

A HISTORY OF GEOGRAPHY AT THE UNIVERSITY OF NORTH TEXAS

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We have generations of students (and colleagues) who know little about the social evolution of American geography and some of the milestones in our collective departments. ...If we are looking for good stories on geography's successes, we need to examine how, when, where, and under what circumstances geographers established and nurtured academic departments. ...While individuals in the respective institutions may know some of this history, we are not very good at recording and thus sharing much of our own social history. (Cutter 2001, 3–4)

So wrote Association of American Geographers President Susan Cutter in her concluding column of the June 2001 issue of the *AAG Newsletter*. Such a process had already begun in the Southwestern region with the publication of Fred Shelley's (1997) fifty-year history of the Southwestern Division of the Association of American Geographers and Kent Mathewson and Vincent Shoemaker's (1997) history of geography at Louisiana State University's. Since then, an additional 6 histories of geography departments have been compiled in the *Southwestern Geographer*, including the present offering on the history of the Geography Department at the University of North Texas.

The University of North Texas (UNT) is located in Denton, Texas, about 35 miles north of both Dallas and Fort Worth, where interstate highways 35W and 35E join together. Denton's role in higher education began in 1885, when the town was chosen by the state legislature as a site for a "summer normal" school to educate local teachers during the summer period. Denton's local business community was keenly aware of both the need, and the economic potential, for higher education. Into this scene came Joshua C. Chilton in 1890. He was looking for a suitable site to establish a private normal college, and his proposal for a private

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normal school in Denton was quickly accepted by city leaders. Although enthusiastically embraced by city business leaders, the privately funded normal school failed to achieve financial stability, and Chilton, who had broken down completely both financially and physically by 1892, died a few years later in Indiana. Nevertheless, after considerable political maneuvering that included creation of the Southwest Texas Normal School in San Marcos, the renamed North Texas State Normal College (NTSNC) was officially created and funded by the state legislature in 1899 (Rogers 1965).

The Early Years

Although records are scant, Rogers (1965) suggests that geography courses were included under the science curriculum as early as 1901. The only instructor listed by Rogers at that time was Mrs. Hayden Lewis, who also taught history. A more prominent faculty member associated with geography was J. R. Swenson, who arrived in Denton in 1907. It is unclear whether Swenson was formally trained as a geographer.¹ However, in a fascinating 1935 book, *Why on Earth Did it Happen? The Geographic Factors Conditioning American History*, he “freely and gladly” acknowledged his debt of inspiration to the work of Ellen Churchill Semple (Swenson 1935, ii). The book went on to become part of the instructional curriculum for the next forty years. As Bill Holmes (faculty member, 1964–1998) recalls, “We had, at one time, probably as many as 100 or so copies of the book stored in boxes....I had students read it in my historical geography classes” (Holmes 2005). Terry Jordan (faculty member, 1969–1982) disposed of the lot when he arrived as department chair in 1969 (Holmes 2005).

Swenson’s commitment to education was clear. Writing in the students’ *Journal on College Athletics* in 1907, Swenson provided an early critique of intercollegiate sports, arguing that:

...when the standing of a college is made to appear to depend upon a certain individual’s playing on the team, the best-intentioned of deans are tempted “not to count this time”, until the colleges dare no longer accuse each other of this fault. (Rogers 1965, 145)

Swenson also contributed a number of chapters to UNT President William Bruce's *Principles and Processes of Education* (1916) and was heavily involved in the development of student government in the early 1930s.

Movement toward recognized college grade status for the school began in 1912, when the Texas legislature standardized the course of instruction for teachers across all Texas normal schools and recognized the final two years as college-grade work. By 1922, sixteen courses in geography were listed in the university catalog. While many of these are predictable given the time period (e.g., Environment and Adaptation, Geographic Conditions of History, Regional Geography of South America, Structural Geology, and Industrial Geography), a few offer delightful insights into the varied nature of our discipline. For example, a course in Descriptive Astronomy was described as follows:

While astronomical phenomena have some bearing on mathematical and physical geography, *the aesthetic interest in these phenomena for their own sake* fully justify this study. *Technical mathematics of astronomy is avoided.* (NTSNC 1921, 83, emphasis added)

How often these geography courses were taught is unclear. Certainly, teaching loads were very high, with as many as 25 teaching contact hours per week on a six-day schedule, with Swenson and two other summer teachers (Louis Fred Conell and Edwin Gullledge Grafton) providing the instruction (NTSNC 1921; Rogers 1965).

