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OBITUARY: ELMER CLEA BIRNEY, 1940–2000

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OBITUARY

ELMER CLEA BIRNEY: 1940–2000

On 11 June 2000, Dr. Elmer C. Birney unexpectedly passed away from cardiac arrest suffered while outside caring for his cattle at his home in Blaine, Minnesota. One of his former students, Robert Timm, probably best expressed the immediate reaction of his family and many friends: ''He was too young and in too good of health to be gone so soon.'' At the time of his death, Elmer was Professor in the Department of Ecology, Evolution and Behavior, the Curator of Mammals at the Bell Museum of Natural History, and Director of Graduate Studies of the program in Ecology, Evolution and Behavior at the Twin Cities campus of the University of Minnesota.

Dr. Birney was born 26 March 1940 in Satanta, Haskell County, Kansas, to Russell and Esther Birney. He had 2 sisters—Letty Gay and Lorna Ann. Elmer married Marcia F. McVey on 5 August 1961 in Culver City, California. They had 2 children, Amy and Clayton, and 2 grandchildren, Aaron and Danielle. Elmer's family described its feeling about him in the obituary that appeared in Minneapolis Star-Tribune: ''He was a great husband, father, grandfather, friend, University of Minnesota Professor, and hobby farmer who loved his life.''

Dr. Birney attended the public schools of Sublette and Satanta, Kansas, and he graduated from Satanta Rural High School in May 1958. Elmer enjoyed athletics and played both football and basketball throughout high school as well as participating in the junior class play. His high school graduation motto really did set the tone for the remainder of his life: ''The men who roll up their sleeves never lose their shirts.''

Although he was never truly passionate about professional sports, he still knowledgeably followed his favorite teams, and he and his wife played in an adult volleyball league. Elmer had a competitive streak that sports helped fill. While locked in a serious administrative struggle that could have affected the future of the Bell Museum, he began an e-mail to one of us (Phillips, 6 June 1995) by writing, ''I had a bit of fun beating up on the Dean's volleyball team yesterday. But I digress!''

Elmer was never far from his rural Kansas roots as he explained on his personal Web site:

> My interest in living things goes back to the earliest memories of my childhood on the farm. What will the babies look like? It was my burning desire for years to crossbreed varieties of every species of livestock and poultry on the farm just to see what the babies would look like. Imagine my surprise when I learned that Gregor Mendel had shared a similar interest, albeit at a more sophisticated level. After learning of Charles Darwin's great insights, I was forever hooked. Then, when I learned that with a lot of hard work and a little luck one can actually study plants and animals full time and simultaneously put bread on the table, I knew that I had found my niche.

What this Web site did not explain was that one of his true favorites was multicolored chickens, which he maintained for many years. He was always prepared to give neighbors and visiting children personal instructions on the proper method for collecting the chickens' eggs. For Elmer in recent years, his cattle were a source of relaxation and fun. He regaled us with detailed explanations of breeding plans and competition strategies. He was an active member of the Bull Test Station, St. Croix Valley, Wisconsin, where his bulls won the Highest Indexing Simmental Bull in 1992–1993 and 1997–1998 and Highest Indexing Bull Overall in 1997–1998. Elmer could become very attached to his fellow mammals, so the accidental loss of one of his cows while giving birth and the death of a favorite dog were the kinds of events that deeply hurt him.

Elmer entered Fort Hays State University in the fall semester of 1958. One of us (Choate) recalls that the best story about Elmer is told by the older faculty in the Department of Biology at Fort Hays State University. The story goes that this gangly country boy walked in one day and announced that he wanted to take biology

Elmer Clea Birney during his presidency of the American Society of Mammalogists, 1988–1990.

courses for just 1 year so that he could get a job in a grain elevator. That gangly country boy eventually took more than 90 hours of credit in biology at Fort Hays State University (literally every biology course offered at that time) and became one of the most accomplished scientists ever produced by the department. Elmer left the university at the end of his 1st academic year and joined the United States Navy, being on active duty from 1959 to 1961 and active and inactive reserve from 1961 to 1965. He was on Western Pacific cruise in January to July 1960, with the remainder of his enlisted time spent in basic training and aboard U.S.S. Preston-DD-795. Elmer was honorably discharged in 1965 with the terminal rank of YN3.

