



JEAN MYRON LINSDALE, 1902–1969

(Photographed at the Hastings Natural History Reservation in the 1950s)

IN MEMORIAM: JEAN MYRON LINSDALE

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THE ornithological career of Jean M. Linsdale started in Kansas and continued in California with adjunct work in the neighboring state of Nevada. His name figures prominently in that coterie of people who made the Museum of Vertebrate Zoology at the University of California one of the paramount centers of ornithological research. For 33 years he was on the staff of that institution as a Research Associate, the first 10 years at the museum itself on the Berkeley campus, followed by 23 years as first resident director of the museum's Hastings Natural History Reservation near Carmel Valley. His research dealt with reptiles and mammals as well as birds, but ornithology was his initial and most consuming interest. In connection with his research on birds his name is associated primarily with two major works, namely "The birds of Nevada" and "The natural history of magpies." His studies, however, dealt with many diverse aspects of ornithology such as life history, behavior, avifaunal analysis, systematics, frequency of occurrence, significance of weights, birdbanding, and bird protection. Perhaps the best overall characterization of the man and his work is to regard him as a natural historian, which explains his wide interests and endeavors with all groups of land vertebrates, plants, and certain groups of invertebrate animals.

Among his many accomplishments was the initiation of a comprehensive quasi-ecological program at the Hastings Natural History Reservation, which was a long term, intensive study of plant-animal interrelations in a restricted area in the California coastal region. Not the least of his achievements was his sustained editorial service for three publications, and for fifteen years he served as regional compiler of Audubon Field Notes for the San Francisco Bay area. His chronological life span was 67 years (1902-1969). His professionally productive interval extended from 1924 to 1960. General ill health and failing eyesight forced early retirement, but packed into these 36 years was a remarkably productive career as field naturalist, writer, compiler, and editor. Clearly he was a man dedicated to his work—a person of the old-time Grinnellian school who worked long hours virtually every day, who put work before pleasure, who worked not for any reward but simply because work was a part of him. His voluminous writings constitute an enduring testimony to his many accomplishments.

Jean Linsdale's ancestors came to America in pre-Revolutionary War times and represented an amalgamation of stocks from Ireland, Scot-

land, England, and France. His parents gravitated to the midwest where Jean was born at Wellsville, Kansas, on May 20, 1902, the son of Jesse E. and Lena Armstrong Linsdale. The father was at the time a rural school teacher and farmer. Consequently Jean lived for his first six years on a farm in Franklin County. As his parents enjoyed the out-of-doors, an awareness of nature developed in the youth, but he attributed his interest in birds primarily to two kindly, elderly people who were the nearest neighbors. They related their experiences with birds to a frequent and eager young listener. After each visit Jean would spend much time trying to verify some of the fascinating things that he had been told about. Here was an early manifestation of three traits that later characterized the man—an intense curiosity about natural phenomena, a strong desire to ascertain first hand facts of nature, and long hours of patient field observation.

This interest in birds, early acquired, became a little stronger each year. In his first year of formal schooling at Iola, Kansas, during the long winter he had to set aside his new found interest temporarily, but the next summer most of his time was spent in the field looking for birds. When Jean was six years old the family moved to Ottawa, Kansas. The third winter that Jean was in school he discovered the city library, which was well supplied with books on birds. The golf links of the Ottawa Country Club near their home was a propitious place for bird-finding and he spent part of nearly every day there, sometimes playing, sometimes working, but mostly studying birds. When he was about ten he made his first trip to the University of Kansas at Lawrence and visited the Natural History Museum in Dyche Hall, which electrified him. Thereafter K. U. and the museum were virtually synonymous in his mind. When he was at an age for high school there began a series of family moves that resulted in his attending three different high schools in close succession, the last being in Lawrence, which brought him close to the University of Kansas and the museum. It followed as a matter of course that he would attend the University of Kansas and that he would major in zoology. During his undergraduate college days, he collected birds in Douglas and Doniphan counties of Kansas and in Creek County, Oklahoma, in the Christmas holidays of 1920 while visiting his parents in Sepulpa where his father was then a school superintendent. In the summer of 1921 he collected birds and mammals in several Kansas counties when assigned a small stipend by Professor H. H. Lane to extend the work of the State Biological Survey by gathering material to inventory the land vertebrates of the state. These trips expanded his interests to all land vertebrates and he became "research-minded." He was awarded the Bachelor of Arts degree with honors in 1924.

