, including t-shirts, hats, aprons and designer peppermills. Condiments range from peppery mustards and mayonnaises to pepper- stuffed olives, onions and more.

Glen Harrison, (Ph.D., 1986) is a Researcher at Oak Ridge National Laboratory who is currently serving as a Fulbright Scholar in Geography at Ewha Womans University in Seoul, South Korea during the 2002-2003 academic year. Glen will be teaching North America and Economic Geography. (Glen warmed up for this assignment by teaching Transportation Geography for our Department in Spring, 2002.) Glen is one of approximately 800 U.S. faculty and professionals who will travel abroad to

some 140 countries for the 2002-2003 academic year through the Fulbright Scholar Program.

This past year Glen led a team of researchers from the National Transportation Research Center (including Adjunct Professor Cheng Liu) that redesigned the US military's supply chain and logistics system. They received the Excellence in Applied Geography Award from the AAG.

Rachel Kurtz (Clement) (M.S., 1999) still manages to keep busy, even out of the grasp of UT's physical geographers. She is currently a Ph.D. candidate at Penn State where she sees Brian McManus (B.S., 1999) from time to time, and is hoping to run into Ola Johanssen who is at Johnstown, PA. Rachel is working on the spatial and temporal dimensions of how carbon sequestration is affected by land use change in the northeastern U.S. While most of her dissertation work requires time in front of the computer, she has worked in a section on regeneration failure (in PA, when deer browse tree seedlings and new trees don't come back after harvest), which makes her go out and tromp around in the woods. She is teaching Field Methods in the Fall of 2002, just for fun, and still works for the USGS full time as a Research Scientist. Rachel and Sally Horn collaborated to get a publication out of her master's thesis, which was published in the summer of 2001. Rachel has recently invested in serious backpacking gear and is enjoying spending lots of time in places without too many people. For fun, Rachel is enjoying Penn State football and getting in some long-awaited travel. Her next big goal (besides all that dissertation stuff) is to learn to surf in the cold waters off of Western Australia.

George James Wenger (B.A., 1976) is presently employed as a cartographer at the National Imagery and Mapping Agency (NIMA) in St. Louis, Missouri. George has also worked for the U.S. Geological Survey in Memphis, Tennessee; New Cumberland

Army Depot in Harrisburg, Pennsylvania; and the U.S. Army Corps of Engineers in Memphis, Tennessee. He has twenty-three years of Federal service. After receiving his B.A. in Geography from

the University of Tennessee, Knoxville, George earned the Master of Science degree in Geography from Memphis State University in August, 1982.

Keep Us Up-to-Date

Share your news with other UT Alumni and help the Department keep up with your activities. Drop a us a line at: Newsletter Editor, Department of Geography, 304 Burchfiel Geography Building, University of Tennessee, Knoxville, TN 37996-0925, or email us at utkgeog@utk.edu.

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Degree(s) if any; and Years _____

Address _____

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