Elmer returned to Fort Hays State University in 1961. He graduated with a bachelor's in biology in 1963 and received his master's degree in 1965, with a major in zoology and a minor in botany. His early interests in barnyard genetics largely were replaced by a love for mammals that developed during his 1st course in mammalogy, taught by his 1st mentor, Eugene D. Fleharty. Elmer recorded this course as the most influential in his formal education. Fleharty recalled the time he, Elmer, Marcia, and Kenneth Anderson visited the Blue Rapids mine in northern Kansas. Fleharty and Marcia remained outside while Elmer and Anderson went inside. Because the mine was so large and had dozens of side passages, previous visitors had tied string near the entrance to use in finding their way back. Elmer picked up the end of a piece of string and dragged it behind him as he and Anderson wandered hundreds of yards through the maze of passages. After several hours, they had not returned and Fleharty and Marcia were becoming worried. Elmer and Anderson finally emerged and Elmer explained that they reached a dead end and began following the string back to the entrance only to discover that the string was just 25 yards long. This was the 1st of several instances showing Elmer's uncanny sense of direction.

After Elmer earned his masters, he taught at Kearney State College, Kearney, Nebraska (now University of Nebraska–Kearney), as an instructor of biology in 1965–1966. He entered the University of Kansas in 1966 with J. Knox Jones, Jr., as his academic advisor. He received his doctorate in 1970 with his dissertation topic of *Systematics of Three Species of Woodrats (genus* Neotoma*) in the Central Great Plains* which was published as *Miscellaneous Publication of the Museum of Natural History of the University of Kansas.*

One of us (Phillips) remembers his 1st meeting with Elmer in 1966.

> J. Knox Jones had assigned us to a common office, which we shared until 1969. I learned that Elmer was from western Kansas and had served the Navy aboard a destroyer stationed in the Pacific. Surprised that a Kansas farm boy would go to sea, I asked, ''Were you ever disoriented, surrounded only by salt water?'' ''Yes,'' he replied, ''especially when I had the helm at night.'' ''What then?'' I asked. ''Oh, regardless of the actual compass heading, I always imagined that I was going north. It had a calming, reorienting effect.'' Thirty years later, in 1995, Elmer and I climbed a mountainside in Patagonia. We were setting traps and sharing an intertwined set of scientific and personal things, which was our habit while in the field together. We tarried, stopping often to catch our breath or make a point in our conversation. Finally, as the sun dropped behind the Andes and a bitter south-

erly wind chilled us to the bone, we realized that we were far from camp and without flashlights. We started downhill in inky darkness (the Southern Cross and Magellanic clouds being inadequate sources of light), stumbling and groping our way. Are we headed in the right direction, one of us wondered aloud. Finally I asked Elmer, ''Are you disoriented? Do you know the way?'' He stepped in front, taking the lead on the steep, rocky slope. Over his shoulder he said, ''I was confused, but now that I'm heading north, everything will be okay.'' Elmer Birney always had the facility to head north when things needed straightening out.

After completing his doctorate, Elmer took an assistant professor position in the Department of Ecology and Behavioral Biology (now Department of Ecology, Evolution, and Behavior) at the University of Minnesota. He came to the interview at Minnesota directly from field work and was forced to wear his field boots throughout the interview when he realized that he had neglected to pack additional footwear. Elmer held this 1st position until 1974, when he was promoted to associate professor and in 1981 to professor. He held the position of curator of mammals in the James Ford Bell Museum of Natural History from 1970 until his death. As the director of the Bell Museum of Natural History from 1990 to 1992, during a critical point in its history, Elmer helped assure that the museum would continue to serve the people of Minnesota for decades to come. He eloquently described his experiences as a museum administrator in an article in *Curator: The Museum Journal*, which appeared in 1994.

