## IN MEMORIAM: GEORGE H. LOWERY, JR.

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George H. Lowery, Jr., Boyd Professor of Zoology and Director of the Louisiana State University Museum of Natural Science and President of the American Ornithologists' Union from 1959 to 1961, died at his home on 19 January 1978 of complications resulting from a diabetic condition and circulatory problems. Despite recurring physical difficulties, he fully retained his intellectual vigor and was actively engaged in academic and professional matters up to the time of his death. He is survived by his wife, Jean, two daughters, Jeannette and Carol Lynn, and three grandchildren, and by a host of students and former students who were made to feel that they, too, were members of his family. His range of ornithological interests was great, but his major contributions in research dealt with migration and the taxonomy and distribution of New World birds. In 1956, he received the Brewster Award of the A.O.U. for his quantitative studies of the nocturnal migration of birds.



GEORGE H. LOWERY, JR., 1913–1978 (shown with the first Louisiana Goshawk specimen) Although George Lowery's scientific contributions were many, he is remembered at least as much by colleagues and others for his warm, friendly, and good-humored personality as for his significant ornithological discoveries.

George was born on 2 October 1913 in Monroe, Louisiana, where he lived during his boyhood and early college student days. Both of his parents were interested in natural history and encouraged his interests along those lines. He attended Louisiana Polytechnic Institute in Ruston from 1930 to 1932 before transferring to Louisiana State University in Baton Rouge, where he received his B.S. degree in 1934 and his M.S. degree in 1936. In that year he joined the L.S.U. staff as Instructor in Zoology and was also appointed Assistant Curator of the Museum of Zoology that he then founded. George spent his entire professional career at L.S.U., taking 2 years leave to earn his Ph.D. from the University of Kansas in 1947. Largely due to his efforts, the L.S.U. Museum of Zoology expanded into the Museum of Natural Science, and he was made Director in 1951. In 1955 he was appointed Boyd Professor of Zoology, an endowed professorship that constitutes the university's highest academic rank.

This mere listing of positions achieved does not begin to describe the enormous influence of George Lowery on the fields of vertebrate zoology and wildlife conservation within the university and the state of Louisiana. At the time that he began his college-level studies, the only programs in vertebrate zoology offered in any of the state's universities were strongly oriented toward preparation for medical school or a career in game management. Students interested in vertebrate ecology usually majored in Forestry and Game Management or went to out-of-state institutions. Then as now, Louisiana advertised itself as the Sportsman's Paradise, and there was little or no encouragement or opportunity for the study of wildlife that was unrelated to fishing, hunting, or fur-trapping. Despite the richness of its avifauna, Louisiana had not had a resident ornithologist of stature since Audubon. The latter was still revered, but conservation organizations such as those named for him carried little weight in comparison to economically and politically powerful sportsmen's groups and commercial users of wildlife. The only scientific ornithological collections still extant in Louisiana at that time were small, scarcely known or used, and maintained (if at all) by the part-time efforts of a few dedicated individuals.

Although he scarcely imagined it at first, George Lowery was to change all that. With enormous vigor and enthusiam, he set out to expand and revitalize the small and moribund bird and mammal collections at L.S.U. and to encourage student interest in field zoology. He initiated a new publication series, The Occasional Papers of the Museum of Zoology of Louisiana State University. Lowery's research interests at that time were primarily in traditional areas of taxonomy and distribution, and his appropriately modest goal was to acquire a fully representative collection of Louisiana birds as a research base for a definitive work on the birds of the state. (A 1938 book by H. C. Oberholser, The Bird Life of Louisiana, was largely a compilation of records to that date, including many of Lowery's that had not been previously published). In later years, of course, his interests, his teaching program, and the areas represented in the collections broadened far beyond their earlier limits. The first edition of Lowery's Louisiana Birds was published in 1955 and was acclaimed not only for its ornithological value but also for its engaging and readable style. It won the Louisiana Literary Award for that year. This still-popular work has gone through three editions, the third appearing in 1974, and it continues to inspire interest in birds as well as to provide authoritative information.

Lowery was primarily an ornithologist, but he maintained a strong and active interest in mammalogy. He taught courses and directed graduate research in that field, and the L.S.U. collections now include over 23,000 mammal specimens. One of his first publications (1936) was a preliminary report on the distribution of mammals of Louisiana, and his last major publication (1974) was a comprehensive book, *The Mammals of Louisiana and its Adjacent Waters*, which again won its author the Louisiana Literary Award.

Although Lowery did no research directed primarily toward wildlife conservation and environmental protection, he played an important role in creating public awareness and support for a conservation ethic in Louisiana. He stressed wise principles of resource use in his teaching, and since many L.S.U. students found positions in governmental agencies dealing with conservation, his influence was widely felt. As the state's leading authority on birds and mammals, his data and his opinions carried considerable weight. In 1965 he received the Outstanding Conservationist Award of the Year from the Outdoor Writers Association, and in 1975 he was named Conservation Educator of the Year by the Louisiana Wildlife Federation. It is no exaggeration to say that George Lowery's influence was greater than that of any other single individual in this century in reshaping Louisiana's attitudes toward its bird and mammal fauna from the standpoint of research, education, conservation, and popular appreciation.