Geography and Teacher Education

In 1922, the NTSNC was recognized by the state as an accredited bachelor's-granting institution. By 1924, a similar set of geography courses, with the addition of Meteorology, Climatology, and Ethnography were now offered and listed under the Department of Geography² with Swenson as head. A year later, Mary Jo Cowling (B.S., M.A.) arrived from the University of Chicago. Although we can only speculate, it is probable that Cowling's training at Chicago would have included classes from Ellen Churchill Semple, Robert Park, and Ernest Burgess. Her arrival coincided with the adoption of new courses, including Geography of the South

and Philosophy of Geography. Cowling and Swenson were joined by Mine Beth Seelbach (M.A., Peabody College for Teachers) in 1928 and briefly by Chauncey Pollock (A.M., Columbia University) in 1930. Course offerings remained relatively stable during this time, with Conservation of America's National Resources added in 1933 and World Problems in 1935.

Cowling strongly supported field trips for students (Figure 1). She listed a total of 28 separate field trips for students in her 1936 book, *Geography of Denton County*, and in 1939 she led a six-week field trip through the U.S. South. The 1939 trip included seven female school teachers from the Denton area and was reported in newspapers in Florida and North Carolina, as Cowling sang the praises of each region to the reporters. It is unclear how many times she made the trip. It was never listed as a course in the university catalog, and no references to such a trip beyond 1939 have been found.

The first member of the faculty to hold a Ph.D., Walter "Doc" Hansen (University of Nebraska) arrived in 1936 and took over as chairman in 1941, when Profes-



Figure 1. A typical 1930s geography field trip.

sor Swenson retired. Doc was a devout Methodist, a Midwestern conservative, and a very quiet, polite man who lived his beliefs and principles every day. He was an avid and talented golfer, and every Wednesday afternoon was set aside for a competitive game (with betting on the side) with other members of the faculty. Doc rarely lost and used to keep his “winnings” in bank bags, carefully tied and sorted, and housed in the trunk of his car. On one occasion before a departmental field trip, one member of the group noticed the money bags, and, knowing Doc’s religious habits, asked if this was gambling, to which Doc emphatically stated, “it is NOT gambling unless you spend the money!” (Holmes 2005).

It seems that Hansen faced a few difficult years during the early 1940s. Cowling continued to teach until sometime during 1943, when she passed away, and neither her line nor Swenson’s was replaced until after World War II. Flo Cullin, who had been Assistant to the Director of Teacher Training and had degrees in geographic education, had been teaching geography during the 1940s but was not listed as a member of the faculty until 1947.

The Department of Geography

After the Second World War, the influx of students taking advantage of the G.I. Bill swelled campus enrollment, and in 1949, the mission of the university expanded beyond teacher education. The school was renamed North Texas State College. Demand for geography courses grew also, “because the G.I.’s wanted to know where they’d been” (Miller 1999). As a result, Dean of Education J. C. Matthews gave Hansen three faculty lines to establish a geography department, on the condition that Flo Cullin would be the first person hired. Hansen reluctantly acquiesced, believing that college professors should be male; thereafter he referred to Flo only as “that woman” (Miller 1999).

Determined, hard working, and truly dedicated to geographic education, Cullin’s interaction with the next generation of faculty and students was both professional and affectionate. She never married, but she considered future faculty hires (Miller, Knox, Leo, and Holmes) as her sons, and their children as her grandchildren, whom she would regularly baby-sit. Bill Miller (Robert Miller’s son)

recalls those days fondly, reminiscing that she would teach the children to play cards, talk widely about topics as varied as World War I or Kipling, sing Bohemian children's songs from her youth in Flatonia, and bake drop cakes (Miller 2005). She retired in 1963, after many years of dedicated service and hard work, having learned that she could actually earn *one dollar a year more* in retirement than she could teaching (Holmes 2005)! Her lifetime of dedication to teaching was formally recognized in a proclamation by the Texas legislature commemorating her ninetieth birthday (Miller 1999). As of 2005, Flo Cullin was the only female faculty member in the history of UNT Geography to have gained tenure.

