Following Leopold's Footsteps

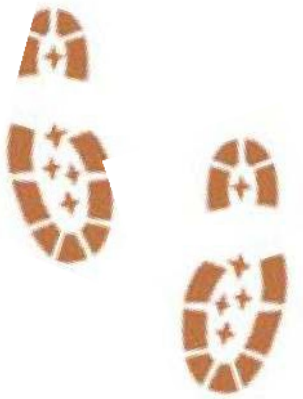
75 Distinguished Careers Dedicated to Wildlife Conservation

The Wildlife Society's Aldo Leopold Medal Winners 1950 -2024

Appreciation is a wonderful thing; it makes what is excellent in others belong to us as well.

Voltaire

From a hell-for-leather two-gun teenager fighting in the war against Mexican dictator Diaz (Beltran) to the first woman to attain Senior Scientist status in the U.S. Fish and Wildlife Service (Stickel), the recipients of the prestigious Aldo Leopold Award are an incredibly diverse group of people who have two things in common: a passion for wildlife and a dedication to its conservation. As you get to know them and to appreciate their myriad accomplishments, we hope you too will find the inspiration to walk in Leopold's foot-steps.



ALDO LEOPOLD

Considered by many as the father of wildlife management and of the United States' wilderness system, Aldo Leopold was a conservationist, forester, philosopher, educator, writer, and outdoor enthusiast.

Born in 1887 and raised in Burlington, Iowa, Aldo Leopold developed an interest in the natural world at an early age, spending hours observing, journaling, and sketching his surroundings. Graduating from the Yale Forest School in 1909, he eagerly pursued a career with the newly established U.S. Forest Service in Arizona and New Mexico. By the age of 24, he had been promoted to the post of Supervisor for the Carson National Forest in New Mexico. In 1922, he was instrumental in developing the proposal to manage the Gila National Forest as a wilderness area, which became the first such official designation in 1924.

Following a transfer to Madison, Wisconsin in 1924, Leopold continued his investigations into ecology and the philosophy of conservation, and in 1933 published the first textbook in the field of wildlife management. Later that year he accepted a new chair in game management - a first for the University of Wisconsin and the nation.

In 1935, he and his family initiated their own ecological restoration experiment on a worn-out farm along the Wisconsin River outside of Baraboo, Wisconsin. Planting thousands of pine trees, restoring prairies, and documenting the ensuing changes in the flora and fauna further informed and inspired Leopold.

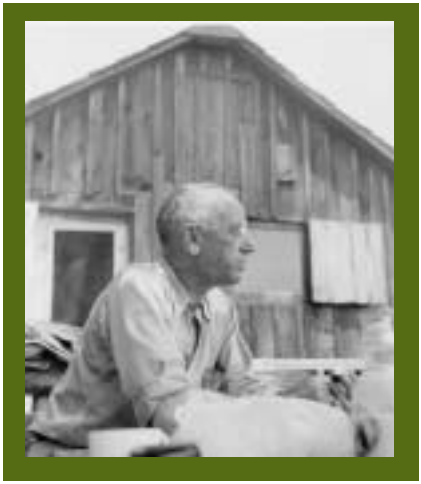


Photo courtesy of the Aldo Leopold Foundation.

A prolific writer, authoring articles for professional journals and popular magazines, Leopold conceived of a book geared for general audiences examining humanity's relationship to the natural world. Unfortunately, just one week after receiving word that his manuscript would be published, Leopold experienced a heart attack and died on April 21, 1948 while fighting a neighbor's grass fire that escaped and threatened the Leopold farm and surrounding properties. A little more than a year after his death Leopold's collection of essays *A Sand County Almanac* was published. With over two million copies sold, it is one of the most respected books about the environment ever published, and Leopold has come to be regarded by many as the most influential conservation thinker of the twentieth century.

Leopold's legacy continues to inform and inspire us to see the natural world "*as a community to which we belong."*

The Aldo Leopold Memorial Award

Following Aldo Leopold's death in April 1948, there was much sentiment within The Wildlife Society for establishing an award medal in his memory. A pro- posal to that effect was unanimously adopted at the Society's 1949 annual meeting. A committee was ap- pointed to create guidelines for the selection of award recipients and to nominate and select the first winner of the Leopold Award.

Only one Leopold award is given each year, and then only if the committee deems a candidate to be entirely worthy. The award is made for "distinguished service to wildlife conservation." It is not given posthumously.

The award is presented during a ceremony at the Society's annual conference.

The Aldo Leopold Memorial Award is the highest honor bestowed by The Wildlife Society. It is considered the ultimate recognition of a wildlife professional.

The Aldo Leopold Memorial Medal

In 1949 sculptor Gifford MacGregor Proctor was commissioned to design and execute models for a suitable medal in bronze, bearing a likeness of Aldo Leopold on the obverse. Due to the artistic limitations imposed by the medium of bronze casting, Leopold had to be portrayed without his familiar eyeglasses. The de- sign on the reverse of the medal includes a passenger pigeon and a sprig of oak. Both recall two of Leopold's most unforgettable essays (*Silent Wings*; *The Flam- beau*) and, we hope, something of his matchless spirit. Dr. Luna B. Leopold representing the Leopold family approved the final design.

Although the artwork was not ready, the first medal was awarded to J.N. "Ding" Darling at the Society's 1950 meeting in San Francisco. Models were finished that year and dies were cast early in 1951. After the 1951 meeting, one medal was presented privately to Mrs. Aldo Leopold as a token of friendship and respect. An engraved medal was sent (a year late) to J.N. Darling. In 1966 a certificate was designed to be presented with the medal.

ALDO LEOPOLD MEMORIAL AWARD RECIPIENTS

1950	J. N. (Ding) Darling
1951	Mrs. Aldo Leopold (in honor of her late husband)
1951	Carl D. Shoemaker
1952	Olaus J. Murie
1953	Ira N. Gabrielson
1954	Harold Titus
1955	Clarence Cottam
1956	Hoyes Lloyd
1957	C. R. Gutermuth
1958	E. R. Kalmbach
1959	Ernest F. Swift
1960	Enrique Beltran
1961	Walter P. Taylor
1962	Paul L. Errington
1963	Clarence M. Tarzwell
1964	Harry D. Ruhl
1965	A. Starker Leopold
1966	Homer S. Swingle
1967	Seth Gordon
1968	Stewart L. Udall
1969	Durward L. Allen
1970	Ian McTaggart Cowan
1971	Stanley A. Cain
1972	Joseph J. Hickey
1973	Gustav A. Swanson
1974	Lucille F. Stickel
1975	Russell E. Train
1976	John S. Gottschalk
1977	C. H. D. Clarke
1978	Henry S. Mosby
1979	Raymond F. Dasmann
1980	H. Albert Hochbaum
1981	Louis A. Krumholz
1982	Thomas G. Scott
1983	Daniel L. Leedy
1984	Joseph P. Linduska
1985	Frank C. Bellrose
1986	Robert A. McCabe
1987	Thomas S. Baskett
1988	Willard D. Klimstra
1989	Laurence R. Jahn
1990	Tony J. Peterle
1991	Jack Ward Thomas
1992	Glen C. Sanderson
1993	L. David Mech
1994	James G. Teer
1995	Jack H. Berryman
1996	Robert D. Nelson
1997	Milton W. Weller
1998	John J. Craighead
1999	David R. Klein
2000	Gary C. White
2001	John W. Mumma
2002	Rollin D. Sparrowe
2003	Nova J. Silvy
2004	David R. Anderson
2005	E. Charles Meslow
2006	Paul R. Krausman
2007	James E. Miller
2008	Richard D. Taber
2009	Ronald F. Labisky
2010	Douglas H. Johnson
2011	Kenneth P. Burnham
2012	Daniel J. Decker
2013	Anthony R.E. Sinclair
2014	Robert J. Warren
2015	James D. Nichols
2016	Dale R. McCullough
2017	Winifred Kessler
2018	Leigh H. Fredrickson
2019	W. Alan Wentz
2020	John Organ
2021	Michael K. Phillips
2022	John L. Koprowski
2023	Carol Chambers
2024	Maurice Hornocker
2025	Terry Bowyer

To Whom Honor is Due...

J. N. (Ding) Darling

1950

A well-known editorial cartoonist whose works won him two Pulitzer Prizes, Jay Norwood Darling, better known by his pen name "Ding," was also a pioneer in wildlife conservation and the "Father of the Duck Stamp." Born in Norwood, Michigan in 1876, Darling grew up on the American frontier, developing a lifelong interest in wildlife and conservation.

Darling's first career, however, was as an editorial cartoonist, satirizing the political characters of his day. After graduating from Beloit College in 1900, he became a reporter for the Sioux City *Journal*, accompanying his news stories with his cartoons. He went on to use his communication skills to bring public attention to important wildlife issues and to further conservation education. His cartoons appeared daily in 130 newspapers and through these he drew public attention to two issues of particular importance to him, wildlife exploitation and destruction of waterfowl habitat.

His passion for waterfowl conservation led to his service on President Franklin D. Roosevelt's Committee for Wildlife Restoration, with Aldo Leopold and Thomas Beck, in 1943. His work on this committee led to his appointment as the head of the Biological Survey, forerunner of the U.S. Fish and Wildlife Service. Darling served as Director for 18 months, putting in place the beginnings of the Cooperative Fish and Wildlife Research Units, helping to develop the Duck Stamp Act, and even designing the first stamp himself. After his turn as Director, Darling organized the nation's disparate groups of sportsmen into the National Wildlife Federation, now the nation's largest conservation education organization, with which he would remain very involved.

Famous at a young age for his witty cartoons, "Ding" Darling used his voice to forever change the face of wildlife conservation in this country.

Carl D. Shoemaker

1951

Carl D. Shoemaker, an Ohio lawyer and Oregon newspaperman before entering the wildlife field, made many contributions to wildlife conservation, key among them his drafting of the original Duck-Stamp Act, the Pittman-Robertson Federal Aid Act, and the Dingell-Johnson Federal Aid to Fisheries Act.

Born in Ohio in 1872, he practiced law there for several years before purchasing an Oregon newspaper in 1912. In 1915, he wrote an editorial that criticized the governor's appointments to the Fish and Game Commission, since most came from Portland and few from the south and west of the state. In response, the governor summoned him to the capitol, where he was shocked to be led into a Fish and Game Commission meeting, peppered with questions, and finally offered the position of state game warden. He served as Director of the Oregon Fish and Game Commission for ten years, resigning this post to carry out private conservation work. He would later go to Washington, D.C. as a staff investigator of the Senate Special Committee on Conservation of Wildlife Resources and become secretary of the Commission, a post he held for nearly two decades. It was in this position that he drafted many important pieces of legislation, including the Duck Stamp Act.

A founder of the National Wildlife Federation in 1936, Shoemaker would ultimately serve as secretary, Washington correspondent, and conservation director for that organization. Shoemaker shunned publicity and was slow to take credit for his achievement, instead attributing any success to his warm personal friends on the Hill.

Olaus J. Murie

1952

Olaus J. Murie, a mammalogist of international stature, utilized his skill as a writer, speaker, and scientist to generate greater awareness of and appreciation for the important role of large mammals in ecosystems. Spending incredible amounts of time in harsh conditions including the Aleutian Islands, the Rocky Mountains, Olympic forests, New Zealand, and the Yukon, Labrador, and Hudson Bay regions of Canada, Murie observed wildlife in a way few men ever have or ever will.