During the summer of that year, following graduation from K. U., he attended the University of Michigan Biological Station at Cheboygan Lake. For the academic year 1924–1925 he returned to the University of Kansas as a Teaching Fellow and did graduate work under Professor Lane. He presented for the Master of Arts degree, which he received in June 1925, a dissertation entitled "The land vertebrates of a limited area in eastern Kansas." His area was in Doniphan County near the old townsite of Geary and bordered by the Missouri River. He had been studying this area for a long time, making repeated trips there between August 1921 and May 1925. From this early work in Kansas he ultimately published ten papers on birds, two on mammals, and one on reptiles and amphibians. After receiving his master's degree he spent the summer of 1925 as a Junior Biologist with the U. S. Bureau of Biological Survey and participated in field work in south central Minnesota.

One of Jean's friends in Lawrence was E. Raymond Hall. They completed the last year of high school together and then went on to the University of Kansas. In that first year of college Jean found part-time employment at fifteen cents per hour working with birds in the natural history museum and a month or so later guided Raymond to the study collections there where C. D. Bunker assigned him to work with mammals. Linsdale and Hall prepared a joint paper on the birds of Douglas County, Kansas. On November 3, 1924, Joseph Grinnell visited the K. U. Museum, where Jean met him and subsequently decided to go to Berkeley for further graduate work. Raymond had already gone there (in January of 1924); Jean followed in August of 1925, and just before venturing westward he married Mary Ann Roundy of Geary, Kansas. Incidentally Hall and Linsdale were but two of several K. U. students who moved to Berkeley; Remington Kellogg, Marcus Hanna, Hall, Linsdale, W. H. Burt, R. A. Stirton, J. E. Hill, Curtis Hesse, and Lawrence Compton went from Lawrence to Berkeley in about the order named.

Jean Linsdale had been accepted as a Teaching Fellow in Zoology at the University of California, a position that he held from 1925 to 1927. During this time he completed the requirements for the Ph.D. degree under Grinnell. His doctoral dissertation was on "Variations in the Fox Sparrow (*Passerella iliaca*) with reference to natural history and osteology," in which he concluded that the genus *Melospiza* is so closely related to the genus *Passerella* that the two should be merged, with *Passerella* having priority. His next professional affiliation, which continued from the time of his attainment of the Ph.D. in 1927 until his retirement in 1960, was with the Museum of Vertebrate Zoology.

For the academic year 1927–1928 he held the title of Research Assistant in Vertebrate Natural History. The following year he was made a Research Associate.

One of Grinnell's well-known methods of studying the vertebrate animal life of California was by making regional faunal studies. Having finished the famed Yosemite report in 1924, work was underway on a similar section through the northern Sierra Nevada in the vicinity of Mount Lassen and Lassen National Park. Jean's first assignment was to participate in this so-called Lassen Project, engaging in field work, collating the data and doing much of the writing of the report. Of the total of 673 field days spent by 12 individuals, Linsdale's quota was 108. The 594-page report entitled "Vertebrate natural history of a section of northern California through the Lassen Peak region" was issued on October 10, 1930, under the authorship of Grinnell, Dixon, and Linsdale.

In addition to these exhaustive regional studies, another approach to the study of vertebrate animals in California followed by Grinnell was the preparation of monographs on certain groups of animals. Following the "Game birds of California," a prolonged study was undertaken on the "Fur-bearing mammals of California." The two-volume work, again under the authorship of Grinnell, Dixon, and Linsdale, was published in 1937. In the preface Dr. Grinnell, in explaining the contributions of the three authors, paid tribute to Linsdale as follows: "Dr. Linsdale joined the 'fur book' enterprise definitely in the fall of 1929, and since then has given to it a large share of his time. He has gone into the field, visited and interviewed numerous trappers and appraised their testimony, assisted in scrutinizing, assorting and organizing a great amount of raw data, and contributed importantly to the ecological discussions and to the economic interpretations. Without Dr. Linsdale's concentrated attention to the details of final revision, I am free to say that the enterprise would likely have been concluded distinctly below its present plane of accomplishment."