Increased post-WWII enrollment also led to the hiring of Robert Miller in 1948 and Lee Knox in 1949. They were close friends, and both had M.S. degrees from Oklahoma Agricultural and Mechanical College (now Oklahoma State University). Knox was known for his field skills in physical geography, while Miller was an accomplished cultural geographer. Both were also avid field geographers and quickly added a six-credit field trip course to the roster (Figure 2). Alternating each year between the eastern and western U.S., month-long field trips were conducted west to Carlsbad, Grand Canyon, coastal California, Yellowstone, and the Black Hills, and east to Washington, D.C., New York, parts of Canada, Chicago, and St. Louis. These field trips continued well into the early 1960s.³ Knox recalls that those 1950s field trips were among the most enjoyable parts of his career at North Texas (Knox 2005).

Geography classes at this time not only served geography majors (which numbered approximately 20), but were also electives for students in education, arts and sciences, and business. As one might expect, regional and systematic courses dominated the offerings. Teaching loads continued to be high (5 courses per semester), and class sizes averaged 40 to 50 students, leaving little time for research. Nevertheless, intellectual inquiry and scientific methodology were alive and well. For example, workers to the southeast of Denton discovered the curious remains of an "elephant-like" animal in 1950. Doc Hansen, whose interests included fossil collection, went out to investigate. Having surveyed the remains, he commented that "It's possibly the bones of an elephant who died here 'recently'—



Figure 2. The 1949 Summer Field School. Robert Miller is eighth from the right.

about 20,000 years ago.... Hansen went on to explain that other fossilized remains found in parts of Denton County substantiated the belief that there was life here 60,000,000—*yes million—years ago*” (italics added for emphasis) (*Denton Record Chronicle*, March 24, 1950).

Hansen also wanted Knox and Miller to complete their doctoral degrees. Miller relocated to East Lansing to enroll in Michigan State University for three years (1958–1961), and Knox returned to Oklahoma State University. Although both completed all the necessary course work and had begun writing their dissertations, for a variety of reasons neither completed their tasks.

The 1960s

In 1961, North Texas State College became North Texas State University, and its mission slowly expanded into research and the provision of doctoral degrees

beyond education and music. The geography program also increased in size during this time. Cultural geographer Nelson Leo (M.S., Southern Illinois University; ABD, University of Illinois) temporarily replaced Miller in 1959. He was retained after Miller returned, due to increased enrollment. Robert Vogel (M.S., Michigan State University) joined the faculty in 1964, and historical/physical geographer William Holmes (Ph.D., University of Texas at Austin) was added in 1966. Although Vogel had finished his Ph.D. coursework at Michigan State, he had been hired as an instructor. When Holmes was hired as an assistant professor (at the time, he had an M.S. from the University of Tennessee), Vogel became sufficiently upset that he resigned the following year (Holmes 2005).

By the mid-1960s, the department had a number of excellent faculty members with some of the finest instructors the department has ever had. Knox was a top-notch geologist and teacher, receiving the 'Fessor Graham Award⁴ for excellence in teaching in 1985. Miller and Leo were excellent cultural geographers, and Holmes artfully blended both historical and physical geography. Unfortunately, the credentials of not having completed the Ph.D. plagued all but Holmes and resulted in a less visible department on the regional and national scene (Holmes 2005).

The increasing emphasis on research and completion of the Ph.D. led to the emergence of two distinct faculties on campus and within geography. One was the "old guard" contingent, who had, for many years, become complacent in the more or less humdrum setting of the "teacher's college" atmosphere. At the time, the school was producing more teachers than any other teaching college in the Southwest, and while it was a definite advantage for new faculty to have earned the terminal degree before being hired, a great number of them had not. University administrators hoped, or perhaps presumed, that a new faculty member would eventually obtain the degree. However, with high teaching loads, distance, time, and communications limited to the postal service and manual typewriters, completing the dissertation was an arduous and laborious task. Holmes, for example, enrolled in the fledgling University of Texas Geography Ph.D. program. Working under the notoriously challenging Donald Brand⁵, Holmes worked feverishly on his dissertation for several years. Finally, Brand announced that he was retiring

and that it was time for Holmes to finish; only then was the degree granted.