Born on the American frontier in Moorhead, Minnesota, in 1889, Murie received his A.B at Pacific University in 1912. After graduation, he went to work as an Oregon State conservation officer, participating in scientific explorations of Hudson Bay and Labrador from 1914 to 1917. He then moved to the U.S. Bureau of Biological Survey, conducting an exhaustive study of Alaskan caribou between 1920 and 1926. He received his M.S. from Michigan in 1927. Also that year, the Survey assigned Murie to investigate the Jackson Hole elk herd, resulting in his classic work *The Elk of North America.*

In 1937 Murie joined the board of directors of the recently created Wilderness Society and used his scientist's logic and artist's passion to speak persuasively on enlarging the National Park system. He helped convince President Franklin D. Roosevelt to expand Olympic National Monument and played an important role in the creation of Jackson Hole National Monument in 1943 and its achievement of national park status a few years later. Murie resigned his position with the Biological Survey in 1945 to become director of the Wilderness Society. In this position, he was an important advocate for the National Park Service, lobbying successfully against the construction of dams within Glacier National Park and Dinosaur National Monument. He also led the crusade to establish the Arctic National Wildlife Refuge in Alaska.

Ira N. Gabrielson

1953

Known to many as "Mr. Conservation," but preferring instead to be referred to as simply "a biologist." Ira N. Gabrielson, a fearless administrator of wildlife resources, was Ding Darling's successor as Chief of the U. S. Biological Survey and the first Director of the U. S. Fish and Wildlife Service.

Born in 1889 in Iowa, Gabrielson began his career in 1912 as a schoolteacher of biology in Marshalltown, Iowa. Three years later he was employed by the United States Department of Agriculture as a biologist in the Bureau of Biological Survey. For the next twenty years he was assigned by that agency to many projects, chiefly in the western states where he became widely recognized as an authority on birds, mammals, and other resources.

His outstanding achievements in the West eventually caught the eye of official Washington, and early in 1935 he was called to the Central Office of the Biological Survey. Upon the retirement of "Ding" Darling as Chief of the Bureau a few months later, Gabrielson was selected as his successor. As Chief of the U. S. Biological Survey and first Director of the U. S. Fish and Wildlife Service, he nurtured the newly-organized Cooperative Wildlife Research Unit Program and fostered the development of National Wildlife Refuges. The highly successful Pittman-Robertson Program was initiated during his directorship. Upon retiring from government service in 1946, he became the first president of the Wildlife Management Institute.

A tireless worker, he authored or co-authored five full-length books and literally hundreds of scientific papers and popular articles on ornithology and wildlife conservation. He was still active in conservation when he died in 1977.

Harold Titus

1954

Today it's called "technology transfer"-the ability to take complicated, science-based information and express it in clear, simple language that is interesting and understandable to an audience of laymen, usually the general public. Michigan native Harold Titus had that knack in spades.

Titus was a member of the Michigan Conservation Commission from 1927 until 1949, except for a two-year hiatus, and served with distinction. Game Division Chief H. D. Ruhl said of him: "His thinking and leadership were of the highest caliber. In initiating research in fish and game matters and in the practical application of techniques, he was usually out in front of the administrators and often leading the biologists, encouraging them to stick to their guns and do their stuff."

But Titus' most enduring contribution was the profusion of short popular articles he wrote to interpret the Conservation Department's scientific thinking for non-professionals. All during the 1930s and into the 1940s his "Old Warden" series and other sportsmen-oriented stories appeared in Field & Stream. Their main purpose was to get across to sportsmen and -women the important work being done almost totally behind the scenes by his agency. In 1942 he told Durward L. Allen, who would later become President of The Wildlife Society, that he had just published his 100th such popular article. Allen had this to say:

"It is widely recognized that management programs can proceed only as rapidly as public opinion is prepared to receive them. Bridging the gap between the technician and the layman is a skill that should not be overlooked in our recognition of those who have done service to this cause. There is no doubt that Harold Titus is in part responsible for the progress in wildlife conservation for which this state is well known."

Clarence Cottam

1955

A polite, caring, and respectful man, Cottam was known for his positive attitude and for optimism. He never cursed, but had a habit of verbally spelling out D-A-M-N at matters that disagreed with him. Always ready to confront controversial issues, particularly those involving the public interest, Cottam frequently expressed his political philosophy that Democrats and Republicans were the primary threats to our wildlife resources.

Cottam was born in Utah, on January 1, 1899, and worked as a farm and ranch hand in his youth. He attended Brigham Young University, receiving his B.S. in 1926 and his M.S. in 1927. Cottam began his career as instructor of biology at Brigham Young. In 1929 he became a junior biologist on the research staff of the U.S. Biological Survey and by 1934 was senior biologist in charge of food-habits research. He earned his Ph.D. at George Washington University in 1936. In 1939 the Biological Survey became the U.S. Fish and Wildlife Service, and Cottam eventually became Chief of Wildlife Research. He was promoted to Assistant Director in 1945, a position that he would hold for eight years. During his time with the agency, Cottam worked with waterfowl issues throughout the U.S., Canada, and Mexico, and was a strong voice in conservation issues involving environmental pollution and pesticide problems.

In 1954 he returned to BYU as Dean of the College of Biology & Agriculture for a year prior to becoming the first Director of the Welder Wildlife Foundation in 1955. Cottam served as Director until his death in 1974, also finding time to become involved in other conservation causes, such as researching the long-range effects of DDT and campaigning for the control of its use and advocating the plight of the whooping crane, bald eagle, brown pelican, and other endangered species.

Hoyes Lloyd

1956

Hoyes Lloyd, a chemist by training but an ornithologist at heart, became a driving force in the advancement of professional wildlife management in Canada and advocated for the establishment of refuges across North America. Involved in the organization of the Canadian Wildlife Service and the handling of international problems related to the Migratory Bird Treaty between the United States and Canada, Lloyd became internationally known as a proponent for sane but vigorous conservation policies.

Born in Hamilton, Ontario, 1888, Lloyd grew up with a love for birds, collecting specimens throughout his youth, and the rest of his life. Despite his love of birds, he studied chemistry in school, receiving a B.A. from the University of Toronto in 1910 and a M.A. in 1911. In 1918, returning to his first love of ornithology, Lloyd became Supervisor of Wild Life Protection in Canada's National Parks branch of the Department of the Interior, charged with implementing the new Migratory Birds Convention Act. Shortly thereafter he was named Supervisor of Wildlife Protection and given responsibility for also administering the Northwest Game Act. Lloyd became intensely interested in ornithology and bird protection at the international level, serving as the President of the American Ornithologist Union and representing Canada at United Nations conferences and at the Ornithological Congress in Oslo.

An active writer on behalf of natural sciences and wildlife conservation, Lloyd had more than 200 published titles to his credit. Lloyd's extensive government service was influential in the creation of a national spirit of wildlife consciousness among a people diverse in interests, fostered research in many phases of natural resources, and furthered the idea of scientific management.

C. R. Gutermuth

1957

C. R. "Pink" Gutermuth, a fisherman and big game hunter, fostered and supported practical fish and wildlife management programs for more than 30 years. An effective public relations officer in the conservation cause, few so completely dedicated themselves to the service of wildlife conservation.

Born in Fort Wayne, Indiana in 1900, Gutermuth went to banking school and spent twelve years as an assistant cashier in an Indiana bank, during which he was involved with local conservation club activities. In 1934 he entered the wildlife field as a professional, serving the Indiana Department of Conservation as Director of Education until 1940 and as Director of Fish and Game from 1940 to 1942. After a short stint at the American Wildlife Institute, he became Vice President of the Wildlife Management Institute, serving from 1946 to 1971. He was the first editor of the Wildlife Management Institute's *Outdoor News Bulletin*. He also made an outstanding contribution to the success of the Cooperative Wildlife Research Units. Gutermuth was one of the founders of the U.S. Chapter of the World Wildlife Fund and served that organization as president.

Gutermuth was an indefatigable defender of wildlife conservation and national legislation that would in any way affect fish and wildlife or the soil, water, forest, and rangeland that support wild creatures. In the Leopold tradition, Gutermuth stood for wildlife conservation in terms of habitat improvement and in its relation to its total environment, including the people who own and operate the land or the public agencies that may manage it.

In a near-tragic adventure, Pink Gutermuth, his wife, and a companion were washed overboard from a charter boat in a hurricane off the Florida coast. This epic of survival is described in "Life Hung on an 18-Thread," FIELD AND STREAM, June, 1949.

E. R. Kalmbach

1958

Edwin Kalmbach not only skillfully ran the U.S. Fish and Wildlife Service's Denver Research Laboratory for more than 20 years but was also a driving force behind the development of the U.S. Post Office's commemorative wildlife stamps.

Born in Michigan in 1884, Kalmbach was a self-educated biologist who began his career as assistant director of Kent Scientific Museum in 1903. He joined the U.S. Bureau of Biological Survey in 1910 as assistant biologist, later becoming biologist, senior biologist, and finally Director of the U.S. Fish and Wildlife Service's Denver Research Laboratory. During more than 40 years in the Biological Survey and the Fish and Wildlife Service, Kalmbach built a remarkable record of accomplishment in directing and stimulating substantial research on wildlife problems and in personally conducting outstanding research and field investigations. He, more than anyone else, paved the way for a correct understanding of the "western duck sickness" or "alkali poisoning" responsible for duck mortalities running into the hundreds of thousands. His work enabled practical steps to be taken toward prevention of botulism losses in many places.

Kalmbach constantly sought to place all remedial action against pest species upon solid foundations of accurate information. His research on crow-waterfowl relationships is an important example, through which he clarified serious misunderstandings about the role of the crow as a factor regulating waterfowl populations in this country and Canada. His deep seated concern that control of offending wildlife should be regulated led to many ingenious control methods. A leading wildlife artist, his paintings graced the pages of several nationally-recognized publications on birds and mammals. Furthermore, he has been credited with fathering the idea of postage stamps to impress upon the public the importance of our wildlife resource.

Dr. Edwin Kalmbach had only an elementary school education yet became a internationally known research biologist and wildlife artist. He received and honorary Sc.D. degree from the University of Colorado in recognition of his scientific achievements.

Ernest F. Swift

1959

Ernest F. Swift, close friend of Aldo Leopold, contributed to the early development of the wildlife profession as a defender of wildlife from the fields and forests of Wisconsin to the legislative halls of Washington, D.C. Born in Tracy, Minnesota, in 1897, Swift joined the Army after high school, and after serving for two years attended the University of Wisconsin. He soon left school, however, to work and in 1926 was appointed state conservation warden in Wisconsin. Swift gained a reputation for being a fearless game warden and served the Wisconsin Department of Conservation for twenty-eight years, rising to Director in 1947. There, Swift pioneered a program of wildlife management based on the findings of trained fish and game biologists. During his six years as Director, Swift saw through to passage 79 of the 100 bills written by his agency, including many landmark accomplishments.

After his 19 years in key administrative positions at the state level, he moved to Washington, D.C. in 1954 as Assistant Director of the U.S. Fish and Wildlife Service. Swift lasted only 18 months in this position and left appalled at the bureaucratic trade-offs he witnessed. He became Director of the National Wildlife Federation, and spent five years helping that group grow, and in the process helping to shape the first U.S. Wilderness Act.

A prolific writer, Swift produced many publications over the years, including the classic *A Conservation Saga.* Throughout his career, Swift aggressively pursued wildlife conservation, focusing on scientific management and shaping the environmental and conservation movement of today.

Enrique Be[tran

1960

Enrique Beltran fought an up-hill battle against enormous odds, not only to pursue a natural resources career in Mexico, but also to create a sound conservation program for the country as a whole. Born in Mexico in 1903, Beltran began his career as a revolutionary soldier in Mexico's war for independence from the Porfirio Diaz dictatorship. After the successful termination of the campaign, he returned to school, graduating from the University of Mexico in 1921. He went on to receive his doctorate in protozoology in 1926.

While serving as a biology teacher at the University of Mexico and as a research protozoologist in the Institute of Public Health and Tropical Disease, Beltran earned a world-wide reputation as an authority on filariasis, malaria, and other tropical diseases. Although enjoying a successful career in public health, he felt that the fundamental problem facing his country was conservation of natural resources. He wrote and lectured widely on the subject, finally abandoning his career in protozoology to accept a tenuous position as organizer and director of the first Mexican Institute of Natural Resources. Initially relying upon private contributions and limited government support, it grew into a functional and growing organization.