Dr. Birney spent December 1977 to March 1978 as a visiting research associate in the Department of Biochemistry and Nutrition, University of New England, Armidale, New South Wales, Australia. Here, funded by the National Science Foundation, he conducted research on the biosynthesis of L-ascorbic acid by monotremes, marsupials, and placental mammals. Another of Elmer's international experiences was in the Antarctic from October until mid-December 1977, where, sponsored by the National Science Foundation, he participated in research on seals. His steady approach to work and self-effacing sense of humor were well suited to the rigors of such work, including his ability to survive the abrupt sinking of his tracked vehicle. Another of his experiences there (as related to Phillips) illustrates his general approach to life. Elmer befriended a Navy pilot who provided him with a clandestine flight to the pole. Once there, Elmer walked to the exact spot and ran around in tight circles so he could claim to have the made the quickest possible round-the-world run. Remembering a similar incident after learning of Elmer's passing, his Argentine colleague, J. Adrian Monjeau, noted that when they were together in Spain for a mammal conference (1998), they drove to the coastal village of Finisterre and walked to the farthest rocks so that they could say they had gone to the end of the earth together.

Elmer Birney directed the doctoral programs of 6 students, including Richard P. Lampe, Lynn L. Rogers, Steven H. Fritts, Donna D. Baird, Robert S. Sikes, and Jan Decher and was directing the programs of Kristin M. Kramer and Anja K. Brunet at the time of his death. He directed the master's programs of 15 students, including Robert M. Timm, Russell J. Rothman, Jeanette T. Thomas, Susan J. Busch, Thomas J. Meier, Suzanne E. Braun, Nancy E. Geving, Brenda V. Lyseng, Leon J. Raudys, Brian D. Konito, Timothy E. Susman, Kristin M. Kramer, Gerda E. Nordquist, Denise Woodward, and Anja K. Brunet. Beginning in 1972, Elmer taught a very popular course in mammalogy. At the undergraduate level, he taught ''Ecology and Evolution'' in 1972–1975, 1977, 1979, and 1981. Subsequently, he helped design a beginning general biology course with an evolutionary approach that he taught in 1983, 1984, 1987, 1989, and 1991, and he cotaught another undergraduate course, ''Biology: Organismal Adaptation and Diversity,'' from 1994 to 1998. Elmer also taught a variety of graduate seminars in the areas of mammalogy, evolution, and biogeography. Although student evaluations for Elmer Birney's classes were always very positive, he laughed about a comment he received on an evaluation shortly after he arrived from Kansas. One student remarked that she ''loved the course and especially enjoyed the professor's delivery. He sounds just like Festus Hagen from *Gunsmoke.*''

Besides administrative responsibilities, Elmer Birney served the University of Minnesota by participating on numerous departmental, museum, college, and university-wide committees, in-

Elmer C. Birney (left) prepares for the business meeting of the American Society of Mammalogists at the 78th annual meeting in 1998 held at Virginia Tech University, Blacksburg. Dr. Birney is joined by his colleagues Robert S. Sikes (center) and Jerry R. Choate (right).

cluding the Department Curriculum Committee, 1974–1980 and 1996–1997 (chair, 1980); Ecology Building Planning Committee, 1988–1992; Bell Museum Editorial Committee, 1971–1980 and 1985–1990; Bell Museum Computer Committee, 1985–1990 (chair, 1985–1989); Bell Museum Strategic Planning Committee, 1995–1996; College Educational Policy Committee, 1974–1977, 1983–1986 (chair, 1976–1977); College General Biology Program Committee, 1979–2000; All-University Committee on Animal Care and Use, 1988–1990; All-University Committee on Collections, 1990–1995 (chair, 1990–1992). Elmer was a strong and capable leader in graduate education and friend to many students, serving as Director of Graduate Studies in one of the University's most well-recognized programs, Ecology, from 1981 to 1984 and 1998 to 2000 and in Zoology from 1985 to 2000. To honor Elmer's commitment to graduate education, a memorial fund has been established to provide support for students in the Department of Ecology, Evolution, and Behavior at the University of Minnesota.