For the “old guard” group, tenure was granted in three years if the faculty member demonstrated good citizenship and performed the task of being a responsible teacher. Promotion to assistant professor was nearly automatic with the granting of tenure, and promotion to associate professor came with the completion of the Ph.D. degree. Full professorship was awarded with a reasonable tenure as associate, and continued good citizenship.

A second group was composed of the new hires with the Ph.D. degree in hand. For this group, tenure was no longer automatic, as the faculty member had to demonstrate his desire to continue research and publication, and promotion took place only after an extended period of significant publication. It was evident that the old-guard faculty who had not completed their dissertations after fifteen or twenty years of service had little intention of doing so before their retirement, and they suffered the consequences of heavier teaching loads and fewer raises, and were generally regarded by the newer folks as “dead weight.” This led to considerable resentment among the old-guard folks when newcomers ridiculed and derided their efforts (Holmes 2005).

With the teaching loads of the old guard, it is difficult to see when they would have had time to conduct research. In geography, only Doc Hansen (the chair) had a twelve-hour load; everyone else taught fifteen hours a week. It was not uncommon for each teacher to have as many as 250 or 275 students per semester. Faculty taught six days per week. There was no department secretary. Everyone typed their own exams on old standard typewriters, ran them off on an antiquated mimeograph machines, stapled them together, and graded them. When the Geology and Earth Science laboratory courses were initiated, they were taught by the faculty. The department was teaching between 1,200 and 1,500 students per semester, and according to some AAG statistics⁶ of the time, North Texas ranked among the top ten universities in the country in enrollment in geography, perhaps even in the top five during some years.

A number of other instructors with either M.A. or M.S. degrees (including Robert Norris, Ralph Meuter, Gary Jacobs, Cecil Williams, Paul Bieneman, and

William Cheek) passed through the department during the second half of the 1960s and early 1970s. While finishing the Ph.D. was a priority for each of them, none had completed the task. Consequently, few stayed at North Texas for very long: Norris returned to the University of Iowa, and later landed a position at the University of Oklahoma, and Meuter and Williams got Ph.D.s from the University of Oklahoma. All of these Master's-degreed faculty members secured an academic position upon completion of their degree (with the possible exception of Jacobs). These were great times in the Geography Department and resulted in some long-lasting friendships among the entire group. Along with Flo Cullin, and brief visits by Hansen, the faculty would regularly get together to "Boil Corn," drink beer, throw horseshoes, and have a good time (Miller 2005).

The Terry Jordan Years

Doc Hansen's retirement in 1969 provided the opening necessary to reorient the department toward the university's new research focus. Terry Jordan (Ph.D., University of Wisconsin), who at the time was a 30-year-old, untenured professor at Arizona State University, was recruited by Dean Frank Gafford to chair the department. Jordan was offered full professor status, twice his Arizona salary, and was told to "fix this department, in keeping with our transition from a teacher's college to regional state university" (Jordan 2001).

This was not an easy task. There was no department secretary and no department files. A secretary was appointed at once, but it took a long time to overcome the absence of files. In a faculty of seven, only Jordan and Holmes had doctoral degrees, and the dean wanted all non-tenured faculty terminated. Bieneman and Cheek were given pink slips and returned to the University of Oklahoma and Michigan State University, respectively, to complete their Ph.D.s and were later hired at St. Thomas Aquinas College and Southwest Missouri State, respectively. Salary incentives were intended to encourage the other instructors (Knox, Miller, and Leo) to finish their dissertations, and this resulted in "a [salary] gap...that could only be described as class struggle in the Marxian sense!" (Jordan 2001). Jordan was given permission to hire Steve Hall, a palynologist (Ph.D., Michigan

State University) in a joint position with the Institute of Applied Studies. Jordan hired John Bean (Ph.D., University of Pittsburgh) in 1972 and G. Philip Curti (Ph.D., University of California at Los Angeles) in 1973. So, by the time Jordan left, five out of eight faculty members held doctoral degrees.