Beltran would go on to hold many titles, often simultaneously, demonstrating the influence and demands on his time, energy, and expertise. Throughout his career, he served as Sub-Secretary of Agriculture in charge of Forests, National Parks, and Wildlife, Sub-Secretary of Forest and Game Resources in the Department of Agriculture, Director of the Mexican Institute of Renewable Resources, Professor of Protozoology at the University of Mexico, Secretary of the Mexican Natural History Society, and member of the Executive Board of the International Union for Conservation of Nature and Natural Resources.

Walter P. Taylor

1961

Walter Taylor conducted and directed research across North America and studied conservation and ecology in Fiji, New Zealand, Australia, and several parts of Europe and Asia.

Born in 1888 in Wisconsin, Taylor received his B.S. in 1911 and his Ph.D. in Zoology in 1914 from the University of California. He served seven years as Curator of Mammals at the University of California Museum of Vertebrate Zoology and then joined the Biological Survey, eventually advancing from assistant to senior scientist. In addition to a 35-year career with the Biological Survey and its successor agency, the U.S. Fish and Wildlife Service, Taylor was a great teacher, inspiring many students with his own enthusiasm and zeal. While employed by the Biological Survey and the Service he also served as professor and lecturer in zoology and wildlife conservation and education at several different universities in six western and mid-western States. In addition, he served terms as Leader of the Cooperative Wildlife Research Units at both Texas Agricultural and Mechanical College and Oklahoma A & M. From 1960 to 1966 he lectured at high schools and colleges through a program sponsored by the American Institute of Biological Sciences.

A prominent writer, he co-authored the book *The Birds of the State of Washington* and edited *Deer of North America*. In addition he published over 300 bulletins, monographs, and papers on zoology, ecology and the conservation of natural renewable resources. In 1951, he received the U.S. Department of the Interior's Gold Medal Award for distinguished service.

Paul L. Errington

1962

Paul L. Errington, teacher, accomplished naturalist, and vertebrate ecologist, advanced the science of wildlife management through research, articulate presentation of science, and education. Born in Bruce, South Dakota, in 1902, Errington grew up working on his family's farm and trapping professionally. He graduated from South Dakota State College in 1929 and earned his Ph.D. degree in 1932 at the University of Wisconsin, studying under Aldo Leopold.

Errington spent almost his entire professional career at Iowa State University as a zoology professor, holding various positions there from 1932 until 1962. During a leave of absence in the 50s he served as a Visiting Professor at Lund University in Sweden and was a recipient of the John Simon Guggenheim Memorial Fellowship.

A prolific writer, Errington authored more than 200 scholarly papers. Some half dozen of his major papers of less than book size are monographic in scope. He also served an important role as an early critical reviewer of books and major papers. Both in 1940 and 1946, he received awards from The Wildlife Society for contributing the most outstanding publications in the field of wildlife ecology and management. His four popular books, *Of Men and Marshes, The Red Gods Call, Of Predation and Life,* and *A Question of Values*, reached diverse audiences. Recognized as an authority on the subject of predator-prey relationships, population dynamics, food habits, the bobwhite quail, minks, muskrats, great horned owls, and marsh ecology, Errington was featured in *Life Magazine* in 1961 as one of ten outstanding North American naturalists.

> *"In common with other human endeavors, conservation or management probably always will be attended by its share of futility and short-sightedness. Regrettable though this may be, worse still is the outright destruction of the values needing most to be preserved - especially in management programs sponsored by agencies subject to public pressure or catering to circumscribed groups."* Paul Errington, "A Question of Values," *The Journal of Wildlife Management*, 1947 [11(3):267: 272].

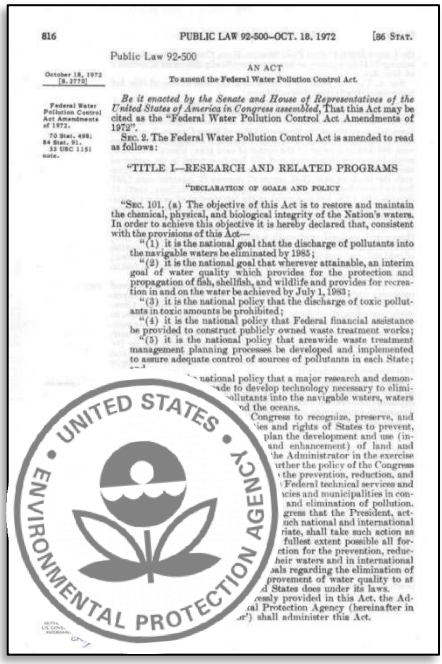
Clarence M. Tarzwell

1963

Clarence M. Tarzwell, renowned aquatic and fisheries biologist, not only personified the dignity of public service, he was instrumental in linking the concept of ecological and human health. Born in Deckerville, Michigan, in 1907, Tarzwell received an A.B in 1930, an M.S. 1932, and a Ph.D. in 1936 from the University of Michigan. His graduate research testing and evaluating structures for the improvement of environmental conditions in Michigan trout streams was the practical basis for trout stream improvement for nearly three decades.

Tarzwell put his knowledge into practice on a wide scale as stream improvement supervisor for the Michigan Conservation Works Program, in a similar capacity with the U. S. Bureau of Fisheries in National Forest CCC camps of the inter-mountain region, supervising stream improvement for the U. S. Forest Service in the Southwest, and later overseeing fishery surveys and investigations in the lower reservoir of the Tennessee Valley Authority.

While working on the TVA projects Tarzwell engaged in cooperative studies of water level manipulation that proved beneficial to aquatic life and mosquito control. This led to his position as Chief of the Biology Section, Malaria Control for the U. S. Public Health Service during World War II. This experience prompted him to work incessantly promoting an understanding of the need for water



816 PUBLIC LAW 92-500—OCT. 18, 1972 [86 STAT.

Public Law 92-500

October 18, 1972
[S. 2770]

AN ACT

To amend the Federal Water Pollution Control Act.

Federal Water Pollution Control Act Amendments of 1972.
70 Stat. 498; 84 Stat. 91.
33 USC 1151 note.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Federal Water Pollution Control Act Amendments of 1972".

SEC. 2. The Federal Water Pollution Control Act is amended to read as follows:

"TITLE I—RESEARCH AND RELATED PROGRAMS

"DECLARATION OF GOALS AND POLICY

"SEC. 101. (a) The objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. In order to achieve this objective it is hereby declared that, consistent with the provisions of this Act—

"(1) it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985;

"(2) it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983;

"(3) it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited;

"(4) it is the national policy that Federal financial assistance be provided to construct publicly owned waste treatment works;

"(5) it is the national policy that areawide waste treatment management planning processes be developed and implemented to assure adequate control of sources of pollutants in each State;

...national policy that a major research and demon-...de to develop technology necessary to elimi-...llutants into the navigable waters, waters ...ed the oceans.

...Congress to recognize, preserve, and ...ies and rights of States to prevent, ...plan the development and use (in-...and enhancement) of land and ...he Administrator in the exercise ...urther the policy of the Congress ...the prevention, reduction, and ...Federal technical services and ...vices and municipalities in con-...and elimination of pollution. ...gress that the President, act-...uch national and international ...riate, shall take such action as ...fullest extent possible all for-...ction for the prevention, reduc-...heir waters and in international ...als regarding the elimination of ...provement of water quality to at ...d States does under its laws. ...resly provided in this Act, the Ad-...al Protection Agency (hereinafter in ...) shall administer this Act.

quality criteria and the protection of aquatic life, and calling for a rational handling of water pollution problems.

Tarzwell ultimately gained international respect for his work by holding seminars to acquaint professionals with new developments in the field of water quality and pollution control. The third seminar, held in 1962, attracted participants from 28 nations and is acknowledged to be one of the most significant gatherings of biological scientists ever assembled in the United States.

Tarzwell was credited as a major contributor to the scientific testing protocols leading to the Clean Water Act of 1972 and the formation of the Environmental Protection Agency.

Harry D. Ruhl

1964

Harry D. Ruhl, a pioneer in the development of modern game management concepts, gave up a budding career in school teaching to organize and lead the game division of his home state, Michigan's Conservation Department.

Trained in both mathematics and biology, Ruhl entered the wildlife field when it was still dominated by the philosophy of the Old World gamekeeper, with reliance placed almost solely on the famed Three P's: Protection, Propagation, and Predator Control. Long before college courses in wildlife were established, he started building a staff of men with the most appropriate combination of training and experience then available. For these men he created a challenging, competitive working atmosphere out of which many of today's proven game management policies were born.

Influencing national conservation agendas is also part of Ruhl's legacy, as he sat on nearly all of the continent wide conservation councils and served as Chairman of the Federal Aid Committee of the International Association of Game, Fish and Conservation Commissioners. From this position, Ruhl argued that economic data should be used to validate and support state and national conservation efforts. Ultimately this resulted in the National Survey of Fishing, Hunting and Wildlife-Associated Recreation, conducted first in 1955 and every five years since. He was also a strong and constructive voice in shaping the Pittman-Robertson program.

Ruhl's greatest contributions to the conservation cause is probably his creation of a new, dynamic, scientifically oriented organization that broke with the past and which served as a model and inspiration to others and his uncanny ability to select and train young professionals.

A. Starker Leopold

1965

Starker Leopold's outstanding achievements in scholarship and conservation paralleled those of his eminent father. Born in 1913 in Burlington, Iowa, Starker was the eldest son of Aldo and Estella Leopold. Part of his youth was spent with his father on duck hunts along the Rio Grande before the family moved to Madison, Wisconsin. Starker received his B.S. from the University of Wisconsin in 1936 and after two years of graduate study in the Yale School of Forestry he transferred to the University of California at Berkeley and received his Ph.D. in zoology in 1944 under the tutelage of Alden Miller.

Predoctoral employment included positions as a junior biologist with the U.S. Soil Erosion Service and as a field biologist for the Missouri Conservation Commission. Upon receiving his Ph.D. Leopold spent a few years in Mexico as Director of Field Research for the Conservation Section of the Pan American Union; his long-standing interest in Mexico culminated in one of his most influential books, *Wildlife in Mexico*.

Joining the faculty at the University of California, Berkeley in 1946, Leopold remained there until his retirement in 1978. He gained full Professor status in 1957, was Associate Director of the Museum of Vertebrate Ecology from 1958 to 1965 and Acting Director for the next two years.

Leopold conducted important wildlife surveys in Alaska, Africa, Australia, New Zealand, and Mexico. Selected by Secretary of the Interior, Stewart Udall, Leopold served as Chairman for the Secretary's "Blue Ribbon Committee" on wildlife. At the Secretary's instruction, it reviewed and made recommendations on national policies of big game management in national parks, resulting in a final report entitled *Wildlife Problems in National Parks*, more commonly known as the *Leopold Report* in honor of his leadership.

Homer S. Swingle

1966

Homer Swingle pioneered not only the field of fishery research, but also its application to conservation and wildlife management. His contributions to the field had a huge impact on fisheries management in his home state of Alabama and across the nation and world.

Swingle received a B.S. in agriculture in 1924 and an M.S. in entomology in 1925, both from Ohio State University and then spent the first ten years of his professional career conducting research in agricultural entomology. A local sportsman club called upon him to answer questions as to how to improve fishing in the club's ponds, and this simple request turned the scientist from entomology to the field of fishery biology. His pioneering methods in the development of aquaculture as a means of food production were world-famous. Because of this expertise, he served as fisheries consultant to the governments of Israel, Thailand, and India, was the U.S. Pond Fish Culture representative to the Pacific Science Congress, and was chair of the first World Symposium on Warm Water Pondfish Culture.