Although the museum's earlier project on the game birds of California had covered the waterfowl, Linsdale became interested in this group of birds, and he wrote one extensive paper and several short notes on waterfowl in California. Furthermore he participated regularly for several years as an observer in the annual inventory of the Black Brant along the California Coast fostered by the State Fish and Game Department.

While still a graduate student, Jean accompanied Annie M. Alexander, founder and patron of the museum, and her companion, Louise Kellogg, on a mammal-collecting trip to Nevada. From this beginning there ultimately developed a major project for him, namely his study of the

birds of Nevada. When the project became his responsibility, he engaged in field work at intervals from 1930 to 1934. The writer, then a Research Assistant in Ornithology at M.V.Z., accompanied him on his final month-long trip in October, 1934. We visited strategic areas over much of the state, travelling in his personal car. My horizons were greatly expanded on this trip. Not only did I receive training in the field, but I learned from his example, and became aware of his almost fanatic devotion to his work and his vast knowledge of vertebrate animals, particularly birds. This intimate association and friendship continued through the years. By coincidence we both left Berkeley in 1937, but during my years at M.V.Z. I often turned to Jean for counsel. Incidentally, he would seldom answer my questions directly, but instead used a technique of asking probing questions and eliciting searching discussion thereby getting me to come around myself to the logical conclusion. Upon occasion he would even swing completely around to the opposite position from which he started as though baiting me and forcing me to defend my stand. Never was he too busy to stop his own work and help others. Those students like myself of the museum group at that time, such as Henry S. Fitch, Robert T. Orr, Thomas L. Rodgers, Jr., and others will always be in his debt for help rendered.

Linsdale's study on the birds of Nevada coincided in part with that of E. R. Hall on the mammals of the state. Hall's was the more sustained study, covering every part of Nevada, in contrast to Linsdale's broader sampling approach. Hall and the students who accompanied him took many specimens of birds, and Linsdale summarized the results of the field work of 80 observers in the state from 1867 through 1935. As part of his Nevada birds project, Linsdale made a tour of eastern museums in the autumn of 1932 to study Nevada specimens in the large collections, particularly in the U. S. Biological Survey and the U. S. National Museum. The main report on "The birds of Nevada," published in 1936, was a succinct, factual summary of the status and distribution of the 338 species and subspecies then known from the state. It was followed by several shorter papers in the nature of interpretive work (1936, 1938).

As regards the second aspect of Linsdale's Nevada study (1938), he concentrated on the Toyabe Mountains, near the center of the state, a rugged desert mountain range that presents a great variety of environmental situations. His first trip to the site was in the summer of 1930 and he made short trips there during each of the next three successive summers. Simultaneously his wife studied the plants of the mountain range and submitted a dissertation on the flora in fulfilling the requirements for the master's degree in Botany at U. C. His compre-

hensive study on the natural history of magpies (1937) was based in large part on his observations of the Black-billed Magpie made in Nevada, supplemented by studies in California on the Yellow-billed species.

One of Linsdale's duties in the museum was to serve as Curator of Herpetology. He worked on the collections from Lower California amassed through the years by museum personnel and in 1932 there appeared under his authorship a sizeable paper on the amphibians and reptiles of Lower California (Univ. California Pub. Zool., 38: 345-386, 1932). This specialty also extended to Nevada, for not only did he collect reptiles and amphibians on his own trips, but he also handled all the cold-blooded vertebrates the Hall expeditions brought in. In 1940 his paper on the amphibians and reptiles in Nevada appeared in print (Amer. Acad. Arts Sci., Proc. 73(8): 197-257, 1940). In his bibliography eleven papers pertain to herpetology wholly or in part.