Jordan introduced new courses in Agricultural, Population, Cultural, and Political Geography, along with a revamped History of Geographic Thought and a series of graduate seminars. He also tried to create a master's degree program but ran into obstacles with the state's Higher Education Coordinating Board, and the idea faced a lukewarm reception on campus. Jordan felt that his main mistake was perhaps that he had tried to create a department devoted to "ivory-tower" research, rather than one more devoted to applied geography (Jordan 2001). The department did move toward a more applied track, however, adding new courses in Quantitative Methods (introduced in 1971), Map/Air Photo (in 1973), and Computer Applications in Regional Science (teaching SYMAP and SYMVU, in 1975) (Ferring 2005).

Terry Jordan was a major influence in the modernization of the Geography Department. He realized that the department needed to develop more scholarship, and to survive, the department would have to increase the volume of research. Although a decent and fair chair, Jordan had very high standards for both existing and new faculty. As recalled by one faculty member, "come time for pay/merit increases, Jordan would line up the faculty in his office and tell them they were useless and undeserving of a pay rise and then return the money to the Dean's office." By the time Jordan left in 1982, the department had a small but high quality publication record, teaching loads had been reduced to three classes per semester, teaching assistantships were available through lab science credit courses in physical geography and geology, and several other service courses at the undergraduate and graduate levels were offered. Jordan felt that he had accomplished his task of fixing the department, and while his years in Denton were happy ones, "fixing a department means you make enemies as well as friends." So in 1982, he decided it was time to leave (Jordan 2001).

The Turbulent 1980s

Philip Curti was replaced by Carl Parker (Ph.D., University of California at Los Angeles) in 1978 and, when Parker resigned, Jordan hired F. Andrew Schoolmaster (Ph.D., Kent State University) in 1980. When Jordan stepped down and accepted an Endowed Chair position at the University of Texas at Austin in 1982, John Bean assumed the chair position, and the university gave the department a one-year temporary position. Bean hired Kent McGregor (Ph.D., University of Kansas), and when the position was readvertised as a tenure-track position the following year, McGregor was hired. At the same time, Robert Miller decided to retire, and John Harlan (Ph.D., University of Iowa), who had also applied for the 1983 tenure-track position, was hired to replace him. Bean also hired Michael DeMers (Ph.D., University of Kansas) and David Selwood (ABD, Ohio State University), although both left the department within a few years, as did Steve Hall, who accepted a position at the University of Texas at Austin (McGregor 2005).

During the early 1980s, the department had about twenty undergraduate majors, a modest number of graduate (MSIS, or Master of Science in Interdisciplinary Studies⁷) students. Teaching loads continued to be nine credit hours for most faculty members, with the expectation of a greater research effort and some graduate instruction. Still, the basic reality was that much of the instruction consisted of undergraduate service courses for the various colleges. Desire for a graduate program continued, but lingering disappointment and cynicism after Jordan's effort in the 1970s and continued lukewarm support from the university administration, dampened efforts. Still, Bean tried to keep some sort of graduate program operational and, since the job market at the time was almost exclusively urban planning, regional science became the core of both the undergraduate program and the MSIS track in geography (McGregor 2005).

Bean's tenure as chair was rather turbulent. Bean felt that he needed to undo some of the perceived injustice that some of the older faculty had suffered under Terry Jordan (Schoolmaster 2005). However, continued clashes with some of the younger faculty divided much of the department into two opposing camps and resulted in a very difficult work environment (McGregor 2005). Bean's tenure as

chair lasted only three years, and he was replaced by Bill Holmes in 1986.

Holmes was instrumental in healing the divisions that had emerged within the department when he became chair (Schoolmaster 2005). In an effort to save money, however, the administration decided to merge geography and anthropology, since they were both small programs. A combination of philosophical and personal differences between the two departments led to another round of strife. Once the Institute of Applied Sciences was granted permission to offer M.S. and Ph.D. programs, in which geography was to play an important role, it was decided to reestablish geography as its own unit. Archaeology faculty decided to stay within the Department of Geography.

