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Jerry Ronald Choate: 1943–2009

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Source: Journal of Mammalogy, 92(6) : 1418-1432

Published By: American Society of Mammalogists

URL: https://doi.org/10.1644/11-MAMM-O-138.1

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Journal of Mammalogy, 92(6):1418–1432, 2011

OBITUARY

JERRY RONALD CHOATE: 1943–2009

All endeavor calls for the ability to tramp the last mile, shape the last plan, endure the last hours toil. The fight to the finish spirit is the one … characteristic we must possess if we are to face the future as finishers.—Henry David Thoreau (1817–1862)

On 9 December 2009 the science of mammalogy lost one of its most unique and dearest leaders. Jerry Ronald Choate lost his battle with cancer at the home of his son Judd in Denver, attended by his wife Fi and other family members, while awaiting a gene therapy trial for melanoma, which originally was detected in 2003. He was born on 21 March 1943 in Bartlesville, Oklahoma, the sole son of Alyce J. Cox and F. L. ''Lucky'' Choate. His father died in World War II, and his mother later married C. W. ''Woody'' Marks. In his autobiographical article (185, *When People Ask What I Do, I Say I Study Bats and Rats*) Jerry described his stepfather as a hard working draftsman for Phillips Petroleum Company and his mother as a stay-at-home mom. He is survived by his wife, Rosemary Fidelis Walker, and son, Judd Randolph, daughter-in-law, Lyn Kathlene, and 2 granddaughters, Mahlon and Jacqueline Rosemary. In the announcement of his Dad's passing Judd wrote: ''While we are deeply saddened by his death, knowing that he lived the life he wanted, married the perfect woman—literally the girl next door—and made so many amazing contributions to his chosen area of study makes it a little easier. During his last days I read him the notes that many of his friends and colleagues had sent, and we talked about his life. While he generally kept it to himself, my Dad was intensely proud of the life he led and contributions he made to the Sternberg Museum of Natural History, Fort Hays State University, and the study of mammalogy.''

From the 1968 annual meeting of the American Society of Mammalogists at Colorado State University in Ft. Collins through the 2009 meeting at the University of Alaska in Fairbanks, Jerry did not miss a meeting—a record of 42 consecutive meetings—and he always was accompanied by his wife Fi. Their relationship was special. They had known each other from the age of 16 and were next-door neighbors. They first attended Oklahoma State University for a year and then transferred to Pittsburg State University in Kansas. They were married 13 April 1963 at the close of his sophomore year. As Fi recalls, ''Both sets of parents wondered aloud at the prospect of a successful marriage between two such stubborn people but we celebrated our 46th anniversary the April before Jerry died. That stubbornness came in handy during Jerry's battle with cancer.''

Jerry's education as a biologist almost ended before it began with his being expelled from Oklahoma State University in the spring of his first year of study (185). However, Jerry listed this event as one of the lucky incidents that changed the course of his life because he transferred to Pittsburg State University and came under the influence of Horace A. Hays. Hays trained him to become a scholar and inspired him to study mammals and see the value of teaching. Jerry completed a B.A. at Pittsburg State in 1965 then headed to Lawrence, Kansas, and the University of Kansas where he completed his Ph.D. in 1969. Jerry began working under E. Raymond Hall, but after a disagreement with Hall about coursework most appropriate to his scientific interests, Jerry completed his degree under the supervision of J. Knox Jones, Jr.



Jerry Ronald Choate (1943–2009) had just retired as Director of the Sternberg Museum of Natural History and Professor of Biological Sciences, Fort Hays State University, Hays, Kansas, at the time of his death. Jerry served the American Society of Mammalogists in numerous capacities, including Recording Secretary, First Vice President, and most notably as a member and chair of the Board of Trustees. Photograph from 2006.

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Jerry Choate and his wife Fi near Lawrence, Kansas, in 1966. They attended 42 consecutive annual meetings from 1968 at Colorado State University through 2009 at the University of Alaska in Fairbanks.

In his autobiography Jerry emphasized Jones' special role in his preparation for a career as a mammalogist. As Jerry himself put it, ''I learned much of what I have used in my career from Knox, and I tried to adopt Knox's good qualities and not succumb to Knox's shortcomings. Learning to distinguish between them was, in itself, an educational experience.'' Unlike Hall, Jones respected what his students envisioned for their careers, and Jerry flourished under the mentorship.