Directing Auburn University's fisheries research station for over 30 years, Swingle turned it into one of the largest warm-water fisheries stations in the world. In his honor, the facility now includes a four-story building called the Homer S. Swingle Fisheries Building, which contains offices, classrooms, and laboratories. Swingle was also well known for his ability to explain his ideas and methods in simple language, often using homemade visual aids. He taught many short courses and special schools for fishery workers, and also established a formal training program for fishery students at Auburn, which would become one of the most highly regarded undergraduate and graduate teaching programs in fisheries in the world.

Seth Gordon

1967

Seth Gordon played an active part in wildlife management and administration at the state, national, and international levels for more than 50 years. Among his greatest contributions was his participation in the drafting of the Model Game Law of 1934, which established criteria for modern wildlife administrators to use in developing realistic hunting regulations for deer and was instrumental in obtaining general public acceptance of modern principles of game management.

Born April 2, 1890 in Richfield, Pennsylvania, Gordon graduated from the Pennsylvania Business College in 1911. After a brief career in teaching and business, he joined the Pennsylvania Game Commission as a game protector in 1913, was appointed assistant secretary of the Commission in 1915, and became secretary and chief game protector in 1919. He resigned in 1926 to become conservation director of the Izaak Walton League of America. In this position, he spearheaded the "Save the Western Ducks Campaign," worked on what would become the Migratory Bird Conservation Act, and was responsible for the campaigns that led to establishment of several wildlife refuges.

In 1936, Gordon returned to Pennsylvania as executive director of the Game Commission, serving until 1948 when he became a private conservation consultant. In this capacity he was engaged by the California Wildlife Conservation Board to advise on funds allocated to the newly-created California Department of Fish and Game, and was later appointed Director of the Department, serving from 1951 until 1959.

Gordon's professional service was equally as impressive in scope, including service on the Forest Research Advisory Committee to the Secretary of Agriculture and the President's Water Pollution Control Advisory Board to the Surgeon General of the United States, to name only a few.

Stewart L. Udall

1968

Stewart Udall has influenced conservation for over 50 years, contributing to the nation's affairs as an author, historian, scholar, lecturer, environmental activist, lawyer, naturalist, and citizen of the outdoors.

Udall was born in St. Johns, Arizona, on January 31, 1920, into an influential western family. He is the son of former Arizona Supreme Court Justice Levi S. Udall and Louise Lee Udall and the brother of former Congressman Morris "Mo" K. Udall. As a young man, Stewart left St. Johns to attend the University of Arizona and then interrupted his studies to spend two years as a Mormon missionary in New York and Pennsylvania and serve in the United States Air Force as a gunner in Europe during World War II. Shortly after graduating from the University in 1948 with a law degree, Stewart started his own practice, and two years later opened up a firm with his brother Morris in Tucson, Arizona.

In 1954, Udall was elected to the U.S. Congress as a Representative from Arizona, later serving on the Committee on Interior and Insular Affairs. Instrumental in persuading Arizona Democrats to support Senator John F. Kennedy during the 1960 Democratic Nomination Convention, he was appointed by President Kennedy to serve as Secretary of the Interior, a position he held for nine years.

Highlights from his Cabinet career are the Wilderness Bill, the Wild and Scenic Rivers Act, the expansion of the National Park System to include four new national parks, six new national monuments, eight seashores and lakeshores, nine recreation areas, twenty historic sites, fifty-six wildlife refuges, and the creation of The Land and Water Conservation Fund.

After leaving government service in 1969, Stewart went on to teach for a year at Yale University's School of Forestry as a Visiting Professor of Environmental Humanism.

Durward L. A[[en

1969

Durward L. Allen's contribution to the advancement of the wildlife profession was deep and diverse. Of particular importance was his landmark book, *Our Wildlife Legacy*, published in 1954 while he was working for the U.S. Fish and Wildlife Service.

Allen was born in Uniondale, Indiana in 1910, graduated from the University of Michigan in 1932, and earned a doctorate at Michigan State College in 1937. He began his career in the Michigan Department of Natural Resources and then moved to the U.S. Fish and Wildlife Service, eventually becoming the Service's Acting Director for Research in Washington, D.C.

In 1958 Allen left the U.S. Fish and Wildlife Service and joined the faculty of Purdue University. There he launched the world-famous studies of wolves and moose on Michigan's Isle Royale, which have had a lasting impact in the field. The studies he began would be continued for years, becoming the longest study ever of predator-prey relationships.

While at Purdue, training many of the nation's top wildlife ecologists, Allen wrote six more books, including *Wolves of Minong* and *The Life of Prairies and Plains*. He came to believe that wildlife conservationists must convince the general public that scientific resource management is necessary to maintain and improve our quality of life. Consequently, he produced dozens of articles for that audience, many of which were published in Audubon magazine.

Throughout his career, Allen stressed the importance of both protecting ecosystems and controlling human populations in wildlife management. Through his landmark research on Isle Royale, his inspired teaching, and his many publications, Allen made a lasting impression on the wildlife field.

Ian McTaggart Cowan

1970

Recognized as a pioneer in using television to educate the public about conservation and the wonders of the natural world, Ian McTaggart Cowan built his distinguished career as a research biologist by specializing in the systematics and ecology of birds and mammals and enlarging our understanding of the wildlife of his homeland and far beyond.

Born in Edinburgh, Scotland, he came to Canada at the age of three. A graduate of the University of British Columbia, he earned his Ph.D. at the University of California, Berkeley, studying under Joseph Grinnell, the foremost ecologist of his day. First employed as a biologist at the Provincial Museum of British Columbia, in 1940 he returned to the University of British Columbia to become Assistant Professor in the Department of Zoology. In 1943, the Canadian government hired Cowan to undertake the first extensive field studies of the fauna of the Rocky Mountain Parks of Canada.

Cowan was promoted to Professor of Zoology in 1945 and served as head of the department from 1953 to 1964, continuing to develop and teach courses in vertebrate zoology. That vertebrate zoology program was the first in Canada to focus on the biological basis of wildlife conservation. Cowan was also largely responsible for convincing the Canadian government to hire trained wildlife biologists to staff their wildlife management agencies. Cowan became Dean of Graduate Studies in 1964, but continued to teach a course in wildlife biology, supervise directed studies, and guide the research of zoology doctoral candidates

Cowan's findings and philosophies, presented in 179 published papers and two books, had a profound influence on focusing attention in tempering human impact upon our world. He was among the first to use television to arouse public awareness of wildlife ecology, with educational programs that garnered international awards.

Stanley A. Cain

1971

Stanley A. Cain was the first to use aerial photography in the biological sciences when he leaned out of a biplane in 1927 to take photographs for his first research paper. This action exemplifies his lifelong efforts to use any means necessary to study and share the results of his research.

A leading figure in the development of science ecology from the 1940s through the 1970s, Cain was born in Indiana in 1902, received his bachelor's degree from Butler University, and his Ph.D. in botany from the University of Chicago. He held teaching positions at Butler, Indiana University, the University of Tennessee, and the University of Michigan, where in 1950 he founded the Department of Conservation, the first such academic department in the country. Cain chaired the Department for eleven years, going on to be named Director of the school's Institute for Environmental Quality. Aside from his stint in government service in the sixties he remained at Michigan until his mandatory retirement in 1972. He then moved to University of California, Santa Cruz, where he taught actively through the 1970s.

Cain's academic specialty was botany, but he was widely acknowledged for pioneering the study of the relationship between people and the environment. His interdisciplinary perspective was visionary for the time. Partly because of his work, conservation became an increasing national concern from the

1940s through the 1960s. In 1965, President Lyndon Johnson recognized Cain's expertise by appointing him Assistant Secretary of the Interior for Fish, Wildlife, and Parks, a post he held until 1968.

Joseph J. Hickey

1972

Joseph J. Hickey, a student and colleague of Aldo Leopold and an outstanding researcher in the fields of population ecology and environmental contaminants in relation to bird life, was a stimulating teacher and a key member of the early environmental movement.

An avid birdwatcher throughout his youth, Hickey was born in New York in 1907 and received a B.S. in History from New York University in 1930. He went on to work as a track coach and businessman, pursing his interest in birds as a hobby. However, after meeting Ernst Mayr he returned to night school at NYU, then pursuing a degree in biology. At a 1941 cocktail party Hickey met Aldo Leopold, and upon Leopold's invitation, moved to Wisconsin to study under him and receive his M.S. from the University of Wisconsin. His master's thesis was published as the classic book *A Guide to Birdwatching*. His received his Ph.D. from the University of Michigan and worked with the U.S. Soil Conservation Service, the Toxicology Laboratory at the University of Chicago, and the Museum of Zoology of the University of Michigan before taking his post as Professor of Wildlife Ecology at the University of Wisconsin. Within a few months of his starting at Wisconsin, Leopold passed away and Hickey became chair of the department. Hickey was instrumental is the posthumous publication of *A Sand County Almanac.*

Hickey was a beloved professor and a prominent researcher, especially on the connection between declining bird populations and pesticides such as DDT. He was also one of the founders and the first Secretary of The Nature Conservancy. A prominent researcher on the use of agricultural chemicals, his work caused some university administrators to criticize him, but it won him the admiration of the burgeoning environmental movement.

Gustav A. Swanson

1973

Gustav A. Swanson, a scientist and educator, rendered outstanding service through a number of state and federal agencies and academic institutions where he consistently advocated for personal and professional integrity.

Swanson, born in 1910 on a Minnesota farm, received B.S., M.S., and Ph.D. degrees from the University of Minnesota where he also taught for seven years. He moved alternately eastward and westward in response to requests for his services. These included teaching and administrative assignments at the University of Maine, University of Montana, Cornell University, and Colorado State University. In 1948 Swanson left his post as Chief of the Division of Wildlife Research with the U.S. Fish and Wildlife Service to found the Department of Conservation at Cornell University, serving as its head for the next 18 years. During his career he also worked for seven years in the Federal Aid and Research Divisions of the Fish and Wildlife Service, was Fellow of the American-Scandinavian Foundation in Denmark, and traveled to Denmark and Australia as Fullbright Lecturer.

As a consultant Swanson worked with The Nature Conservancy in England, Scotland, and Northern Ireland, as well as with several legislative committees in New York State. There he was a major force in developing conservation workshops for teachers and in formulation of the New York Fish and Wildlife Management Act. He also was instrumental in establishment of the Cornell University Laboratory of Ornithology. Later he was appointed by the National Academy of Science National Research Council to serve on two committees studying problems associated with plant pest control and wildlife-land use relationships.

Lucille F. Stickel

1974

Lucille Stickel's accomplished research and administrative career was highlighted by her designation as Senior Scientist in the Fish and Wildlife Service, the highest position ever attained by a woman in the Service, or its predecessor agencies, at the time. Stickel was also the first and only woman ever to be awarded the Aldo Leopold medal.

Stickel earned a bachelor's degree in biology form Eastern Michigan University, and both Master's and Ph.D. degrees from the University of Michigan. After appointment in the Fish and Wildlife Service as a junior biologist in 1943, Stickel was promoted numerous times. At the Service, Stickel exhibited outstanding ability as a research administrator as well as a researcher. She was a colleague of Rachel Carson, and Carson drew upon Stickel's research in writing *Silent Spring*. In 1972, Stickel was appointed Director of the Patuxent Wildlife Research Center, one of the largest wildlife research installations in the world, renowned for its ground-breaking research on endangered species and on the effects of chemical contaminants like DDT and mercury on raptors such as the peregrine falcon, bald eagle, brown pelican, and osprey.

Her publications, cited repeatedly in the wildlife literature, emphasized population biology, particularly of small mammals, and relationships of pesticides and other pollutants to wildlife. Having received wide national and international recognition in the field of pesticide pollutant research, Stickel served on many national advisory committees and panels, represented the U.S. at a Swedish conference on chlorinated hydrocarbon pesticides, and served as a consultant to other governments in pesticide matters. Stickel's research findings provided an invaluable scientific basis for decisions regarding regulation of pesticide usage in the U.S.