Joseph Grinnell was not one to carry on crusades and generally kept the museum out of controversies, but upon occasion he became aroused and then mobilized all resources to champion some cause or protest some deleterious activity. One such event occurred during the period from 1929 to about 1935 when, with Linsdale and Hall as co-campaigners, he opposed the extension of control of wild animals to public, uncultivated land. Particularly were they opposed to the use of the cumulative poison thallium, which was then being broadcast widely without regard to the general effects on wildlife. They also objected to the advertising of methods for killing small birds, supposedly in the interest of fruit and vegetable growers. The problems were discussed before the Northern Division of the Cooper Ornithological Club. One consequence was that Jean Linsdale was made chairman of a Bird Conservation Committee for the society. In this capacity he summarized the problems of the conservation of birds in California and the status of many species of birds in the state and carefully documented many instances of thallium poisoning of wildlife (1931, 1937). This concern carried over in later years to the American Ornithologists' Union, when Linsdale served as chairman of the A.O.U. Committee on Bird Protection in 1945 and in 1947, authoring comprehensive reports each time.

The museum constituted the editorial office for *The Condor*, as Grinnell was editor, and Linsdale, virtually from the time he first became affiliated with the museum, was pressed into service reading proof. Gradually he worked into the editing aspect. In 1929 he was made Associate Editor. His duties also extended to editing numbers of the *Pacific Coast Avifauna*. In addition he served for several years on the editorial board of the *American Midland Naturalist*.

In the summer of 1934 the opportunity arose for the M.V.Z. to make a study of the vertebrate animals of the Point Lobos Reserve in Monterey County, California, a recently established state park that served as a unique example of the natural character of the narrow coastal strip of California. Grinnell and Linsdale personally undertook the study, Linsdale spending the greatest amount of time in the field which for him totaled 124 days of field observation or nearly a thousand hours. As compared with the museum's other regional faunistic studies, this was less prolonged and there was little or no collecting, but the final report was probably more influential than any of the others for several reasons. One was the prestige of the report by virtue of its being published by the Carnegie Institution (1936). A second factor was the stressing in the report of the inherent values of the vertebrate animal life in the reserve and the cogent recommendations for its protection and preservation. Indirectly this study and report led to Linsdale's next assignment, namely the development of the Hastings Natural History Reservation in nearby Carmel Valley.

In 1929 Mrs. Russell P. Hastings had purchased a large ranch in the northern part of the Santa Lucia Mountains east of Monterey, near Jamesburg, but in 1936 she and her husband decided to discontinue ranch operations. Knowing of the Point Lobos study, they entered into discussions with Grinnell concerning another use for the property. Out of these conferences grew the concept of establishing the Frances Simes Hastings Natural History Reservation. A plan was worked out, presented to the university, and was accepted by President Robert Gordon Sproul on behalf of the Regents in October, 1937. The tract consisted of 1,640 acres. Title to the property was retained by Mrs. Hastings during her lifetime, and she assumed financial responsibility for general maintenance, major repairs, remodeling and existing structures, and construction of additional buildings as needed. She also supported much of the on-going research. Administration and protection became the responsibility of the university. Mrs. Hastings died in 1963 and, by the terms of her will, title of the property passed to the university.

The basic plan as initially worked out by Grinnell and Linsdale was to make a continuous record of the biotic changes that would ensue on this tract as it would henceforth be protected. The stated purposes of the reservation were twofold: To preserve an area in California's coastal region where native plants and animals could live undisturbed by human use of the land, and to provide for continuous study of vertebrate animals, especially their numbers and relationships to their surroundings, as the relationships change within the annual cycle and from year to year. This establishment of a permanent field station was a new

type of venture for the museum and the university, and marked a departure from limited exploration in the field in many different localities to a long-range, intensive study of the fauna and flora and the biotic interrelations and changes in one localized area. Jean Linsdale was chosen to be the resident director—his official title was Research Associate in Charge. He moved from Berkeley to the reservation in the autumn of 1937, and started to put the plan in operation.