Jerry Choate exemplified the work ethic so often associated with mammalogy. As a graduate student he invested in 13-hour days, 7 days a week. He perched in a small upstairs office in the Dyche museum ''penthouse,'' leaving about once every hour in search of a bathroom and instant coffee. To describe Jerry as a ''hard worker'' would completely miss reality—as a graduate student Jerry Choate was *immersed* in the science of mammalogy, and this is what comes across in his scientific career, his mentorship of students, and his role as an administrator.

Fieldwork was a major activity for mammalogy graduate students at Kansas, so all of Jerry's former student colleagues have their favorite ''Choate stories.'' In Nicaragua, in the 1960s, Jerry earned the reputation of looking as though he had been afield for months, even after only a few hours of fieldwork. His middle initial, R, was said to represent the word ''Rude-body.'' On one famous occasion, after doing fieldwork in the chilly, rain-swept Black Hills, Jerry returned home claiming that from that day forward he would only drink coffee boiled in an enameled pot with eggshells and chicory roots. Much to his friends' amusement and to Fi's relief, Jerry discovered that camp coffee only tastes great while one is soaked and miserable in the field, and he quickly returned to a simple routine—instant coffee with sugar. A final field story from Jerry's graduate school days involves E. Raymond Hall and one of the authors (Phillips). Hall was a famous task master and student basher, and he loved to discover weakness in his students. On this famous occasion Hall and Phillips accompanied Jerry to his study site near Lawrence, and once there Hall immediately began to question Jerry's knowledge of trees. Pointing to a distant ridge, Hall demanded, ''and what species is growing there, Choate?'' As the prescient Phillips drifted away, slowly at first and then at a run, Jerry stammered, ''Douglas fir, sir.'' Having given one wrong answer, partly because the trees were beyond the resolving power of the thick lenses in Jerry's black-framed glasses, Professor Hall quizzed Jerry for an hour. Hall covered every tree in sight, and some that were hidden behind ridges, and eventually announced that Jerry was 0 for 70. Worse still, Hall judged that as punishment Jerry should immediately take a course in introductory field botany. Jerry of course deftly sidestepped the coursework.

Jerry's dissertation at Kansas was an extensive taxonomic review of the shrews of the genus *Cryptotis* in Middle America, which established his career-long interest in the systematics of shrews. Upon graduation he took a 2-year assistant professor position as a sabbatical replacement at the University of Connecticut. During this time he also served as an instructor at Yale University, teaching mammalogy. In August 1971 Jerry and Fi moved to Fort Hays State University in Hays, Kansas, where he built his incredible career as an educator, researcher, and administrator. Jerry always felt like an outsider when they lived in the Northeast, whereas he always felt comfortably at home in Hays and on the campus, although he often lamented that Hays changed for the worse on the day that the first traffic signal was erected.

Jerry directed the programs of 54 M.S. students. These included Gordon K. Weddle (1974), Mark D. Engstrom (1978), Lynn W. Robbins (1978), Mark L. Sexson (1979), Robert B. Wilhelm (1979), Sarah B. George (1980), Michael P. Moulton (1980), Nancy D. Moncrief (1981), Cheri A. Jones (1982), David C. Lovell (1982), Jay C. Burns (1983), Deanna K. Tolliver (1983), Brett R. Riddle (1984), Peggy L. Svoboda (1984), David M. Zumbaugh (1984), Kent M. Reed (1985), Philip D. Sudman (1985), Michael G. Karl (1986), William R. Whitworth (1986), Jerry W. Dragoo (1988), Michael P. Reed (1988), Forrest W. Davis (1989), Jan Decher (1989), Keith Madsen (1990), Jan A. Nelson (1990), Michael Rezsutek (1990), Thomas D. Haner (1992), Robert R. Harms (1992), Michael Zajic (1992), John M. Anderson (1993), James Robinson (1993), Eric R. Schreiber (1993), Julie M.

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Jerry Choate and his wife Fi enjoy a cruise off the island of Maui in Hawaii in 2002.