Russe[[E. Train

1975

The Honorable Russell E. Train's leadership and contributions to public and private conservation organizations earned him a worldwide reputation as a strong advocate of environmental quality. Born in Jamestown, Rhode Island, Train grew up in Washington, D.C. He received his B.A. from Princeton in 1941, and served in the Army from 1941 to 1946. After receiving his LL.B. from Columbia University in 1948, he joined the Joint Committee on Internal Revenue Taxation as an attorney. Then followed a series of positions involving legal counseling in both the legislative and executive branches of the United States government. In 1957 President Eisenhower appointed him a judge of the Tax Court of the United States.

While serving on the Tax Court, Train became active in conservation work. In 1959 he founded and became first president of the African Wildlife Leadership Foundation. From 1959 until 1969 he served as Vice President of the World Wildlife Fund. He resigned from the Tax Court in 1965 to become President of the Conservation Foundation, a nontprofit research, education, and information organization concerned with environmental matters.

Later, Train served on the National Water Commission and in 1968 was appointed by President Nixon as chairman of a task force to advise the incoming administration on environmental matters. He subsequently became Under Secretary of the Interior, and in 1970, Chairman of the Council on Environmental Quality. In these two high offices, he exerted tremendous influence for the environmental good, participating in the formation of governmental organizations, programs, and guidelines, particularly as the National Environmental Policy Act was implemented. Later he served as Administrator of the Environmental Protection Agency and represented the United States on environmental matters in many international conferences, committees, and discussions, on issues including water quality, endangered species, marine mammals, and ocean pollution by ships.

John S. Gottschalk

1976

John Gottschalk, an aquatic biologist and limnologist by training, advanced the profession and science of wildlife management for more than 40 years. Educated at Earlham College and Indiana University, Gottschalk served as Superintendent of Fisheries for the Indiana Department of Conservation from 1938 to 1941. For a few years he was a bacteriologist and laboratory director for one of the pioneer producers of penicillin. Then, from 1945 to 1970 he was employed by the U.S. Fish and Wildlife Service, first in the capacity of Aquatic Biologist, and then in administrative roles as Assistant Chief of the Branch of Federal Aid, Chief of the Division of Sport Fisheries, Regional Director, and ultimately Director from 1964 until 1970.

His six years as Director saw many memorable accomplishments, including passage of the first federal Endangered Species Act, the comeback by the nearly endangered whooping crane, and an additional 500,000 acres of habitat added to the National Wildlife Refuge System. Following reorganization in 1970, Gottschalk served as Assistant to the Director of the National Marine Fisheries Service, until he assumed the position of Executive Vice-President of the International Association of Game, Fish and Conservation Commissioners, retiring in 1983.

Gottschalk was quite proud that during his tenure as Director of the Fish and Wildlife Service, research was performed at Patuxent Wildlife Research Center that demonstrated how the chemical DDT adversely impacted the eggshells of many bird species, including the bald eagle and the peregrine falcon, leading to the EPA's ban of DDT.

The Northeast Region of the Fish and Wildlife Service has honored Gottschalk's career by establishing the John S. Gottschalk Award, presented each year to a deserving Region employee in recognition of outstanding, innovative, and enthusiastic efforts in developing and implementing natural resource partnerships.

C. H. D. Clarke

1977

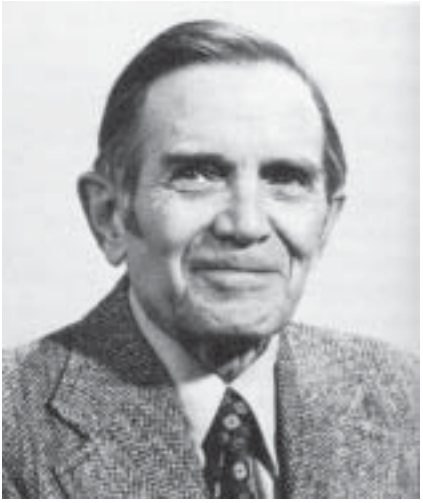
Called the "Canadian Aldo Leopold," C. H. D. Clarke not only worked to understand the ecology and management of wildlife but also to comprehend the social and economic interplay affecting wildlife and its management, a dimension avoided by most field-trained biologists. Clarke was born in Kerwood, Ontario, on 14 June 1909. A precocious ornithologist at an early age, he completed his PhD on ruffed grouse populations and went on to become supervisor of a provincial fish and game division and international consultant on wildlife matters.

Beginning his career as a student of forestry in 1927, Clarke then did stints with the Canadian National Parks and the Research Branch of the Ontario Department of Lands & Forests. He became Supervisor of Wildlife in the Fish and Wildlife Division in 1947 and Chief of the Division in 1961. He retired from the Civil Service in 1971, but not from his chosen profession. He served as Scientific Consultant of the Rachel Carson Institute, President of the North American Forestry Association, President and Honorary Member of The Wildlife Society, and Governor of the Arctic Institute. He also took four trips to East Africa to study in Kenya and Tanzania.

As a writer of over 300 papers and articles, he was articulate, scientific, humorous, and philosophical. In his classic work on the Arctic, *A Biological Investigation of the Thelon Game Sanctuary*, he could not refrain from mentioning those aspects of Arctic beauty that he came to understand and appreciate that were such a part of this man.

Henry S. Mosby

1978



Henry S. "Doc" Mosby had a 40-year career in wildlife management and research that began with his classic doctoral dissertation on *The Wild Turkey in Virginia*. This research set the standard for wildlife turkey restoration and management in the Southeast for years to come.

Born in Lynchburg, Virginia in 1913, he received his B.S. in biology from Hampton Sydney College in 1935, his B.S. and Master's of Forestry from the University of Michigan in 1937, and his Ph.D. in wildlife, also from the University of Michigan, in 1941.

Mosby served with the Virginia Game Commission in various capacities as a wildlife biologist from 1939 until 1943 and for a year after World War II. During the war he served in the U.S. Army, from 1943 until 1946, some of that time as a meteorologist in Europe. In 1947, he became Leader of the Virginia Cooperative Wildlife Research Unit, a position he would hold until 1955. That year he began his tenure as a Professor with Virginia Tech's Department of Fisheries and Wildlife Sciences. Mosby was named Department Head in 1972, a position he held until his retirement in 1977.

During his career, he published over 50 scientific articles that carried great influence in the developing field of wildlife management. He was editor of the first and second edition of the *Wildlife Techniques Manual*. His 61 graduate students grew and thrived under his guidance and tutelage and through them his philosophies have spread through our profession to its benefit. Often described as a "true Southern gentlemen," Mosby has a lasting influence on the wildlife profession.

Raymond F. Dasmann

1979

Raymond F. Dasmann's numerous scientific papers, articles, and books display a classical knowledge and advanced philosophy of biology, ecology, and wildlife management. Born in San Francisco in 1919, he received his AB., M.A., and Ph.D. at the University of California. He went on to teach at the University of Minnesota, Humboldt State College, and the University of California. He was a research biologist at the Rhodesia National Museum, Senior Associate at the Conservation Foundation in Washington, DC, and Senior Ecologist at the headquarters of the International Union for the Conservation of Nature and Natural Resources at Morges, Switzerland.

Dasmann pushed both the scientific and philosophical dimensions of wildlife management. In the 1950s he began working in the field of conservation biology, helping to identify population growth, pollution, habitat loss, and species eradication as major threats to biological diversity. In the 1960s, Dasmann helped launch the Man and the Biosphere program with the United Nations Educational, Scientific, and Cultural Organization (UNESCO). An early advocate of conservation policies that respected indigenous people, he called for the minimization of human impact on the land and helped lay the groundwork for the field of environmental ethics. His pioneering work on game ranching in Africa fostered the field of ecodevelopment and helped make ecotourism a household word.

Authoring more than a dozen books, including *The Destruction of California*, *Environmental Conservation, Wildlife Biology*, and *California's Changing Environment*, Dasmann fought for the title of his influential text *Environmental Conservation* at a time when the phrase was unknown. Although informed by complex scientific observations, Dasmann's vision of conservation was based on one simple fact: Resources are finite. Yet successful conservation strategies are not simple, and Dasmann always fought for policies that took into account the full complexities of biology.

Dasmann coined what he called the first law of the environment. "No matter how bad you think things are," he often said, "the total reality is much worse."

H. Albert Hochbaum

1980

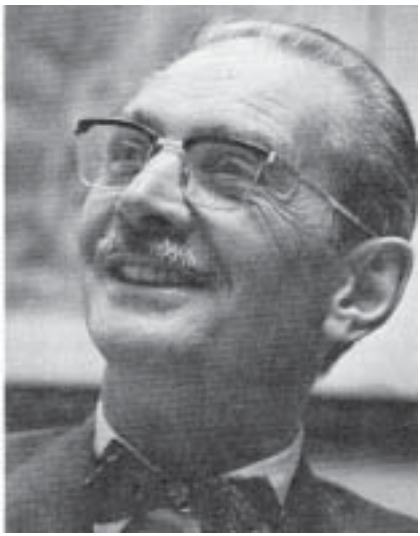
Aldo Leopold's first graduate student, H. Albert Hochbaum played an important role in the development of wildlife management into a science-based profession. Hochbaum's life as an observer, student, and recorder of wildlife began in Greeley, Colorado, where he was born in 1911. After studying ornithology at Cornell University, he received his B.S. in 1933. From 1934 to 1937 he served as a Wildlife Technician for the National Park Service, after which he enrolled at the University of Wisconsin to study game management under Leopold.

In conjunction with his studies and at the urging of Professor Leopold, Hochbaum reported to Delta, Manitoba, in 1938, with an assignment to examine the potential of the vast Delta Marsh as the site for a new waterfowl research station. There he completed the waterfowl field studies that led to his Master's Degree from the University of Wisconsin in 1941. Hochbaum, serving as Director for 32 years, laid the groundwork for the Delta Waterfowl Research Station to become recognized by many as the most respected and productive private waterfowl research facility in North America.

Aside from his pioneering waterfowl research at Delta, Hochbaum also distinguished himself further through his writing and artistic talents. His first book, *Canvasback on a Prairie Marsh*, received The Wildlife Society's book award and the Brewster Medal from the American Ornithologists' Union. His 1955 book *Travels and Traditions of Waterfowl* also won The Society's book award. The year 1973 saw the release of *To Ride the Wind*, a magnificent collection of his paintings and sketches that brilliantly dramatize the beauty, character, and ecology of waterfowl and their habitats. These books are classics, not only for the sensitive blending of the scientific information and conservation message that each imparts, but also for the poetic style of writing.

Louis A. Krumholz

1981



Born in Washington State in 1909, Louis Krumholz grew up amidst the lakes of Minnesota, kindling his lifelong interests in aquatic ecology and natural history of fishes. These interests would lead him to a career marked by numerous contributions to the fields of ichthyology and aquatic biology and by service to the wildlife profession.

Krumholz got his start as an assistant to David H. Thompson of the Illinois Natural History Survey, where he undertook the extensive studies of mosquito fish in Illinois, which would lead to his receiving an award for the best student paper at the 1939 meeting of the American Society of Ichthyologists and Herpetologists. After receiving his Ph.D. from Michigan, he became Instructor in Zoology and Research Associate in the Indiana University Lake and Stream Survey, carrying a heavy teaching load in comparative anatomy labs and sharing the classic research on sunfish population dynamics in ponds with William E. Ricker. Krumholz then served as Director of the Lerner Marine Laboratory in the Bahamas, which resulted in his authoritative work on embryology and the life history of several important marine fishes. For 25 years he was on the faculty of the University of Louisville, directing its Water Resources Laboratory from 1967 until 1976. His work there on the effects of pollution on fish communities in the Ohio River resulted in the widespread reputation enjoyed by the Laboratory for innovative and excellent research.