The Emergence of an Applied Focus

Although movement toward a more applied program had begun with Bean's classes on SYMAP/SYMVU and the regional-science focus of the MSIS track in the 1970s, it was not until the early 1980s that a truly applied focus began to emerge. Schoolmaster had been teaching the undergraduate "Introduction to Regional Science" course, but he felt that the concept remained unfocused. He began to experiment by bringing in practitioners (people with geography degrees or people working on geographic issues) from the Dallas–Fort Worth business and government community, and he began to develop outreach and internship programs. John Frazier (State University of New York at Binghamton) and Bart Epstein (Kent State University) had started the Applied Geography Conferences⁸ (AGC) in 1978, and Schoolmaster positioned North Texas Geography as a cosponsor of the annual meetings in the early 1980s.⁹ The research interests of Harlin (geomorphology, water), McGregor (meteorology, climatology), DeMers (GIS), and Selwood (economic geography, water) also dovetailed with the emerging applied focus, as did the department's expanding links with the interdisciplinary Institute of Applied Sciences¹⁰ (IAS) (Schoolmaster 2005).

Schoolmaster took over as chair in 1988 and consolidated the department around Applied Geography and GIS. His first goal was to consolidate the department's applied focus at the undergraduate level by substantially increasing

the number of majors, developing an extensive internship program (overseen by Paul Hudak), increasing the connections between the faculty and the students, developing the growing alumni base, and nurturing the camaraderie of the department. He instituted an annual departmental banquet (now in its fourteenth year), a formal alumni association, a newsletter, and a series of annual parties, including Beers of the World and Bowl-a-Rama. By the mid 1990s, the department had grown to approximately 75 undergraduate majors, and Andy was spending considerable time cleaning his kitchen floor, as a result of frequently offering the hospitality of his home to faculty, students, and alumni (Lyons 2005, personal recollection of good times!). Extended field-trip courses returned to the syllabus in 1994, with Joseph Oppong's biannual Ghana Field School and Don Lyons's and Harry Williams's biannual British Isles Field School in 1998.

The expansion of GIS and its place within geography was a second task. Sam Atkinson had been hired by Biology and IAS in 1986 to develop and direct the Center for Remote Sensing and Land Use Analysis (CRSLA) and taught the first modern GIS course as a "freebie" for geography in 1988. Bruce Hunter, who was, and is, the most central player in GIS at UNT, was in that class. Hunter had returned to the university to get an M.S. degree in Environmental Science and was hired (on soft money) by Sam Atkinson to work in CRSLA. Schoolmaster recognized the need to keep GIS within geography and along with Ken Dickson (director of IAS) recognized Hunter's talents. Together, they conceived of the Center for Spatial Analysis and Mapping (CSAM) as a joint center between geography and IAS, with Bruce Hunter as manager (later, director) under the guidance of geography. Dickson then approached the president, who redirected him to the provost and the dean of Arts and Sciences. He was able to convince the dean of the importance of the center, and in 1992, CSAM was officially recognized with modest start-up funds for eight computers provided by the dean's office. A few years later, Paul Hudak (faculty member, 1992–present) successfully coordinated the writing of a National Science Foundation proposal to purchase more computers to expand the technical course offerings of the geography program. Along with Higher Education Assistance Fund (HEAF) or Proposition 2 money secured by Schoolmaster, a

large number of additional computers was purchased, and the GIS program began to take off (Atkinson 2005; Hunter 2005; Schoolmaster 2005).