In carrying out the research program at the reservation, Linsdale's natural history philosophy again came to the fore. Edmund Selous apparently had long been his guiding light and Jean had in his library every book that Selous wrote. Reflecting this man's influence, Jean felt that long and detailed observations of one (or a few) nests, or of one (or a few) pairs of birds would yield more significant data than many shorter, less complete observations on larger numbers of nests or pairs of birds. Thus he would rather have one nest of a particular species under observation, say for 15 hours per day for several weeks, than to spread the same effort over many nests for shorter periods each. This *modus operandi* resulted in the accumulation of great quantities of data, but hardly constituted an adequate sampling program. Curiously Linsdale made little use of censuses at the reservation, which would have documented the long-range trends and would have made possible the comparing of populations from one period to another. The dearth of quantitative data that could be evaluated statistically is difficult to explain in light of his having been a pioneer in the use of statistical methods in systematic ornithology in connection with his doctoral study of Fox Sparrows. Furthermore he dealt extensively with quantitative data in his adaptation of the Raunkaier frequency method to bird census data (1928, 1932, 1936). Yet similar studies were not made for the birds of the Hastings Reservation. As a result of these omissions the program at Hastings was largely descriptive and was concerned almost entirely with what was on the reservation rather than with the why of things. This was the approach of the natural historian that Linsdale was. Indicative of his single-mindedness and keen sense of studying the environment as it is and not as it should perhaps be managed was an event that occurred at the reservation in the spring of 1945 when Oliver Austin was visiting him. A student came in to report that he had just spotted two bull snakes working their way down the little valley. Jean's immediate reaction was a shrug of his shoulders and a remark "I guess that'll be the end of the Bullock's Orioles' nests we're studying." That he might have saved the nests by removing the snakes was to him just unthinkable.

Linsdale himself put in long hours in field study. Correspondence,

writing and similar activities were evening chores. His wife, Mary Ann, was a staunch co-worker in this huge undertaking. She was particularly interested in the bird banding phase. Their son Donald was trained in the tradition of his father as a field naturalist. As regards Linsdale it was in some respects a case of the right man, at the right place at the right time. This sort of meticulous work of broad coverage was his particular forté. For the identification of lower plants and the numerous groups of invertebrates, Linsdale sought out specialists. All those who worked at the reservation during the first ten years, the identifiers of specimens, and all others who contributed importantly to the work are listed in Linsdale's report of 1947 as well as in various publications pertaining to the scientific results of the reservation. A number of species of animals and one plant were named for Linsdale as follows: the crane flies *Tipula (Hesperotipula) linsdalei*, *Dicranoptycha linsdalei*, and *Limonia linsdalei*; a mite, *Cheyletus linsdalei*; a chigger, *Acomatocarus linsdalei*, a false scorpion, *Pycnochernes linsdalei*; a lithobiid centipede, *Pokabius linsdalei*; a geophiloid centipede, *Malochora linsdalei*; a cestode, *Catenotaenia linsdalei*; a hymenopteran, *Hoplitus linsdalei*, and a tuber, *Tuber linsdalei*.

The efforts of Linsdale and his associates in gathering materials, his correspondence and visitations soliciting identifications of plants and invertebrate animals, and hosting visiting scientists, were prodigious. While all these items pertaining to the reservation were going on, Linsdale was finishing the paper on the reptiles of Nevada, helping edit the Condor, preparing regional reports for Audubon Field Notes, compiling the Fifth Ten Year Index to the Condor (Vols. 41-50, 1939-1948) and preparing monographs on certain species on the reservation. These consist of three lengthy books on mammals published by the University of California: the California Ground Squirrel (1946), the Dusky-footed Woodrat (with Lloyd Tevis, 1951), and a monograph on mule deer (with Quentin Tomich, 1953). He had partially completed other manuscripts on the Merriam chipmunk, meadow mouse, the pocket mouse, and four kinds of white-footed mice. In working up the data for publication, mammals fared better than birds, perhaps because of completeness of data or perhaps because of public relations considerations. A study on the goldfinches of the reservation was the principal work on birds (1950 and 1957). Another major work was a monograph on the fleas on the refuge published with Betty S. Davis in 1956.