Perhaps his most memorable accomplishment, to many Wildlife Society members, was his record 22 years as Editor of *Wildlife Monographs*. By careful, conscientious, and skillful handling of the myriad details, he saw through to publication some 74 odd monographs. Louis Krumholz's career was marked by his authoritative research and his characteristic optimism.

Only one award has been presented post-humously. Louis A. Krumholz died after the selection was made and unfortunately the letter notifiying him of this honor arrived one day after his death in January 1981.

Thomas G. Scott

1982

A distinguished leader and prolific author, Thomas G. Scott was known throughout his career for his pursuit of excellence and his courage in taking stands against unpopular issues. Born in Ohio on May 22, 1912, Scott received his Ph.D. from Iowa State in 1942 and then served with distinction in the U.S. Army during World War II. After the war he returned to his position at the Iowa Wildlife Research Cooperative Unit, leaving in 1950 to take over as head of Wildlife Research at the Illinois Natural History Survey. When he became head of the Department of Fisheries and Wildlife at Oregon State University in 1963, he led the effort to establish the Cooperative Fisheries Research Unit and the Cooperative Wildlife Research Unit there. He became director of the Denver Wildlife Research Center of the U.S. Fish and Wildlife Service in 1972 and was named senior scientist in 1975, a position he held until his retirement in 1983.

Unafraid of standing his ground on issues important to him, Scott promoted legislation to protect hawks and owls in Illinois and was one of the first scientists to call attention to the danger of unregulated pesticide use. He also produced numerous publications, including over 100 articles, bulletins, monographs, and special reports. His publications on the red fox in Iowa and the northern plains are classics in the wildlife literature, as is one of his later publications, *The Checklist of North American Plants for Wildlife Biologists*. Scott served The Wildlife Society in various roles, taking turns as President, President-elect, and Editor of the *Journal of Wildlife Management*. As Editor, he redesigned the format and style of the *Journal* with such flair and success that many major scientific periodicals subsequently adopted it as a model for upgrading their own productions.

Daniel L. Leedy

1983

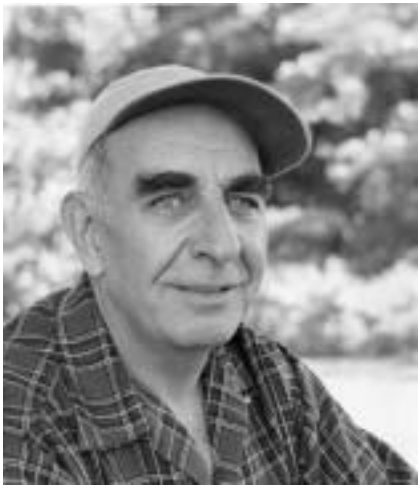
A charter member of The Wildlife Society, Daniel L. Leedy's wildlife career developed along with the growing field of wildlife management. Born in 1912 in Ohio, Leedy grew up on a farm, where his interest in wildlife began. He received his M.S. in 1938 and his Ph.D. in 1940 from Ohio State University, conducting research on ring-necked pheasants. For the following two years he was an instructor at the University. He then entered military duty, serving from 1942 to 1945 in World War II as an aerial photo interpreter.

After the war he joined the U. S. Fish and Wildlife Service and for three years headed the Cooperative Wildlife Research Unit in Ohio. In 1949 he was chosen as the biologist in charge of the entire Cooperative Wildlife Research Unit Program, which, under his guidance, continued to emerge as a dominant factor in the education of students, conduct of research, and application of these findings to management activities. In 1957 he was elevated to the position of Chief of the Branch of Wildlife Research for the U.S. Fish and Wildlife Service, where he was instrumental in strengthening the role of wildlife study and investigation at the national level. After retiring from government service, Leedy worked with the Urban Wildlife Research Center from 1974 to 1994, serving as Research Director and Senior Scientist.

During his long career, Leedy also contributed greatly to the technical literature, publishing nearly 90 papers on many subjects including upland game and furbearers, land use-wildlife relationships, aerial photo interpretation in wildlife management, research needs in wildlife and recreation, highway-wildlife relationships, and the newly developing field of planning and management for fish and wildlife in urban areas. Quiet, behind-the-scenes leadership, with plenty of acknowledgement for others, were Leedy's keys for a long, successful wildlife career.

Joseph P. Linduska

1984



Born in Butte, Montana in 1913 in an area that would later become a copper mine pit, Joseph P. Linduska, a charter member of The Wildlife Society, would go on to become its President and Executive Director, for several years running the Society from his kitchen table until a full-time director could be found. He earned his B.A. and M.A. in zoology and entomology from the University of Montana, and a Ph.D. in vertebrate zoology from Michigan State University.

After stints with the Michigan Department of Conservation, as a research ecologist, the U.S. Department of Agriculture, conducting award-winning research on insects of importance to the military, and back in Michigan, carrying out statewide surveys of the ring-necked pheasant, Linduska moved to the U.S. Fish and Wildlife Service, where he would spend much of his career. His first significant achievement there was to organize and direct the seminal program to evaluate the effects of DDT and other pesticides on fish and wildlife. In 1949 he was named Assistant Chief of the Service's Wildlife Research Branch and in 1951 became Chief of the Game Management Branch. After ten years in the private sector running the Remington Arms Company's wildlife research and demonstration program, he returned to the Service in 1966 as Associate Director.

Seven years later, he moved to the Office of the Director as Special Assistant and Senior Scientist, working on the international scene representing this country as a delegate to numerous international working groups in Switzerland, Russia, India, Pakistan, Poland, Iran, South Africa, Brazil and other countries.

Linduska also found time to produce two books and more than 50 technical papers on wildlife and natural resource subjects and in excess of 100 popular articles on conservation subjects, including a monthly feature on wildlife management for *Sports Afield* Magazine.

Joseph P. Linduska, in a private audience with India's Prime Minister Indira Gandhi, expressed his support for her efforts at population control and suggested that this might be the main salvation of India's wildlife.

Frank C. Bellrose

1985

Those in the field knew him as "Mr. Waterfowl." Born in Ottawa, Illinois, in 1916, and educated at the University of Illinois, Frank C. Bellrose would become one of the world's foremost authorities on waterfowl and wetlands. His research career spanned more than 50 years with the Illinois Natural History Survey, and included positions such as Assistant Game Technician, Assistant Game Specialist, Wildlife Specialist, and Principal Scientist.

Bellrose's pioneering research on lead poisoning in waterfowl was a major factor in the gradual replacement of lead with nontoxic shot for waterfowl hunting both in the United States abroad. His innovative research led to over 90 publications representing a wide variety of topics ranging from waterfowl food plants, to muskrats, to waterfowl migration corridors. One of the many notable contributions is his book, *Ducks, Geese and Swans of North America*, recognized as one of the most complete waterfowl references in print. Both that book and *Ecology and Management of Wood Duck* were selected as The Wildlife Society's Book of the Year.

In 1997 the Waterfowl Research Laboratory of the Illinois Natural History Survey's Forbes Biological Station near Havana, Illinois, was officially named the Frank C. Bellrose Waterfowl Research Center, in honor of Bellrose's important contribution to waterfowl ecology and management throughout the world and on the Illinois River where he spent his entire life and professional career. In 2001 Bellrose, who passed away in early 2005 at the age of 88, was inducted into the newly established Illinois Outdoor Hall of Fame in recognition of his lifelong commitment to natural resource protection and outdoor recreation in Illinois.

Robert A. McCabe

1986

Aldo Leopold, his Ph.D. advisor, said Robert McCabe was "one of the best and most versatile men that I know, has a warm and forceful personality, a phenomenal ability to get things done and an intellectual horizon that is wide and getting wider." McCabe spent nearly his entire career at the University of Wisconsin, Madison, where he received his Ph.D. in 1949.

Born in Milwaukee, Wisconsin, in 1914, McCabe began working for the University of Wisconsin in 1943. He served as the University of Wisconsin Arboretum biologist for 2 years, and in the Department of Wildlife Ecology for the next 39 years, 27 of them as Department Chairman. Under his leadership, the Department grew from 2 to 10 faculty members and broadened in scope from game management to wildlife ecology. In fact, McCabe is often credited with elevating wildlife management to a respected science and profession.

MaCabe also shared his extensive wildlife knowledge and training with many other nations during his career. He conducted surveys of wildlife in various African countries, was awarded a Fulbright Professorship in 1969-70 at Dublin, Ireland, served as consultant to Ireland's Office of Public Works on its National Parks, and was an advisor to the government of Ethiopia regarding that country's National Parks. McCabe also authored over 100 publications varying from technical to popular, and ranging from flycatchers to flowers, whitetails to wetlands, and hunting tales to wildlife training. The list would be even more impressive were it not for his steadfast refusal to accept credit for coauthoring papers published by his graduate students.

In 1999, in honor of his remarkable career, McCabe was inducted in the Wisconsin Conservation Hall of Fame.

Thomas S. Baskett

1987

Inducted into the Missouri Conservation Hall of Fame in 2001, Thomas S. Baskett was a leader in the conservation movement, both in his home state of Missouri and in the nation. He wore many hats throughout his career, serving as a teacher, researcher, writer, editor, and administrator. Most of his career was spent leading the Missouri Cooperative Wildlife Research Unit for the U.S. Fish and Wildlife Service, which under his guidance would become one of the strongest and most successful cooperative wildlife research programs in the nation.

Born in Liberty, Missouri, in 1916, Baskett received a B.A. in biology from Central Methodist College, an M.S. in zoology at the University of Oklahoma, and a Ph.D. in zoology at Iowa State University. He served in the U.S. Navy in the Pacific during World War II. After returning from military service, he taught zoology and wildlife at Iowa State University and the University of Connecticut. In 1948, he became Leader of the Missouri Cooperative Wildlife Research Unit. In 1968, he interrupted his unit leader career to serve for 5 years as Chief of Wildlife Research for the Fish and Wildlife Service, providing strong and effective leadership in the continuing effort to establish reasonable control over pesticide use in the U.S. A landmark decision to restrict the use of DDT because of its impacts on migratory birds was achieved during his tenure.

As a researcher, he has studied and written widely about a broad array of wildlife species and topics. By emphasizing long-term studies and focusing on specific conservation and management problems and needs, he has made important contributions to our understanding of bobwhite quail, cottontail rabbits, and mourning doves, to name just a few.

Willard D. Klimstra

1988

Known as "Doc" to his students and colleagues at the Cooperative Wildlife Research Laboratory at Southern Illinois University, which he founded in 1951 and led for 35 years, Willard D. Klimstra was recognized as a pioneer in wildlife ecology and mined-land reclamation. He spent his entire career at Southern Illinois University, beginning in 1949 as Assistant Professor of Zoology, attaining the rank of Distinguished Professor Emeritus in 1985, and retiring in 1987.

Klimstra received a B.A. from Maryville College, Maryville, TN, in 1941. Then in 1948 he received a M.S. and in 1949 a Ph.D. in Economic Zoology from Iowa State University. Two years after beginning his career as an Assistant Professor at Southern Illinois, he founded the Cooperative Wildlife Research Laboratory there. For the next 35 years he would serve as leader, continually adding to the staff and tirelessly directing the efforts of graduate students whose research and professional accomplishments continue to provide benefits to wildlife and natural resources conservation in Illinois and throughout the country.

Klimstra personally made substantial contributions on the impact of strip-mining on the environment and on the ecology and management of bobwhites, Canada geese, and key deer. His work at Pyramid State Park in the 1950s represented one of the nation's first demonstrations of mine reclamation for fish and wildlife habitat enhancement. Klimstra helped draft legislation on mined land reclamation and conservation, the Illinois Nature Preserves System Act, and the Illinois Endangered Species Protection Act. In 2005, the Illinois Conservation Foundation selected Klimstra for induction into the Illinois Outdoor Hall of Fame.