Schoolmaster also hired many of the current faculty and staff during this time. In 1989, Dianne Whaley (Ph.D., Northwestern) was hired to further develop the economic/urban side of the program and taught GIS in 1989, but she left after two years to take a position at Indiana University at Indianapolis. Also hired were physical geographer Harry Williams (Ph.D., Simon Fraser University) in 1989; economic/urban geographer Donald Lyons (Ph.D., University of Colorado at Boulder) in 1991; medical geographer Joseph Oppong (Ph.D., University of Alberta at Edmonton), geohydrologist Paul Hudak (Ph.D., University of California at Santa Barbara), and biophysicist Miguel Acevedo (Ph.D., University of California at Berkeley) in 1992; and archaeologist Lisa Nagaoka (Ph.D., University of Washington) in 1999. All of these faculty members are still at UNT. Three other faculty members—Jeff Fitzgerald (1994–95), Karen Lupo (1996–98), and Minhe Ji (1997–2004)—were also hired by Schoolmaster. Tami Deaton, a young UNT business undergraduate in 1989, was hired as a part-time clerk. A few years later, she was promoted to administrative assistant and, with the exception of one year, has run the departmental office with efficiency, flair, and good humor for more than ten years. Adjunct faculty Ken Iles and George Maxey (both of whom skillfully teach large numbers of the introductory Earth Science, Geology, and World Regional Geography courses) were also hired during this time (Figure 3).

By 1994, the department was in solid shape, and the time was ripe to once again develop a M.S. degree proposal. This time, the focus was squarely on applied geography, with an emphasis on regional and environmental analysis. With input from the entire department, a proposal was submitted to the provost in August, and the Texas Higher Education Coordinating Board in January 1995. Approval was granted in July 1995, and the first students were enrolled that fall with Don Lyons as graduate advisor. Later that year, planning began for what is now the permanent home of the Department of Geography. Spearheaded by Ken Dickson and other IAS faculty, and in conjunction with the departments of Geography, Philosophy and Religion Studies, and Community and Environmental Jour-

nalism, planning began for the Environmental Education, Science, and Technology (EESAT) building (Figure 4). Completed in 1998, EESAT, in addition to units listed above, includes the Elm Fork Education Center, which hosts a number of environmental education programs oriented to local primary schools, a planetarium, and a variety of other environmentally oriented public-outreach programs.

Initial enrollment in the graduate program was relatively modest, with six students enrolling during the fall of 1995. Enrollment increased slowly during the first few years but began to take off after the department moved into EESAT, increasing to nineteen by the time Schoolmaster stepped down in 2000, and twenty-six by 2005. Undergraduate enrollment has continued to increase as well. In both cases, the growing utility of GIS as an employment option for both undergraduates and graduate students plays an important role in expanding our student recruitment. Recognizing this reality, the department created a fifteen-credit-hour



Figure 3. The Geography Department in 2004. Front row, from left: Tami Deaton, F. Andrew Schoolmaster, Lisa Nagaoka, Eva Ramirez. Middle row, from left: Miguel Acevedo, Donald Lyons, Harry Williams, Joseph Oppong. Back row, from left: Ken Iles, Paul Hudak, Kent McGregor, Bruce Hunter, Reid Ferring. Missing: George Maxey.

certification program in 1999, which has further increased enrollment.

Bruce Hunter began to teach GIS short-courses during the mid-1990s, and he used the revenue stream to upgrade all CSAM computers in 1999 and again in 2002. In addition to short courses, Hunter continues to tap into a variety of revenue streams, including externally funded research projects, joint programs with a variety of public and private entities, and negotiations with software suppliers to continually expand and update the hardware, software, and physical space of CSAM (Hunter 2005). In the course of twelve years, Bruce has transformed CSAM from its modest beginnings with eight computers into two large labs with 47 computers, digital projectors, and color plotters, as well as an extensive collection of field equipment. Furthermore, although CSAM's original purpose was to provide GIS support and computing, the facility also supports thirteen GIS/technology-related courses offered by geography and the IAS.



Figure 4. The new home of the Geography Department at the University of North Texas: the ESSAT building.

UNT Geography in the Twenty-First Century

By 2000, Schoolmaster had completed his task of building robust undergraduate and terminal M.S. programs in applied geography. In addition, he had successfully mentored a large number of the younger faculty and had developed strong and sustained friendships with students (and faculty) going back twenty-five years. He was ready to move on. He accepted a position as faculty executive assistant to the chancellor and later became an associate dean in the College of Arts and Sciences at UNT. In fall 2004, he left UNT to become dean of Arts and Sciences at Eastern Kentucky, where he continues to work today.