One of the traits that made Elmer an excellent advisor and mentor was that he treated graduate students as respected colleagues and truly valued their input. In conversations with his colleagues, Elmer regularly found opportunities to promote his students' special strengths and was always careful to give them credit for their contributions to his research program. This treatment certainly was not reserved for his own students, as evidenced by sentiments expressed by numerous graduate students with whom he had an opportunity to interact in his role as Director of Graduate Studies, nor was it limited to graduate students. In fact, Lawrence Heaney wrote upon learning of Elmer's passing that it was largely his interactions as an undergraduate research and curatorial assistant with Elmer and his students that formed the core of his undergraduate experience. Along with Marcia, Elmer usually ''adopted'' his academic children and, through advice and example, encouraged them to take an active role in determining the direction of science at all levels.

One of us (Kramer) remembers the advice Elmer offered during a critical period in her life.

> I was struggling to cope with the unexpected death of my mother and, at the same time, was working as a veterinarian's assistant. The job was thoroughly unenjoyable, and unbelievably, my greatest source of stress. I did not often discuss personal issues with Elmer, but it was clear to him that I was reaching the limit of what I could bear. He asked me why I was enduring this job. I was plan-

ning on leaving graduate school with a M.S. and applying to vet school and felt I needed the experience as well as the income. He simply said, ''Life is too short to do anything unpleasant for any longer than necessary.'' It was this perspective from which I truly benefited. This advice was a turning point in my life. Shortly thereafter I quit my job and enrolled in the Ph.D. program. More importantly, eliminating that source of stress created a load I could bear.

Another one of us (Sikes) remembers the following:

The first time I visited Elmer and Marcia's house, they were away—I stayed for a week. The Birney's were in Argentina where, as President of the American Society of Mammalogists, he was participating in the joint meeting of the American Society of Mammalogists and the Argentine Mammal Society. Despite their absence, Elmer had invited me, a newly admitted graduate student who previously had met with him only a few times, to stay in their home for as long as it took to find a place to live and for my wife to find employment. Needless to say, I was more than a little surprised by this offer, but as I was soon to learn, this was completely in character for the Birney's hospitality. Elmer routinely invited his students and friends to share family holidays and casual gatherings. For graduate students new to the area and often far from their own family during the holidays, this generosity made Elmer a very special person indeed and illustrates just how seriously he took his role as mentor. It also explains why my children so looked forward to visits

''Emercito, would you please hold the bucket still?'' Elmer C. Birney and J. Adrian Monjeau come up with an innovative solution to fueling the field vehicle on an expedition to the Patagonian region of Argentina in 1992.

to ''Dr. Birney's house'' to carve pumpkins, celebrate Thanksgiving or Christmas, or just join a family gathering.

Elmer Birney's generosity extended beyond this, and included colleagues, their families, and especially, their children. When he helped bring Dr. J. Adrian Monjeau to the United States for research, Elmer ''adopted'' the Monjeau daughters and treated them as his own grandchildren.

Elmer Birney's contributions to science in general and mammalogy in particular went far beyond the University of Minnesota. He had a long-term personal and professional commitment to the American Society of Mammalogists, which he explained as follows:

> From 3 decades of close interactions with professional colleagues who have specialized in every conceivable aspect of mammalian biology, from 6 years on the editorial staff for the *Journal of Mammalogy,* and from participation in more than 25 annual meetings of this fine organization, I am just now beginning to feel that I know a little about what makes mammals so interesting.