Laurence R. Jahn

1989

When he won the Aldo Leopold award in 1989, Laurence R. Jahn was described as a mover and a shaker in the area of conservation. His natural resources colleagues preferred to call him "Our Man in Washington." Jahn was one of the strongest driving forces on the Washington scene in support of sound land and water management programs and practices.

Born in Jefferson, Wisconsin, in 1926, Jahn spent his childhood on the family farm, sparking a lifelong commitment to wildlife conservation. He received a M.S. and a Ph.D. in wildlife management/ecology from the University of Wisconsin, the program founded in 1939 by Aldo Leopold. He began his professional career in 1949 as a waterfowl biologist for the Wisconsin Conservation Department at Horicon Marsh. His contributions to waterfowl and wetland management are widely recognized for their scientific rigor, excellence in reporting, and positive impact on the resource. However, it is the politics of conservation that has been the arena for his most profound contributions to wildlife conservation.

In 1959, Jahn joined The Wildlife Management Institute as Field Representative for the North Central States. In 1970, he moved to Washington, D.C. to become the Institute's Director of Conservation. Over the years he worked with policymakers from nearly every major federal and private resource agency and became one of the premier spokesmen for wildlife conservation in Washington. He was the sustaining force that rallied political support for saving the Cooperative Fish and Wildlife Research Units and was instrumental in obtaining funds for research on values of old-growth forests for wildlife habitat. It was his diligence and perseverance that resulted in landmark conservation provisions in the 1985 Farm Bill. Laurence Jahn demonstrated aggressive leadership second to none, much of which was accomplished quietly, behind-the-scenes, with little fanfare or self-acclaim.

Tony J. Peterle

1990

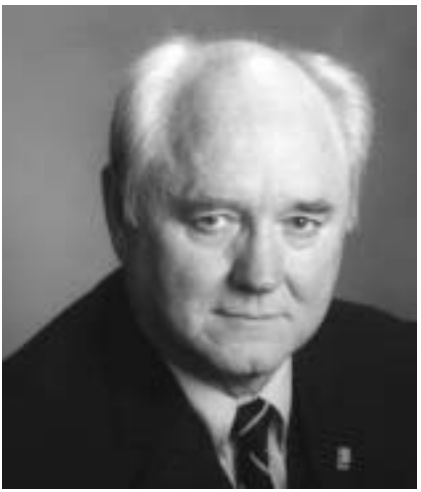
A teacher, administrator, and scientist, Tony J. Peterle's easy self-confidence and vital integrity made him a natural leader in the wildlife field. As a teacher, he earned the admiration and respect of his students, including some 50 M.S. and Ph.D. graduates to whom he served as major advisor. Many of his students are now at the top of the field themselves. As academic administrator, he motivated his faculty to reach their highest level of achievement. As a scientist, he emerged as one of the true pioneers and leaders in environmental toxicology, a point well-illustrated by his 30 journal papers in that field alone.

His professional home for 30 years was the Ohio State University, where he was Leader of the Ohio Cooperative Wildlife Research Unit from 1959 to 1963 and Professor of the Department of Zoology from 1968 to 1989, serving as Chair from 1968 to 1981. His commitment to his students was evident. One example of this is the Fellowship Grant Program he developed. This program is a cooperative venture between Ohio Audubon Council, The Ohio State University, and the Division of Wildlife of the Ohio Department of Natural Resources that provides two-year fellowships to graduate students in environmentally related subjects at Ohio State.

Peterle also made many contributions of paramount importance in the arena of conservation policy and politics. His contributions to the National Academy of Sciences, the National Fish and Wildlife Resources Research Council, the Fish and Wildlife Committee of the National Association of State Universities and Land-Grant Colleges, and the Association of University Fish and Wildlife Program Administrators were innumerable.

Jack Ward Thomas

1991



Jack Ward Thomas, an eminent wildlife biologist and Forest Service career scientist, served as the 13th Chief of the U.S. Forest Service from 1993 to 1996, offering legendary leadership not only during the Northern Spotted Owl controversy, but also in championing ecosystem management.

Born in Fort Worth, Texas, on September 7, 1934, Thomas began his career as a wildlife researcher with the Texas Game and Fish Commission after receiving a B.S. in wildlife management from Texas A&M University. In 1966, he joined the U.S. Forest Service and became involved in research on the effects of even-aged forest management on wildlife resulting in a M.S. degree from West Virginia University. The results of this research were a key influence on the 1970s debates on the relationships between wildlife and even-aged timber management.

Thomas transferred in 1969 to establish the first research unit at the Pinchot Institute. There he focused on wildlife habitat in urban and suburban settings, culminating in a Ph.D. degree in Forestry from the University of Massachusetts and resulting in an article entitled "Invite Wildlife to Your Backyard" that served as the touchstone for the National Wildlife Federation's still popular "Backyard Wildlife Program."

In the spring of 1993, Thomas was chosen to head the Forest Ecosystem Management Assessment Team as a result of his work on spotted owl and old growth habitat in the Pacific Northwest in the late 1980s and early 1990s. In part because of his work on this project, Thomas was chosen to be the Chief of the Forest Service. In 1996 he resigned and became the Boone and Crockett Professor of Wildlife Conservation in the School of Forestry at the University of Montana. Thomas has published more than 400 chapters, articles, and books.

Glen C. Sanderson

1992

Glen Sanderson's studies during his tenure with the Illinois Natural History Survey, between 1955 and 1990, on the biology and ecology of the raccoon, rabies in mammals, and lead poisoning in waterfowl resulted in more than 90 publications and edited works, bringing him national and international recognition in wildlife research.

Sanderson completed B.S. and M.S. degrees at the University of Missouri and began his career as a game biologist with the Iowa Conservation Commission. There he specialized in studies of mammals, with emphasis on raccoons, which became the subject of the Ph.D. dissertation he completed at the University of Illinois while working for the Illinois Natural History Survey.

Appointed Adjunct Professor at Southern Illinois University in 1964 and Professor of Zoology at the University of Illinois in 1965, through the years Sanderson taught classes in wildlife ecology and advised candidates for advanced degrees at Illinois and lectured at Southern Illinois as well as at numerous other colleges and universities. Sanderson was also a driving force in the movement to eliminate the use of lead shot in waterfowl hunting. Indeed, his efforts led him to be characterized as "a giant in the crusade for steel shot." He was also a leader in protecting remnant flocks of prairie chickens in Illinois and championed the innovative approaches to habitat conservation through land acquisition and management used nationally by The Nature Conservancy.

In addition to his more than 90 publications and edited works he served as editor of *The Journal of Wildlife Management* in 1971 and 1972, special editor of the *Wildlife Society Bulletin* issue 15(1) that commemorated the 50th Anniversary of The Wildlife Society, and consulting editor for *Wildlife Monograph 49*.

L. David Mech

1993

David Mech, described by some as "the most prominent wolf biologist in the world" and known as "the alpha wolf," has directly or indirectly influenced practically every recent wolf project in the world. Born in Auburn, New York, Mech received his B.S. from Cornell University in 1958 and his Ph.D. from Purdue University in 1962. For 33 years he has researched deer, moose, lynx, marten, raccoons, muskrats, and most intensively wolves.

Mech began his career as an assistant professor and research associate for Macalester College in St. Paul, studying wolves in Superior National Forest. In the late 1970s, he worked on a recovery plan for wolves under the new federal Endangered Species Act. Since 1978 Mech has chaired the World Conservation Union's Wolf Specialist Group, working with wolf scientists around the world. In 1986 he began his study of wolves and caribou in Alaska's Denali National Park and Preserve and in the 1990s helped to reintroduce wolves to Yellowstone National Park and central Idaho. He is a senior research scientist with the Biological Resources Division of the United States Geological Survey, Northern Prairie Wildlife Research Center, and an adjunct professor in the Department of Ecology and Behavioral Biology and the Department of Fisheries and Wildlife at the University of Minnesota.

Mech's research has centered in northeastern Minnesota, Denali National Park, Alaska, and Ellesmere Island, Northwest Territories, but his knowledge and expertise have been invited and shared in Italy, India, Kenya, Canada, Mexico, Sweden, U.S.S.R., Spain, and other countries. No other single biologist has contributed so much to wolf conservation. Through his writings, talks, films, and appearances on the Johnny Carson and Dick Cavett shows he has been instrumental in teaching the general public about wolf conservation.

James G. Teer

1994

James G. Teer began his career in waterfowl research, and then sought to improve the scientific foundation of white-tailed deer management. His field research over the years has included studies on cottontail rabbits, big game ranching, commercial harvest of game, private lands wildlife management, ringtails, rangeland ecology, exotic game animals, white-winged doves, collared peccary, bobwhite quail, and endangered species.

Born in Granger, Texas in 1926, Teer received his B.S. in Wildlife Management from Texas A&M University in 1950, an M.S. in Wildlife Management from Iowa State University in 1951, and a Ph.D. in Wildlife Management and Zoology from the University of Wisconsin in 1963. His professional experiences include positions as a Research Biologist with the Texas Game and Fish Commission, Research Biologist with U.S. Fish and Wildlife Service's Patuxent Wildlife Research Center, Professor at Mississippi State University and Texas A&M University, Visiting Professor at University of Pretoria, South Africa, and Director of the Rob and Bessie Welder Wildlife Foundation.

During the academic portion of his career, Teer built one of the largest undergraduate and graduate education and research programs in the U.S. focusing on wildlife, fisheries, and associated outdoor recreation education. His tenure as TWS President coincided with the emergence of a new movement in conservation biology and he had the delicate task of integrating the new elements of this movement with the rich heritage and connection to natural resources embodied in wildlife management.

Ahead of his time, Teer's extensive field experience in wildlife research and the human dimensions of wildlife conservation laid the foundation for his tenacious advocacy of incorporating human needs and aspirations into the overall framework for sustainable management of aquatic and terrestrial ecosystems.

Jack H. Berryman

1995

From reorganizing and redirecting the predator control program of the Bureau of Sport Fisheries and Wildlife to developing a national program of extension education for the U.S. Fish and Wildlife Service, Jack H. Berryman contributed significantly at the local, regional, national, and international levels during a professional career spanning nearly five decades. His efforts helped to deflect the Sagebrush Rebellion, establish and implement the North American Waterfowl Management Plan, obtain new funds for fish and wildlife programs during times of reduced federal budgets, and strengthen the conservation dimensions in federal agriculture programs.

Born in 1928 in Utah, Berryman received B.S. and M.S. degrees from the University of Utah and began his professional employment with the Utah Fish and Game Department. An accomplished twenty-three year career, beginning in 1950, with the Bureau of Sport Fisheries and Wildlife (later the U.S. Fish and Wildlife Service) included stints as Assistant Regional Supervisor of the Branch of Federal Aid in Albuquerque and then Minneapolis, Chief of the Division of Wildlife Services, Acting Deputy Associate Director for Wildlife, Chief of the Division of Technical Assistance, and Chief of the Office of Extension Education. His tenure with the Service was interrupted from 1959 to 1965 when he returned to his native Utah as Associate Professor and Wildlife Specialist at Utah State University. Upon retirement from the Service, Berryman served ten years as the Executive Vice President of the International Association of Fish and Wildlife Agencies.

Serving as Chairman of Technical Advisory Committee for the National Academy of Sciences' Panel on Land Use and Wildlife Resources, Chairman of the Agricultural Task Force of the Natural Resources Council of America, and a Member of the Secretary of Interior's Task Force on Wetland Preservation, few persons have demonstrated such a willingness to serve the causes of wildlife conservation.