Reid Ferring took over for Schoolmaster in 2000. Ferring holds Ph.D. degrees in Anthropology (Southern Methodist University, 1980) and Geology (University of Texas at Dallas, 1993) and is an internationally renowned archaeologist, having made major archaeological discoveries, including the earliest North American Clovis site (northeast of Denton) and a 1.77 million year old hominin site in Dmanisi, Republic of Georgia. Reid came to UNT in 1978 through a research position in the IAS. In 1982, Terry Jordan hired him to teach physical geology, and he has been housed within geography and IAS ever since.

Ferring, a true Renaissance man, had a large impact in redesigning the graduate program. While the program had grown substantially, it lacked coherence. Ferring led the effort to restructure the program around four central themes: urban environmental management, water resources management, applied GIS, and geoarchaeology. The resulting changes have made the program more focused, and graduate enrollment continues to increase. Reid also significantly increased the number of teaching assistantships in the program. By strictly limiting earth science, archaeology, and geology labs to twenty-five students (and with growing enrollment), he was able to “induce” the university to expand the department’s part-time budget considerably.

The future of the program looks bright. Enrollments are high, as is student-credit-hour generation. Pinliang Dong, (Ph.D., University of New Brunswick), whose interests are in GIS, joined the faculty in 2004, and Eva Ramirez joined the front office staff in 2003. Paul Hudak took over as chair in 2004 and is guiding the

implementation of the department's strategic plan. Research links with IAS and other units on campus continue to develop, and a number of the faculty members have secured research grants from NSF and other agencies. Many of these projects apply principles from geography and allied disciplines to studies of human–environment interactions. According to Hudak (2005), “Our expertise in archaeology and geology, combined with wide-ranging expertise in applied geography, gives us unique capability to study such interactions over different time scales. Increasingly, we will adapt resources of the urban laboratory around us, for organized classes, internships, and research.” His vision for geography is to continue educating the general student population through wide-ranging core offerings while developing courses for majors demanded by a growing and increasingly diverse job market for geographers:

Our plan to sustain a strong majors base includes demonstrating the societal importance of geography in core courses, working with high schools and community colleges on geography curricula, including geographic information science, and modifying our curriculum to reflect the latest developments and applications in the discipline. To help accommodate increased enrollments, we will continue to develop distributed learning modules for courses suited to that mode of instruction. (Hudak 2005)

When the next department history is written, let's hope we can look back on the same excellent leadership and high quality faculty that UNT Geography has had since its inception in the 1920s.

Notes

¹In the 1921–22 university bulletin (NTSNC 1921), the term (Geography) is listed after his name, although the departmental affiliation is listed as Natural Sciences.

²Although geography was listed as a department, it continued to be housed within the Department of Education.

³I have also heard of a field trip to Cuba in the 1950s, but this trip hasn't been verified.

⁴The 'Fessor Graham Award is the highest honor bestowed by the student

body at UNT. It recognizes one faculty member each year for outstanding and unselfish service beyond the call of duty to students. It is named for the late Professor Floyd Graham, who taught at UNT for more than forty years.

⁵Brand, a student of Carl Sauer, was known for giving 500-question exams!

⁶Lyons 2005.

⁷The MSIS degree was administered by the Graduate School and included a variety of “specialist tracks.” The tracks were used by the smaller departments to offer graduate programs without having to acquire approval from the Coordinating Board.

⁸The Applied Geography Conferences have provided a forum for the exchange and critique of ideas related to the application of geographic concepts, analytical techniques, data, and methods since 1978. The conference brings together practitioners, academicians, and other professionals who seek geographic solutions and explanations to societal problems. www.appliedgeog.org/html/main.htm (accessed on March 28, 2005).

⁹Schoolmaster also served as co-editor and editor of *Papers and Proceedings of the Applied Geographic Conferences* and became executive director in 1995.

¹⁰Links with IAS can be traced by to Jordan’s hiring of Steve Hall as a joint appointment with IAS during the 1970s. Schoolmaster also worked on a number of projects with members of the IAS faculty during his time at UNT.

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