McCullough (1994), Greg Wilson (1994), Steven P. Adams (1995), Matthew E. Hopton (1995), M. Neil Bass (1996), Steven R. Hoofer (1996), Victoria Jackson (1996), Dale W. Sparks (1996), Carla Carr (1997), Ernest Valdez (1997), Guillermo Castillo (1998), Robert S. DeBaca (1998), Lacrecia Johnson-Haynie (2002), Mark Omura (2002), Jon Storm (2002), Korrie Chapman (2003), Justin D. Hoffman (2004), Shauna Marquardt (2005), Karen Wolfe (2005), Brian Bartels (2007), Jennifer O'Neill (2010, co-advised), and Zachary Schwenke (2010, co-advised).

Of these 54 students, at least 26 have gone on to complete their Ph.D. and 1 a D.V.M. These graduates have gained positions with university or college faculties (18), museums (9), Kansas Department of Wildlife and Parks (4), Colorado Department of Wildlife (2), Texas Parks and Wildlife Department (1), United States Fish and Wildlife Service (2), Army Corps of Engineers (1), Bureau of Land Management (1), Environmental Protection Agency (1), National Park Service (1), United States Geological Survey (1), and a city zoo (1). This is an awesome record of impacting the lives of current and future mammalogists, and the success of these students is a testament to the excellence of the education they received. Fort Hays State University has a long tradition of producing outstanding graduates in the biological sciences, and Jerry and his students carried forward and enhanced this tradition. Jerry seemed to have a particular talent for taking students with unexpressed abilities and developing these abilities into those of a scholar and professional, much as Horace Hays had done for him many years earlier.

From 1971 to 1988 Jerry averaged teaching 3 courses per semester at Fort Hays State University. In 1988 he was given 0.5 release time that allowed him to increase his time devoted to direction of the Museum of the High Plains and to teach 3 courses in the fall and 1 in the spring. This continued until 1995 when he had 0.75 release time and he taught 3 classes in the fall and none in the spring. This lasted until 2003, when he became a full-time director of the Sternberg Museum and no longer had teaching responsibilities. However, he continued to organize the fall collecting trip for the Mammalogy lab and lecture on trapping, showing students how to put up study specimens and write their catalogues and field notebooks as one of us (Finck) took over the Mammalogy course. Jerry taught the following courses at Fort Hays State University: Mammalogy and its lab, 32 times; Biological Scientific Writing, 32 times; Cellular Biology and its lab, 16 times; Evolution, 15 times; Principles of Systematics, 18 times; and Biogeography, 3 times. Most students fondly recall their experiences in the collecting trips that Jerry directed over the years. It was the experience that they said helped them to decide to stay in field biology. One of Jerry's recent graduates (Hoffman) recalls: ''When people speak of some of the great mammalogists of the past, they almost always reference those individuals' love of bringing students into the field and Jerry was no exception. His field trips for his mammalogy class were legendary among graduate and undergraduate students at Fort Hays. Anyone who has participated in one of these will certainly remember Jerry's 'cowboy coffee,' his meals of canned tuna in oil, and the late night excursions for kangaroo rats, rabbits, and well, anything else.''

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Jerry Choate and Hugh Genoways in northern New Mexico pause in route to the annual meeting of the Southwestern Association of Naturalists in Albuquerque to do some montane fieldwork in April 1978. Hugh is holding a pocket gopher, which was the subject of some of the field collecting. The temperature at daybreak was near −7°C.

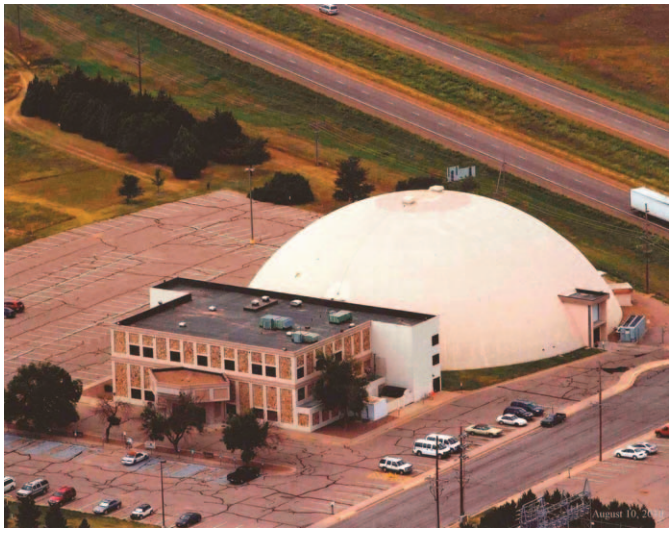
When Jerry arrived at Fort Hays, Eugene ″Gene″ Fleharty had already established a strong graduate program in mammalogy and herpetology. But in deference to Jerry, Gene turned over responsibility for curating the mammal collections consisting of 8,770 specimens. As of June 2009 the mammal collection had cataloged just over 39,000 specimens, an increase of about 450% over the intervening 38 years. The importance of the collection lies in its regional coverage of Kansas and the adjacent central Great Plains mammals, and as is the case with most mammal collections, the groups most represented are rodents, bats, and shrews.