At the time of Lowery's appointment to the staff at L.S.U. and in his early years there, the University was undergoing a tremendous expansion at the behest of the state's undisputed political boss, the colorful and dynamic Huey P. Long, and later by his political heirs. Though by no means an unmixed blessing, the expansionist policies during the Long regime brought a great many gifted young scholars to the faculty. George's potential was recognized within the zoology department, but some of the conservative senior professors cordially reminded him from time to time that they looked forward to the day when he would outgrow this youthful enthusiasm for bird chasing and settle down to real science. Happily, he was able to combine the two without sacrificing the most important aspects of either.

Lowery's career was particularly influenced by three other ornithologists—Francis M. Weston, Thomas D. Burleigh, and Josselyn Van Tyne. As a boy George received his first real instruction in field ornithology from Weston, and his lifelong appreciation of this early guidance is well described in his memorial to Weston (1975, Auk 92: 793-796). Tom Burleigh was one of the best field men of his generation-expert at identifying the living bird by sight or sound, and also an indefatigable collector and skillful preparator of specimens. He was stationed for some years in Mississippi as a Fish and Wildlife Service biologist, and became a close friend of Lowery's during his frequent visits to the burgeoning L.S.U. collection. Burleigh had also collected in Mexico, and he fired George's enthusiasm for the study of neotropical birds. They made many collecting trips together, and published a number of joint papers. In the summers of 1936 and 1937, Lowery studied at the University of Michigan Museum of Zoology, of which Van Tyne was then Director. The magisterial Van Tyne made a deep impression as a scholarly professional ornithologist, and he was always held in great respect by Lowery. The L.S.U. Museum Occasional Papers series was modelled closely on the University of Michigan Museum's series with the same title.

Prior to World War II, students in ornithology were few, and even as under-

graduates they were warmly and fully welcomed into the L.S.U. museum by George. He provided unrestricted access to the collection, the library, the journals, and even his manuscripts and most of his correspondence. For students who had been little more than teenage bird watchers, the effect was that of a crash course in scientific ornithology. Specimen collecting was then possible and legal close to the campus, and field trips in Lowery's own dilapidated car were frequent—often preceded by early breakfast at his home. Even in later years, George never lost this sense of camaraderie with his students or his willingness to share all of his knowledge and his ideas with them.

The collecting trips that were especially memorable were those to the Gulf Coast, particularly during spectacular periods of migration. Lowery became deeply interested in the patterns and timing of the movements of such enormous numbers of birds, and realized what an inadequate sample of the phenomenon was provided by irregular daytime observation. With the aid of astronomer W. A. Rense, he devised a technique for telescopic observation of nocturnal migrants across the face of the moon. This opened up a new dimension in the study of migration and was the subject of his doctoral thesis which, in published form, won him the Brewster Medal. He continued to pursue this subject in a progressively refined manner in collaboration with his students (especially S. A. Gauthreaux and Robert J. Newman), a number of whom have since become leading authorities on bird migration.

Taxonomic and distributional studies also continued, with an emphasis on the Mexican state of San Luis Potosí immediately after World War II. Most of the fieldwork there was done by R. J. Newman, his wife Marcella, and C. J. Shaw (who collected mostly mammals); Newman later joined the staff at L.S.U. after receiving his Ph.D. under Lowery's sponsorship.

Beginning in the mid-1950's, a number of L.S.U. graduate students undertook extensive ornithological studies in Middle America. In 1955, S. M. Russell and D. A. Lancaster made the first of several L.S.U. expeditions to Belize (then British Honduras). E. O. Willis and Jared Verner subsequently conducted behavioral studies in Belize. Other neotropical studies in the 1950's and 1960's included those of D. G. Berrett in Tabasco and L. C. Binford in Oaxaca, Mexico; K. A. Arnold, J. H. Hunt, and Douglass Morse in Costa Rica; and Burt L. Monroe, Jr., in Honduras. All of these studies resulted in theses and in some cases publications that are now standard references. During the same period, Lowery continued to sponsor graduate research on migration such as that of S. A. Gauthreaux as well as morphological studies such as those of Joel L. Cracraft and S. L. Warter, and J. Alan Feduccia was among the L.S.U. undergraduates that Lowery encouraged to pursue careers in ornithology. These were only some of the outstanding students that Lowery attracted; a complete list of those taking graduate degrees under his direction is given in an appendix.

In 1961 John P. O'Neill made a summer trip to Peru during which he made a small collection of birds. Although a student at the University of Oklahoma, O'Neill placed his material in the growing L.S.U. collection. At that time the collection did not contain all of the world's bird families, and the specimens collected by O'Neill added several of those not represented. Lowery was so excited by this material that he insisted that O'Neill return the following year. This was the beginning of Lowery's major shift to an interest in South American birds. Starting in 1963, the discoveries in Peru of numerous new species and genera of birds fulfilled one of George's earliest

ambitions, and he would dedicate most of his energies for the rest of his life to building the L.S.U. collections to be among the best in the world in neotropical representation. Although Peru has been the principal area of South American research, there have been extensive studies in Ecuador and a major program on Bolivian birds is now underway. With O'Neill as Director and James V. Remsen as Curator of Birds, the L.S.U. museum continues to flourish and the bird collection now totals nearly 98,000 specimens.