Some other facets of Jean Linsdale's ornithological career should be noted. It is significant that his first publication in 1920 was a report on a Christmas bird census made at Lawrence, Kansas. This interest surfaced again years later when, in his drive to mobilize distributional

data for birds at Carmel Valley and the Hastings Reservation, he assumed the role of editor-compiler for the whole San Francisco region for Audubon Field Notes. This tremendously time-consuming task he continued for 15 years from 1937 to 1952. While this was of general benefit, it had the disadvantage of diverting his waning energy away from mobilizing the data at Hastings Reservation. However I suspect that the compilations were the closest thing he had to a hobby and that they constituted a vicarious means of relaxation, an activity akin to Grinnell's collecting bibliographic citations on the birds of California as occasion permitted.

Another interest was in live bird weights recorded from trapped and banded birds. On this he worked with E. L. Sumner, Sr., and published results on three species (1934 and 1937). As an accompaniment of his editorial work he frequently reviewed current books, especially for the American Midland Naturalist. In his bibliography 15 titles bear witness to this activity. That he was historically minded is indicated by his biographical sketches of several persons, namely Harry S. Swarth, William H. Parkinson, Joseph Grinnell, Amelia S. Allen, and Rose S. Taylor. Although he worked for many years with systematists, he did little himself in discovering, describing, or naming new taxa. Working with Joseph Grinnell he helped describe in 1929 a kangaroo rat from the Upper Sacramento Valley, *Dipodomys heermanni saxatilis*, and in 1930 two new foxes from the Channel islands off the coast of southern California, *Urocyon littoralis santarosae* and *U. l. dickeyi*. The only bird that he named was a subspecies of Black-capped Chickadee from Nevada, *Parus articapillus nevadensis* (1938).

Jean Linsdale was basically a shy, sensitive individual. To those who got to know him he was a warm, cordial personality. Because of his retiring nature he made his impact on society largely through written rather than spoken words and his writing reflects the nature of the man—his exact, careful, thorough work. In his writings he would sometimes interpret the facts and draw inferences but not invariably. Some reviewers of his longer works criticized the exhaustive detail and the repeated case histories. His approach was a luxury that is seldom possible today with the so-called knowledge explosion and soaring printing costs, but with his detailed presentations he was being true to his credo of reporting facts as observed. In response to Hall's repeated questioning why he did not end a factual account with a generalization, Linsdale maintained that orderly arrangement of facts enabled readers to draw the obvious conclusions and therefore these did not need to be "spelled out." It was his attitude that the philosophical interpretation could come later, perhaps even being the contribution of others based

in part on his data—his primary mission was to gather and record the unexpurgated data on which the inferences could be based. While factual reporting predominated in his writing, the interpretive work that he did do was excellent. This is seen in two of his shorter papers on the birds of Nevada (1936 and 1938) and the Toyabe report (1938).

Jean Linsdale was in his way a teacher, not in the usual sense of lecturing before large audiences or carrying on a dialogue in smaller groups. Rather he taught by example and in an indirect way. For example the M.V.Z. directors, first Grinnell, then Hall and Alden H. Miller, persuaded many of the graduate students to spend time at the Hastings Reservation under Linsdale's tutelage. He was a hard taskmaster. He might assign the neophyte to go out and sit under the nest of some bird (a "dickie bird," perhaps, to the student) and record his observations. This might go on for days. Frequently, to start with there was a resistance or even hostility to this activity (or inactivity as some put it), but usually, eventually, that nest and its occupants became the most important thing in the world to the observer. The student would profit further from sitting down with Linsdale and having him go over the notes and proffer suggestions. An impressive number of our best field biologists today were "weaned" under Linsdale at the Hastings Reservation and were helped by his observational and note-taking procedures.