Jerry served the university in many different ways. He was a member of numerous departmental committees, including Curriculum Review Committee (1990–1993), Graduate Concerns Committee (chair, 1981–1995), Scholarship Committee (1987–1993), and Tenure Committee (1983–1993, 1995–1996, 1997–2009; chair, 1983, 1997–2001). For the College of Arts and Sciences he served on 7 committees, including the Health and Life Sciences Faculty Advisory Council (1990–1993, 1999–2004). He served on at least 37 university-wide committees, including the Editorial Board of University Press of Kansas (1976–1978, 1986–1990), Institutional Committee

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Jerry Choate, shotgun in hand, heads to collect rabbits in Kansas in 1987.



Aerial photograph of the Sternberg Museum of Natural History, ''Dome on the Range,'' photographed by Midwest Aviation, Inc., in August 2010.

on Graduate Programs and Research (1980–1989), University Archives Committee (1980–1989), Institutional Animal Care and Use Committee (1987–1991, 1995–1997), University Library Committee (1991–1994), Ethics in Research Committee (1991–1993), Centennial Campaign Committee (1998–1999), Integrated Marketing Committee (1999–2008), Endowment Development Coordinating Committee (1999–2008), and President's Distinguished Scholar Committee (2005–2009).

Jerry Choate was recognized by Fort Hays State University as the President's Distinguished Scholar in 2005. This is the highest recognition given by the University. No more than 1 faculty member is recognized each year. Only 7 of the 21 individuals so recognized since 1989 were scientists. Part of the award citation stated: ''Dr. Choate is also an accomplished teacher. He has taught a variety of classes ranging from cell biology to biogeography; however, Jerry's biggest impact on biology majors has been teaching his specialty area, mammalogy. Many people familiar with Jerry's accomplishments would point to his success in working and inspiring graduate students as his greatest accomplishment.''

This recognition was presented by professional colleagues and administrators that knew his contributions best. Clearly, they saw him making major contributions to their institution, mammalogy, and scientific societies. The current Chair of the Department of Biological Sciences (Finck) remarked ''Jerry was a very strong advocate for maintaining and developing the natural history orientation of the department, which is the strength of our program to this day. He helped convince the central administration that is where we had our strengths and should be where we stay. Besides his legendary work with graduate and undergraduate students, he was a mentor to new assistant professors. He helped them recognize their strengths and helped them develop their talents. He always was a strong advocate for good science and told all students and colleagues to concentrate on their science.'' He also was honored for his contributions to the education of students by 2 scientific organizations, the Southwestern Association of Naturalists, with presentation of the first Robert L. Packard Excellence in Education Award in 1988, and the American Society of Mammalogists, which honored his contributions in 2006 with the Joseph Grinnell Award for Excellence in Education in Mammalogy. When the R. L. Packard Excellence in Education Award was envisioned the committee creating and designing the award used Jerry's record as the exemplary model for the standard of the award, recalls one of us (Baker) who was a member of that committee.

Jerry was an extremely active and loyal member of the American Society of Mammalogists since 1964, a life member since 1965, and a patron since 1997. His attendance at 42 consecutive annual meetings, if not an all-time record, is certainly an inspiration for current and future society members. Jerry served our society for 10 years as Recording Secretary, 24 years as a Trustee, with 12 as chair, 1 year as First Vice President, and 1 year as Editor for *Special Publications*, and was a member of the Board of Directors from 1984 to 1999 and 2007 to 2009. He was in line to be a president of the society but chose to dedicate his time and energy to his work as a Trustee. Jerry served as a member of 23 standing and ad hoc committees for a total of 91 service-years (14 as chair), including service on the following standing committees: Animal Care and Use, Coordinating, Development, Executive, Grinnell Award, Honoraria, Legislation and Regulations, Merriam Award, Nomenclature, Planning and Finance, and Systematic Collections (chair 6 years). Jerry, along with Elmer Birney, organized and edited a volume on the history of the American Society of Mammalogists, *Seventy-five Years of Mammalogy (1919–1994)* (136), issued as one of the *Special Publications of the American Society of Mammalogists*. In 2007 Jerry received Honorary Membership, the highest recognition given by the American Society of Mammalogists.