Funding for L.S.U. expeditions under Lowery's direction was totally from private donations, including important contributions from the McIlhenny family of Avery Island, Louisiana, creators and producers of the world famous Tabasco Sauce. George so genuinely enjoyed this hot pepper seasoning that maintaining loyalty to his patron's product was never a problem for him.

Building the collection was a labor of love for George. He arranged for the purchase or donation of private collections for L.S.U. and filled in many gaps through specimen exchange—an activity in which his expertise and shrewdness were almost legendary. Most of all, he urged students to do master's and Ph.D. problems that would involve collecting specimens. George eagerly looked forward to the return of the students who had been in the field. For him the arrival of the collections, sometimes with new species and always with birds new to the museum, was indeed like Christmas. He would literally have to be told to go home to eat and all unpacking had to cease until he could get back.

George was able to visit Peru only once, when he and his wife joined O'Neill for three weeks in 1964. The highlight of that trip was when O'Neill brought in a specimen of the then-undescribed cotinga, *Conioptilon mcilhennyi*, for George to skin. As George prepared the bird he first noticed the dense powder down patches under the wings that were to be one of the generic characters.

Lowery was honored several times by fellow scientists who named animals after him. The most memorable highlight of this kind was provided by the events leading to the naming of the remarkable new genus and species of owl, *Xenoglaux loweryi*, discovered by O'Neill and Gary R. Graves in Peru (1977, Auk 94: 409–416). They realized at the moment the first specimen was captured that the bird was something strikingly new, and at the same time they agreed to name it in Lowery's honor and not to let him know in advance. The specimens were kept hidden and all work on the description and colorplate reproduction was carried out in secret. At a museum party, George was presented with the specimens, the manuscript, and the colorplate. He was truly overwhelmed and exceedingly pleased with "his" owl.

Every former L.S.U. student has his own favorite anecdote reflecting the many sides of George's warm and friendly personality. George's greatest legacy is, of course, the museum which he founded and brought to its present state of eminence. Among American ornithologists of his generation, few started with so little and accomplished so much as did George Lowery, and few are remembered by colleagues and students with so much admiration and genuine affection.

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		MS or MNS			Ph.D.		
		Orni- thology	Mam- malogy	Her- petology	Orni- thology	Mam- malogy	Ich- thyology
Roland Abegg	1939		×				
Edward Fairchild	1950		×				
Floyd L. Bailey	1951		×				
Walter W. Dalquest	1951					×	
Robert J. Newman	1951	×					
Benjamin E. Gandy	1952			×			
Charles M. Fugler	1953			×			
Frances Crews James	1955	×					
Richard T. Gregg	1956						×
Robert J. Newman	1956				×		
Herbert E. Shadowen	1956					×	
Horace W. Belknap	1957	××					
Edwin O. Willis	$1958 \\ 1959$	×					
Jared Verner	1959	~			×		
Douglas A. Lancaster Delwyn G. Berrett	1960				x		
Douglas M. Lay	1962		×		~		
Francis J. Rolle (deceased)	1962	×	~				
Stephen M. Russell	1962	^			×		
Marjory B. Freeman	1963		×		~		
Edward T. Armstrong	1964	×	~				
Sidney A. Gauthreaux, Jr.	1965	×					
F. Allan Hayse	1965	×					
Burt L. Monroe, Jr.	1965	~			×		
Douglass H. Morse	1965				×		
Stuart L. Warter	1965				×		
Keith A. Arnold	1966				×		
Joel L. Cracraft	1966	×					
David G. Huckaby	1967		×				
Richard K. LaVal	1967		×				
Bradley McPherson	1967		×				
Laurence C. Binford	1968				×		
William H. Buskirk	1968	×					
Sidney A. Gauthreaux, Jr.	1968				×		
John J. Morony, Jr.	1968	×					
Nancy Steinke (Pearson)	1968	×					
Richard L. Ferren	1969	×					
James J. Hebrard	1969	×					
James H. Hunt	1969	×					
David L. Pearson	1969	×					
John Farrand	1970	×					
Alfred L. Gardner	1970					×	
John P. O'Neill	1970	×					
John W. Boettcher	1971	×					
Donald W. Buden	1971	×					
Kim R. Thomas	1973		×				
Sandra L. Guthans	1973		×				
H. Douglas Pratt	1973	×					
Carol S. O'Neill	1974	×					
John P. O'Neill	1974				×		
James Rodgers	1974	×					
Phillip L. Bruner	1974	×					
Dan A. Tallman	1974	×					
Erika J. Tallman	1975	×					
Kim R. Thomas	1976					×	
Glenda Quintero (Medina)	1976	×					
Robert S. Kennedy	1977				×		
TOTAL		28	10	2	12	4	1

APPENDIX I List of Students who Received Degrees under George H. Lowery, Jr.