His teaching extended in some degree to undergraduate students in various ways. For instance during his Berkeley period on spring Saturday mornings, a number of ornithologists were dragooned to assist Professor Grinnell in the field work of his large bird course by leading small groups of 15 to 20 students along the trails of Strawberry Canyon in the foothills in the eastern sector of the campus. Jean, more than any of us, stressed persistent and prolonged observation, insisting that all students take notes on each bird on the spot, while watching the bird. Everything had to be recorded—the place, time, kind, recognition marks, behavior. The other assistants may have had longer lists of birds seen per trip, but his group made the more pertinent observations.

Another attribute of Linsdale was his unconcern with what others were (or said they were) doing by way of duplication of effort and at the same time remaining steadfast in his own endeavors. When he was working on the California ground squirrels at Hastings Reservation, at least two other zoologists told him that they were doing a similar study, and one even made a trip from afar to the reservation and not too subtly suggested that Linsdale drop his project. Jean would chuckle over this as he told the story, and of course he ignored the suggestion. Significantly it was Linsdale's book that was completed and published.

Jean Linsdale was never a robust individual. At the age of nine months he experienced a severe attack of whooping cough which affected his health for several years. For the ten years that he occupied an office in the museum at Berkeley, he was exposed to the fumes of carbon bisulfide which was heavily used as a fumigant. He worked in what struck me as a dark office, as though light hurt his eyes, yet his writing and editorial work necessitated long hours of close visual work. Vacations were unknown to him, and he had few, if any, outside interests. By 1960 in failing health he elected early retirement, and he and his wife moved from the reservation to the nearby town of Salinas where they bought a home. Despite his retirement his eyesight continued to degenerate. By 1964 he was totally blind. His father had been blind for some years before his death, and a sister suffered from glaucoma, so a genetic basis for his affliction may be inferred. In addition to this great personal tragedy, there thus came an end to his scientific career and the organizing of the vast amount of data so laborously accumulated on the reservation for so many years. His general health continued to decline and he lingered on until death came to him at his home on January 20, 1969. He is buried in the Garden of Memories in Salinas. His widow still lives in Salinas and carries on an active bird-banding program. Their son Donald earned his Ph.D. in Entomology at the University of California at Berkeley in 1961. For many years he held the position of Senior Vector Control Specialist, Bureau of Vector Control and Solid Waste Management, California State Department of Public Health. He has recently assumed the position of Curator of Natural Sciences in the Oakland Museum.

Recognition of Jean Linsdale's work came through his being elected a Fellow of the American Ornithologists' Union, Honorary Member of the Cooper Ornithological Society, Fellow of the California Academy of Sciences, Fellow of the Herpetologists' League, Honorary Member of the Monterey Peninsula Audubon Society, and Trustee of the Monterey Bay Chapter of the Nature Conservancy. In his lifetime he held memberships in the following professional societies: American Association For The Advancement of Science, American Society of Ichthyologists and Herpetologists, American Society of Mammalogists, American Society of Zoologists, California Academy of Science, California Botanical Society, Ecological Society of America, Herpetologists' League (Charter Member), Kansas Academy of Sciences, Kansas Ornithological Society, National Audubon Society, Nature Conservancy, Phi Sigma Society, Society of the Sigma Xi, Society for the Study of Evolution, Society of Systematic Zoology, Western Birdbanding Association, Western Society of Naturalists, Wilderness Society, Wildlife Society, Wilson Ornithological Society.

Of all of these, his ties were particularly strong with the Cooper Ornithological Society, which he joined in 1926. He served a term as President of the Northern Division, which automatically made him a member of the Board of Governors of the parent society. At one time he was a member of the Western Advisory Board of the Nature Conservancy. He was consultant in Entomology for the Agriculture Extension Service 4-H Club for Monterey County. He joined the A.O.U. in 1922, became an Elective Member in 1933, a Fellow in 1945, and a Fellow Emeritus in 1964. Of a total of 166 titles in Jean Linsdale's bibliography, 69 are Audubon Field Reports, 15 are book reviews, 6 are obituaries or memorials, 10 papers are devoted exclusively to mammals, 8 to reptiles and/or amphibians, 1 deals with botany, and 1 is in the field of entomology.

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