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One of Jerry Choate's favorites among his photographs was taken at the Garden of the Gods near Colorado Spring following an overnight 9-inch snow on his 65th birthday in March 2008. Please see online version of photo to view in color.

The American Society of Mammalogists has benefited from the exceptional commitment of a number of its leaders who gave decades of service and vision to the society. Jerry chose to serve the society by a sustained commitment to some of the most difficult jobs and tasks. The most obvious of these is 24 years as a Trustee, with 12 years as chair. This service required daily attention to the stock market and the Reserve Fund. When he became a Trustee in 1984, the principal of the Reserve Fund stood at just over $482,000, whereas at his death the amount was nearly $2,860,000, an increase of approximately 600%, and this record was from just at the beginning of the recovery from the Great Recession. Because of his sound financial judgment, Jerry was asked to serve in various forms of strategic planning for the American Society of Mammalogists, including Long-range Planning Committee, the Strategic Planning Committee, and the Planning and Finance Committee; all of these involved leadership for the future of the Society. The American Society of Mammalogists is a better and wealthier society because of Jerry's leadership. On a personal note, we take notice of the fact that Fi has agreed to bring her considerable knowledge as a financial planner to serving as a Trustee of the society to help fill the experience gap on our Board of Trustees that has occurred with Jerry's passing.

In addition to the American Society of Mammalogists, Jerry was an active member of 23 other professional societies and organizations. He was his University's representative to the Natural Science Collections Alliance (previously Association of Systematics Collections) for 37 years, and he served 2 years as Secretary of the alliance. He was active in the Central Plains Society of Mammalogists, being a patron member and archivist. Jerry was particularly active in the Southwestern Association of Naturalists, in which he served as president and as chair of the Board of Trustees for 23 years. For this organization he was a member of 8 committees for a total of 50 service-years. He served on the Board of Governors from 1973 to 1978 and from 1985 to 2009 and was an associate editor of the *Southwestern Naturalist* for 2 years. Perhaps the most significant service that Jerry contributed to the Southwestern Association of Naturalists was in conjunction with David Schmidly when they served back-to-back terms as president. Under their leadership the association was pulled back from the brink of financial collapse and set on a path of firm financial management, including the establishment of the first trust funds and trustees for the association's assets. In 1999 Jerry received the first Meritorious Service Award given to an individual who has contributed outstanding service to the Southwestern

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Photograph by Jerry Choate of the setting sun against a summer storm, 2007, taken from his front porch near Victoria, Kansas. Please see online version of photo to view in color.

Association of Naturalists. This award was renamed the Jerry R. Choate Meritorious Service Award in 2010.

Jerry Choate has been an active and productive researcher, publishing 201 scientific contributions, of which 5 are books. His work has appeared in such recognized regional, national, and international journals as *Alces*, *Annals* and *Special Publications of Carnegie Museum*, *American Midland Naturalist*, *Bulletin of the Southern California Academy of Sciences*, *Canadian Journal of Zoology*, *Experientia*, *Journal of Mammalogy*, *Journal of Range Management*, *Journal of Wildlife Diseases*, *Mammalia*, *Mammalian Species*, *Occasional Papers of the Museum of Southwestern Biology*, *Occasional Papers* and *Special Publications of the Museum of Texas Tech University*, *Prairie Naturalist*, *Proceedings of the Biological Society of Washington*, *Publications of the Museum of Natural History of the University of Kansas*, *Southwestern Naturalist*, *Special Publications of the American Society of Mammalogists*, *Systematic Zoology*, *Texas Journal of Science*, *Transactions of the Kansas Academy of Science*, *Transactions of the Missouri Academy of Science*, and *Transactions of the Nebraska Academy of Sciences*. To support his programs he received more than $1.8 million in grants and contracts from such agencies and corporations as Center for Field Research, Colorado Division of Wildlife, Energy Research and Development Administration, Institute of Museum and Library Services, Kansas Department of Wildlife and Parks, Kansas Electrical Utilities Research Program, Kansas State Wildlife Grant, Kansas Travel and Tourism Development Division, National Science Foundation, Sunflower Electric Cooperative, United States Army Construction Engineering Research Laboratory, United States Economic Development Agency, and United States Soil Conservation Service. Jerry's research contributions were honored by his home institution in 1990 with the Health and Life Sciences' Faculty Research Award and the awarding of the C. Hart Merriam Award in 1988 by the American Society of Mammalogists.