Elmer served as the President of the American Society of Mammalogists from 1988 to 1990 and as the First Vice President from 1986 to 1988. He held 2 of the most demanding editorial positions in the Society, serving as the Managing Editor of the *Journal of Mammalogy* from 1978 to 1981 and as the Journal Editor of the *Journal of Mammalogy* from 1981 to 1984. He also served as the editor for *Special Publications* from 1984 to 1988, and he, along with Jerry R. Choate, organized and edited *Special Publication* number 11, entitled ''Seventy-five Years of Mammalogy (1919 to 1994),'' which was distributed on the 75th anniversary of the founding of the Society at its annual meeting in Washington, D.C., in 1994. Elmer gave a total of 58 years of service to the Society through work on various standing and ad hoc committees, including Membership, 12 years (chair, 1974–1978); Program, 2; Systematics Collections, 9; Editorial, 10 (chair, 1982–1988); Development, 10 (chair, 1990–1994); Honorary Membership, 10 (chair, 1996–1998); Strategic Planning, 3 (chair of subcommittee on Activities); Society Bylaws Revision, 2 (chair 1998–2000).

In recognition of his many contributions to the Society, Elmer Birney received its highest service award in 1999, the Hartley H. T. Jackson award. Beyond all of this service, Elmer's greatest contributions to the Society may well have been his leading role in growing the principal of the endowment of the Future Mammalogists Fund for support of programs for student members and for his appointment of numerous women and younger members to positions on the Society's committees.

Elmer Birney had a notable sense of humor, and most often saw his fellow human beings in a humorous, charitable light. His laugh, uproarious and distinctive, was a feature of many meetings of the American Society of Mammalogists. He was also noted for some off-handed quips, which included: ''The geographic origin of any species is equivalent to the convergence of all paths of dispersal,'' and ''If you misidentify a mammal as to its genus, you surely will have a new species.'' One of his many friends, Clyde Jones, reminded us of yet another: ''One beer is equivalent to 20 minutes sleep.'' Very likely, Elmer's legendary late-night excuse and the other 2 sayings will continue to be heard at meetings of the Society long after his passing.

The American Society of Mammalogists was not the only professional organization to receive Elmer Birney's time and energy. He served as an associate editor for the *American Midland Naturalist* from 1976 to 1978. Elmer served the Minnesota Zoological Society, which had a mission to support zoological research, to host seminars, and to educate the public about animals, as the president in 1994–1995, as treasurer from 1992 to 1994, and as member of the Board of Trustees from 1971 to 1975 and 1990 to 1995. He also served the Zoological Society as a member of the State Zoo Review Committee from 1971 to 1975 (chair, 1975) and Research Awards Committee (chair, 1975), which gave small research grants to graduate students.

Elmer Birney's research on evolutionary patterns of mammals was conducted in the midwestern United States, Mexico, Antarctica, and Australia. In recent years, the Patagonian region of Argentina was of special interest. All of this scholarship required fieldwork, sometimes under difficult conditions, but he loved being outdoors, collecting, and observing mammals. At the conclusion of a business letter to Phillips (regarding a publication of American Society of Mammalogists) he wrote: ''I just spent 2 especially enjoyable weeks in the field, which once again reminded me why I got into mammalogy in the

first place. Catching mice just beats the hell out of pushing paper.''

There are enough stories from being afield with Elmer to take up several evenings. One of the most memorable moments for one of us (Genoways) occurred during the summer of 1969:

> We were working about a kilometer south of the Río Nayarit, which at this point formed the border between the Mexican states of Nayarit and Sinaloa. We were camped in a low area not far from the highway on this unusually hot and humid day. Just at dark, we had finished setting our traps for *Liomys pictus* for me and *Neotoma alleni* for Elmer. We were considering doing some netting for bats when it began to rain—and rain hard. We sat in our tent for about an hour waiting for the rain to stop, but it only rained harder and harder. We finally became concerned because many of Elmer's live traps were set very near the river and this was no usual rain storm. We jumped into our university carryall and drove toward the river, but were turned back by the police before we could cross the bridge over the river because of high water. They were surprised and concerned to see Americans—didn't we know this was a hurricane? It was immediately clear that about 100 live traps were making a fast trip to the Pacific Ocean. As we drove back to camp, we started getting our stories together for Knox Jones once we returned to school in Kansas. As we approached our camping area, it became obvious that, not only was the river flooding, but so was our camp. As we stepped into the tent, there was about a foot of water and our skinning kits, which were fishing tackle boxes, floated toward us in greeting. Drastic action was needed, so we quickly began loading our equipment into the carryall. However, before we put the last chairs in and struck the tent, Elmer asked that we wait a minute, and he stepped outside toward the carryall. In a couple of minutes, I looked out the tent flap, and to my amazement, Elmer had gotten out his soap, stripped naked, and began showering in the downpour with flashes of lightning as his only illumination. When I asked what he was doing, he responded, ''Well, we haven't had a shower in a week, and it could be that long before we have another.'' That was Elmer, no situation was so bad that some good couldn't come from it. This sense of humor and optimism made him a great field companion and life-long friend.

Throughout his professional life, Elmer aspired to learn as much as possible about mammals, resulting in the publication of 79 books and articles, particularly concerning their evolutionary and biogeographic history, systematics, community and population ecology, reproductive biology, and conservation. The quality of his research can be judged from the high quality of the international and national journals in which his work appeared, including *Nature, Experientia, American Naturalist, International Journal of Primatology, Molecular Ecology, Landscape Ecology, Journal of Mammalogy, Zeitschrift für Säugetierkunde, Ecology, Evolution, Systematic Zoology, Comparative Biochemistry and Physiology, United States Antarctic Journal, Behavioral Ecology and Sociobiology, Journal of Reproductive Physiology, Journal of Wildlife Management, Journal of Wildlife Diseases, Canadian Field-Naturalist, Mastozoología Neotropical, Curator, Proceedings of the Biological Society of Washington, American Midland Naturalist,* and *The University of Kansas Science Bulletin.* Early in his career, Elmer concentrated his work on studies of Grassland Biome mammals as part of the United States International Biological Program. For >10 years, beginning in the mid-1970s, he was involved in exciting joint studies with biochemist Robert Jenness on the evolution of the ability of mammals to synthesize L-ascorbic acid. Beginning in the 1990s, his interests were dominated by work on the systematics, biogeography, and natural history of Patagonian small mammals in cooperation with Carleton J. Phillips, J. Adrian Monjeau, and Robert S. Sikes. Throughout his career in Minnesota, Elmer studied small mammals of the state to gain insight into their natural history in order to assist with their conservation.

Elmer Birney was also an excellent collaborator, and the diversity in his published works attests to his willingness to learn about new subjects, think broadly, and share ideas. A conversation with him could comfortably range from L-ascorbic acid evolution to population genetics, DNA sequence data, biogeography, and landscape ecology. When it came to mammals, nothing was beyond his interest or curiosity.

The favorite memory of one of us (Phillips) of Elmer is the following:

The one that first came into my head (and then repeatedly as I thought about him) is from our work in Patagonia in 1995. We had clambered up a rocky volcanita near a place called ''Escondido.'' The very top of the hill consisted of a pinnacle of basaltic rock, perhaps 6 feet by 6 feet, if even that large. We got up there together, just at sunset. In all directions we could see a landscape dotted with volcanitas and wind-blown cliffs, scattered low vegetation, and rocks. But we could see no roads, no houses, no power lines, no smoky yellow haze, nothing in fact to suggest that human beings ever existed on the planet. A pair of guanacos appeared, seemingly from nowhere. They walked together toward our volcanita and paused below us, capturing our scent I think, and then ran gracefully until out of sight. We stood there in silence, for perhaps twenty minutes, and then Elmer said, ''This is why we came here. I'd be satisfied if this was all there was to it.'' And that's how I'll always remember him.

His many close friends in mammalogy will remember similar field experiences with Elmer. Although we all surely will always cherish these memories, we all also will know that there was far more to Elmer C. Birney.

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