Jerry's most important research contributions were to the understanding of the systematics of New World shrews of the genera *Blarina* and *Cryptotis*. His systematic review of the members of genus *Cryptotis* in Mexico and Central America (18) reduced the number of recognized taxa from 34 to 18 named kinds, representing 8 species. This monograph is still the starting point for researchers working on *Cryptotis* in Central America. Nancy Moncrief, currently Curator of Mammalogy and Assistant Director of Research and Collections, Virginia Museum of Natural History, who worked with Jerry on *Blarina*, on evaluating his contributions said, ''He produced 15 peer-reviewed publications on these shrews (4 of which were

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monographs), including several seminal works that established the existence of multiple species in the genus *Blarina*.'' Jerry and one of us (Genoways), early in our careers, published data in 1972 that demonstrated that 2 distinct species of *Blarina—B. brevicauda* and *B. hylophaga*—occur along a narrow zone of contact in southern Nebraska (22). One of Jerry's final papers (200), which appeared in print after his death, was a major systematic revision of the northern short-tailed shrew, *Blarina brevicauda.*

Jerry also was very interested in the fluctuations of species distributions both in historical and recent time. He felt that his true research niche included examining the historical biogeography of mammals on the Great Plains, where he defined historical biogeography as ''changes in distributions during historical time'' (185). Over the course of his career Jerry published several manuscripts with the focus of shifting distributions. Along with his students, he documented the historical biogeography of numerous mammals on the Great Plains, some of which include the spotted skunk (30), gray fox (38, 94), least weasel (61), pronghorn (73), black-footed ferret (83), and woodchuck (100). He was equally productive in documenting recent range expansions of mammals in multiple geographic directions. Some of the more notable expansions included those of the least weasel (117, 157), armadillo (86, 121), woodchuck (131, 149), moose (189), and multiple species of bats (145, 166, 186, 192). While Jerry thought that much of this research was not at the ''cutting edge'' of science, it is difficult to argue against its significance in light of a changing global environment, and indeed these sorts of publications provide the rigorous baseline data for assessing the potential effect of climate change on distributions of mammals.

Together with students and colleagues, Jerry spent a considerable amount of time studying the biogeography, natural history, and systematics of pocket gophers on the Great Plains. Of Jerry's 54 graduate students, 8 (15%) conducted their thesis research on pocket gophers. When asked why such a high number of his students worked on gophers, Jerry would calmly reply, ''because I want to make sure that every pocket gopher in west Kansas has a good home in the museum.'' Jerry and others documented valuable data on reproduction and diet for the plains pocket gopher (*Geomys bursarius*; 126, 141, 154, 187), Baird's pocket gopher (*G. breviceps*; 133, 187), and llano pocket gopher (*G. texensis*; 171). Jerry also documented the first case of pneumonia in a fossorial mammal (84). As genetic techniques became more commonplace, Jerry used these methods to study the systematic and taxonomic relationships of *Geomys* (92, 114) along zones of contact in Kansas and Nebraska. This continues to be a dynamic area of study that is undergoing constant changes, in part, due to advances in molecular techniques. Probably the most significant contributions that Jerry and his students made to pocket gopher biology were their studies of biogeographic relationships among species of pocket gophers in western Kansas and southeastern Colorado. They noted several examples of ecological separation with respect to soil and vegetation, resulting in parapatric distributions (87, 182, 191, 196) with limited evidence of sympatry (59).

Jerry's major administrative accomplishment at Fort Hays State University was the realization of the new Sternberg Museum of Natural History, which opened to the public on 13 March 1999. His 28-year journey to this opening is described in detail in his online publication *Dome on the Range: The Improbable Dream* (198), based on his Grinnell Award presentation at the 2007 annual meeting. To really understand what Jerry accomplished it is important to know where he started. When he arrived at the university in 1971 he became curator of mammals, which was one of several collections housed in the Department of Biological Sciences and part of a paper museum, Museum of the High Plains. In 1973 Jerry was able to get the Museum of the High Plains recognized as a separate unit on campus, and he was designated as its director. He began immediately to lobby for a new building for the museum.

In 1980 Jerry became Director of the Fort Hays Museums, combining under 1 umbrella the 2 campus science museums—Museum of the High Plains and the Sternberg Museum, covering geology and paleontology—but maintaining their separate identities and directors. Jerry maintained his active pursuit of resources for a new museum. At this point the constellation of events that would lead to a successful conclusion to his quest for a new museum building began to unfold. A new university president, Dr. Edward Hammond, took office in 1987, with a reputation as a high-powered fund raiser. In 1991 a unique dome-shaped building just off Interstate 70 in Hays, which served as a recreational facility before it entered bankruptcy, became available. The University Foundation acquired this building, but it needed to be renovated from wall to wall because it had been vacant for several years and it needed to be converted to a ''museum building.'' As Jerry observed, ''It took several years to raise almost $13 million for the project because, with a few exceptions, we had to raise the money in small parcels instead of large contributions.''

In the interim (1994) the biology museum was merged with the campus geology museum to form the Sternberg Museum of Natural History, with Jerry as the director. In addition to the excellent paleontology collections, this merger also brought the opportunity for public programs in 2 exhibit rooms, although the included exhibits were of an early 20th-century vintage. Jerry used this space to begin making the case that a new museum could be a tourism attraction for Hays. On 13 March 1999 the new Sternberg Museum of Natural History opened in 101,000 square feet of newly renovated space in a modern 4-story building, with permanent and temporary public exhibits and space to bring together all of the research collections. The audiences being served are school children and families in western Kansas, but also a portion of the national traveling public using Interstate 70 are being educated about the natural history of the region. The museum expanded its offering to include a wide variety of educational programs through permanent and traveling exhibits, workshops, public programs and lectures, field trips, tours, classroom presentations, checkout materials, and a Discovery Room. More than

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100,000 people are taking advantage of these opportunities on an annual basis. Jerry had envisioned an educational field site adjacent to the Sternberg Museum, which was named the Dr. Howard J. Reynolds Nature Trail and had a grand opening in fall 2011.

Michael Mares, who successfully built a new museum at the University of Oklahoma—Sam Noble Museum of Natural History—summarized Jerry's accomplishments as follows in the introduction to *Dome on the Range …* : ''Jerry Choate did, indeed, pull it off. He, too, became a keystone personality in the development of the Sternberg Museum. Today the museum is one of the important university natural history museums in the country. It stands on the windswept prairies of western Kansas, a testament to a passionate collector of fossils, a good university, a visionary president, and Jerry Choate, a tenacious and dedicated director who spent much of his professional and personal life developing the Sternberg Museum as it stands today. As he said in his history of the development of the Sternberg Museum, he may have been disappointed now and then, but he would not accept defeat. That is the attitude that makes a successful field biologist, which Jerry was, and a successful museum director.''

To promote the museum Jerry served as a guest speaker for a range of social and service organizations in the Hays area, including Daughters of the American Revolution, AARP, Rotary Club, Kiwanis, Association of Retired Teachers, Optimists Club, and Chamber of Commerce. He became a member of a number of local organizations, such as Ellis County Historical Society, Hays Area Chamber of Commerce, Hays Sister City Committee, and Society of Friends of Historic Fort Hays, and a member in 1996 and chair in 2004 of the Advisory Board of the Hays Convention and Visitors Bureau. These museum and civic efforts have made significant contributions to the economic development in Hays, Kansas, and surrounding areas. In recognition of his success promoting economic development Jerry received the 2002 Award of Merit from the Travel and Tourism Development Division of the Kansas Department of Commerce and Housing.

After the opening of the Sternberg Museum another unexpected opportunity to construct a branch museum presented itself. To bolster the economy of the Great Bend area (about 65 miles southeast of Hays) the city fathers decided that they wanted a museum built at Cheyenne Bottoms just northeast of the town. Cheyenne Bottoms, a 41,000-acre wetland, is the largest wetland in the interior of the United States and one of the largest wetlands in the Americas. It is perhaps best known as a major migratory resting area for whooping cranes, but it also is visited by, or home to, about 320 species of birds and is regarded as the most important site for migratory waterfowl in the entire Western Hemisphere. In 1988 it was officially designated as a Wetlands of International Importance by the Ramsar Convention on Wetlands. Jerry jumped into this project with his usual energy. A major grant was obtained from the Kansas Department of Transportation, design and construction followed, resulting in the grand opening of the Kansas Wetlands Education Center in the spring of 2009.

As Jerry was contemplating his upcoming retirement, he decided that he would need a new hobby to fill some of his time and bring some balance to his life. He chose photography. He dove in as usual, bought a Canon Rebel XT camera, obtained a half dozen of the leading books, and visited numerous Web sites to pick up guidance from some of the foremost photographers. Jerry's choice of subject matter was landscapes—sunrises, sunsets, sunflowers, storm clouds, and country roads. Many of the photographs were taken from his front yard and show his passion for the Kansas landscape and its beauty. However, Jerry's favorite among his photographs was taken at the Garden of the Gods near Colorado Spring following an overnight 9-inch snow on his 65th birthday in March 2008 (see photo). The Sternberg Museum held a memorial exhibit, ''The Eye of a Naturalist,'' displaying some of Jerry's photographs for 4 months in late 2010 and early 2011.

Perhaps the best way to evaluate Jerry Choate's life is to look at the impact that he had on the lives of those around him because clearly this was his focus. A humorous, but also very insightful view, was given by Jerry's son Judd at his memorial service on 18 April 2010, held at the Sternberg Museum and attended by approximately 300 friends and colleagues. In a list of ''Things My Dad Taught Me'' Judd included:

- ''To love the weather. Dad and I would stand on the front porch and watch the squall lines of a western Kansas thunderstorm. With Mom in the basement eating supper, we would wait in hopes of seeing a tornado.''
- ''How to make beer. Dad used to make his own beer in a large green garbage can in the basement. He rarely complained about the chunks of yeast he would spit out when he drank it.''
- ''Lettuce is merely a vehicle by which to get the blue cheese dressing to your mouth.''
- ''Dad showed me that social norms were subject to change based on the situation. For example, as long as a woman wasn't present, it was perfectly okay to drink directly from the milk carton.''
- ''To love baseball. My greatest memories are playing catch with my Dad in the front yard.''
- ''You can't learn anything when your mouth is open.''
- ''To be a feminist. Dad had female graduate students in the field back in the early 1970s. He would scoff at the idea that his female students should be treated differently than his male students.''
- ''To garden.''
- ''Food always tastes better when you're on a field trip.''
- ''On the drive to camp for the annual mammalogy field trip, Dad would teach me the scientific names of each of the species that we would likely find. Then, when it was time to quiz the students on the animals that were caught, he would wait until someone missed a question and turn to me and say 'hell, my nine-year old knows that one.' I still remember the scientific names—like *Blarina brevicauda* and *Peromyscus maniculatus.*''

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- ''The words to 'Put Another Log on the Fire' by Tompall Glaser. To be sung loudly at all camp fires.''
- ''To love poetry.''
- ''My Mom and Dad were a wonderful couple who never lost the spark of the love that made their marriage special. Dad would tell me that you should take every opportunity to shower with the woman you love.''

''My Dad was a great man, but more importantly he was a good man and while I loved him very much, I also liked him. He was my best friend and I miss him.''

Robert Dowler, currently a professor at Angelo State University, remembers the impact that Jerry made on him: ''To a young biologist fresh out of a Master's program, Jerry was the ideal first employer. He was together a mentor, colleague, and friend who gave me the confidence to think that I could succeed in an academic career. The opportunities he gave me and my interactions with him over 2 years convinced me to move on for a Ph.D. and a career in mammalogy. He continued to be a valued advisor and friend over the next 30 years.''

The hallmark of Jerry's life was to turn the ordinary into something magnificent. Whether it was his photography that changed an ordinary landscape into a magnificent masterpiece, or his convincing a reluctant graduate student that they could do good science, assistant professors that they could be good mentors, colleagues that they could do good science, it was always the same. He exuded quiet confidence that it could be done with hard work and perseverance. In many ways Jerry Choate was both ''one of a kind'' and an ''exemplar'' of his generation of field mammalogists. His personality was both complex and multilayered on the one hand, while straightforward ''eyes on the road'' on the other hand. Jerry Choate's huge and lasting successes in education, science, and university and community development probably exceeded his expectations for himself but were inevitable, given his dogged determination and work ethic. Jerry was a finisher.

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