Robert D. Nelson

1996

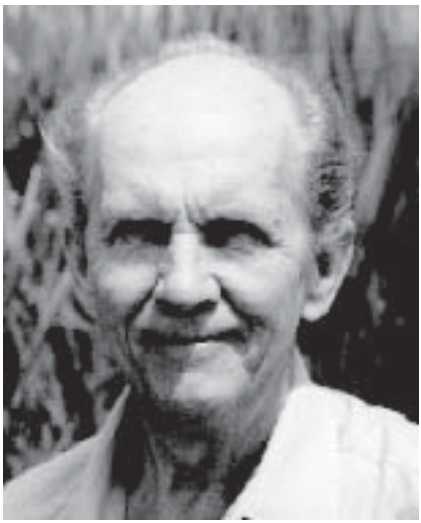
Robert D. Nelson aggressively promoted innovation, efficiency, and teamwork for more than 35 years in numerous capacities with the USDA Forest Service. Recognizing, long before most, the effectiveness and importance of working beyond administrative boundaries, he pushed for partnership agreements and initiatives ultimately resulting in significant contributions for wildlife and fisheries conservation.

Nelson's wildlife career began with completion of B.S. and M.S. degrees in Wildlife Biology at Washington State University and professional employment as a Forest Wildlife Biologist. Initiating the Forest Service's Continuing Education Program for Wildlife and Fisheries Biologists, which now involves 10 universities and 13 courses each year, Nelson has made major contributions to the development of the wildlife profession. Another of Nelson's most notable achievements is the Forest Service's Challenge Cost-Share program that provides non-federal partners the opportunity to share in shaping, funding, and implementing wildlife and fish habitat management on National Forest System lands. This program and numerous other partnerships and initiatives including "Taking Wing" with Ducks Unlimited, "Making Tracks" with the National Wild Turkey Federation, and "Eyes on Wildlife" for wildlife viewing helped advanced wildlife management to the mainstream of the Forest Service.

Under Nelson's leadership as Director of Wildlife, Fish, and Rare Plants, the program became one of the strongest in the National Forest System. His leadership and vision also led to the development of habitat conservation assessments for numerous species, including forest carnivores, the Mexican Spotted Owl, and Pacific salmon, the first comprehensive federal habitat management and monitoring guidelines for neotropical migratory birds, interagency agreements to streamline and improve the Endangered Species Act consultation procedures, and the identification of management needs for rare plant conservation.

Milton W. Weller

1997



Milton W. Weller's initial detailed studies of Redhead ducks kicked off a career that significantly expanded the fields of wetland and wetland-wildlife ecology. His research, and that of his students, has included many classic works in areas of waterfowl molts and plumages, redhead ecology, nest parasitism, island waterfowl biogeography, prairie wetland dynamics, black-headed ducks, and Rallidae.

Born in 1929, Weller received the majority of his formal education at the University of Missouri in Columbia, culminating in his Ph.D. degree in 1956 in Zoology/Wildlife. For nearly twenty years he taught wildlife ecology and management at Iowa State University, where he played a key role in developing curricula aimed at providing an integrated background in wildlife and fisheries resources. He led the Fisheries and Wildlife Section at Iowa State University, went on to head the entomology in fish and wildlife department at the University of Minnesota, and was the Kleberg Chair in Wildlife Ecology at Texas A&M University for twelve years, retiring in 1994.

Pioneering an effort to understand the linkages that exist between wetland birds and their habitats, Weller has compiled an impressive list of publications over the last four decades, including such classic books as *The Island Waterfowl* and *Freshwater Marshes*, *Ecology and Wildlife Management*, which are used throughout the country in wetlands courses at the college level. Weller's research has been described as helping others to "understand the basic forces and patterns of waterfowl adaptations and evolution that have both provided a context for the study of waterfowl and also have served as examples for studies of other animal groups world-wide."

John J. Craighead

1998

John J. Craighead distinguished himself by bringing wildlife biology and wildlife research to the lives of the general public, helping to educate and thrill people worldwide. With a career that included government service, academia, and the establishment of a non-governmental organization, Craighead worked diligently to improve communication on the importance of wildlife management.

Craighead received his A.B. in science from Pennsylvania State University in 1939 and his M.S. in ecology and wildlife management from the University of Michigan in 1940. In 1937, at the age of 21, he co-authored his first book, entitled *Hawks in the Hand* and first article in National Geographic entitled *Adventures with Birds of Prey*. During World War II he served as a Lieutenant in the U.S. Armed Forces and developed the Naval Survival Training Program. His publication *How to Survive on Land and Sea* became the Navy's survival manual and led to a special citation from the Secretary of Defense.

Following the war, Craighead received his Ph.D. in vertebrate ecology from the University of Michigan and in 1952 accepted the position of Leader of the Montana Cooperative Wildlife Research Unit and Professor of Zoology and Forestry at the University of Montana in Missoula, where he served for 25 years. Many knew Craighead, and his twin brother Frank, for their pioneering research on grizzlies in Yellowstone National Park from 1959 to 1971, which was captured by a series of National Geographic television specials that took their research into the living rooms of millions of ordinary people. This work set new standards of excellence in the study of large mammalian carnivores and pioneered the application of telemetry. In 1978, after leaving the University of Montana, Craighead founded and became the Executive Director of the Wildlife-Wildlands Institute in Montana, also serving as President and Chairman of the Board.

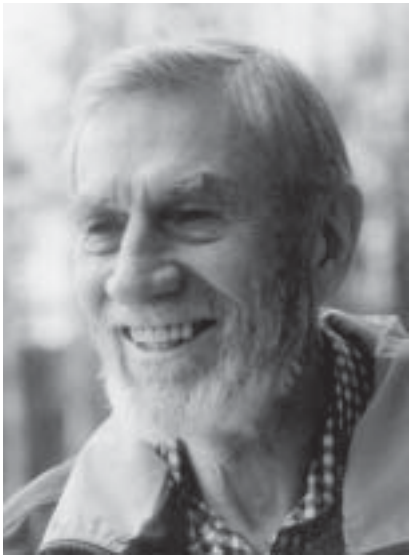
David R. Klein

1999

David Klein's name has become synonymous with conservation and management of wildlife in the Artic. He helped lead the fight for the conservation and wise management of natural resources on the Tongass National Forest in southeast Alaska, and on the Arctic National Wildlife Refuge along Alaska's Arctic coast.

Before beginning his wildlife career, Klein served his country in the Navy during both World War II and the Korean War. He earned his B.S. in 1951 from the University of Connecticut where he majored in Zoology/Wildlife. An M.S. in Wildlife Management followed in 1953 from the University of Alaska. The University of British Columbia awarded Klein his PhD in Zoology/Ecology in 1963.

Klein began his professional career in 1955 as a Wildlife Research Biologist with the Fish and Wildlife Service in Petersburg, Alaska. He joined the Alaska Department of Game and Fish in 1959 and served that organization until 1962 when he rejoined the Fish and Wildlife Service and became Leader of the Alaska Cooperative Fish and Wildlife Unit. He held this position until 1991. In 1992, he became Senior Scientist at the National Biological Service's Cooperative Fish and Wildlife Unit at the University of Alaska, Fairbanks. He held this position until 1997, when he became Professor Emeritus with the Institute of Arctic.



Throughout his career, Dr. Klein has made important contributions to science. His article on the increase and crash of the St. Mathews' reindeer population has become a classic, as has his Ecological Monograph on the ecology of deer in Alaska. Likewise, his international reputation has resulted from studies on caribou and muskox ecology in Denmark, Greenland, Norway, and Siberia. He also studied ungulates in South Africa. He continues to be a productive researcher and scientist with more than 120 technical publications, mostly in peer-reviewed journals.

Gary C. White

2000

Gary C. White brought the sophisticated tools of mathematical modeling, population estimation, and survival analysis to the forefront of wildlife research and management. His work on ungulate population dynamics has not only provided a showcase example of how to conduct experimental field research, but also has given new insights into some of the most fundamental concepts in wildlife population dynamics, such as density-dependent and compensatory responses.

Born in 1948, White grew up on an Iowa farm. In 1970 he received a B.S. in Fisheries and Wildlife Biology from Iowa State. In 1972 he received his M.S. in Wildlife Biology from the University of Maine and in 1976 his Ph.D. in Zoology from Ohio State. After a year of post-doctoral research with the Utah Cooperative Wildlife Research Unit, he moved to Los Alamos National Laboratory, where he was a scientist in the Environmental Science group until 1984. That year he accepted a position at Colorado State University as a professor of wildlife biology in the Department of Fishery and Wildlife.

As the architect of such software programs as CAPTURE, SURVIVE, RELEASE, AND MARK**,** White has made invaluable tools available to all wildlife biologists that have enabled researchers and managers to test complex hypotheses about wildlife populations. Dr. White has co-authored some 90 refereed scientific papers, 2 books, and 40 technical papers. In honor of his achievements in the field, Iowa State University has established the Gary White Fisheries and Wildlife Biology Award, an annual award given to an undergraduate who shows promise for graduate study in fisheries and wildlife biology or ecology, with a particular interest in quantitative study.

John W. Mumma

2001

At the age of 32, John W. Mumma created new opportunities for wildlife biologists to influence federal agency management when he became the first wildlife biologist to serve as a forest supervisor. Early in his career, he developed a reputation for adeptly fostering partnerships with other disciplines and with an array of conservation organizations to effectively accomplish shared goals.

Born in 1939 and raised in Farmington, New Mexico, Mumma received his undergraduate training at Fort Lewis College in Colorado and at the University of New Mexico. He did graduate work at Oregon State and Colorado State University. Mumma began his professional wildlife career in 1964 with the U.S. Forest Service as wildlife and range staff officer on the San Juan National Forest in Colorado. In 1988, he became the first wildlife biologist in the history of the Forest Service to serve as Regional Forester, a position he held for over 3 years.

After a period of employment as a consultant, he was appointed Director of the Colorado Division of Wildlife in 1995. As a first order of business he faced the challenge of implementing a major reorganization of that agency. Among the accomplishments of the Colorado Division of Wildlife during his tenure were the completion of the largest wildlife habitat acquisition in the history of the agency in cooperation with the Rocky Mountain Elk Foundation, reintroduction of the lynx to Colorado, aggressive management to thwart whirling disease in trout, and construction of a hatchery devoted to propagation of native fish species.

John would often provide copies of Aldo Leopold's *A Sand County Almanac* to his staff and associates.

Rollin D. Sparrowe

2002

Rollin D. Sparrowe is recognized as a leader in translating science into effective conservation policy. Over a 35-year record of federal and non-governmental service, he has been a scientist, professor, federal resource manager, and a president of a national conservation organization, but foremost, he has always served as a spokesman for the principles of sound wildlife management.

Sparrowe received his undergraduate degree from Humboldt State University in 1964 and went on to receive a master's degree from South Dakota and a doctorate from Michigan State University. After completing his doctoral studies, Sparrowe joined the Fish and Wildlife Service for a career that spanned 22 years. He began his federal career as an assistant leader of the Missouri Cooperative Wildlife Research Unit. He progressed to become Chief of the Division of Cooperative Research Units, Chief of the Division of Wildlife Research, Chief of the Office of Migratory Bird Management, and finally Deputy Assistant Director for Refuges and Wildlife. He left the Fish and Wildlife Service in 1991 to become President of the Wildlife Management Institute, retiring in 2004.

Sparrowe was involved in the implementation of the North American Waterfowl Management Plan, assisted in negotiating amendments to the Migratory Bird Treaty with Canada, and played a role in the implementation of Adaptive Harvest Management for setting waterfowl seasons. He has worked with many conservation coalitions, including Teaming With Wildlife, the Cooperative Alliance For Refuge Enhancement, the North American Bird Conservation Initiative, and the American Wildlife Conservation Partners. Sparrowe was also a founding Board Member of the Theodore Roosevelt Conservation Partnership.

Nova J. Silvy

2003

Nova Silvy's work with the endangered Attwater's Prairie Chicken exemplifies his ability to blend science, conservation, management, and education. Over the past 30 years Silvy has not only conducted high-quality research on the species, he authored the first Recovery Plan for the U.S. Fish & Wildlife Service, fought for research funding, educated audiences about the plight of the bird, and with the help of his students constructed a captive breeding facility.

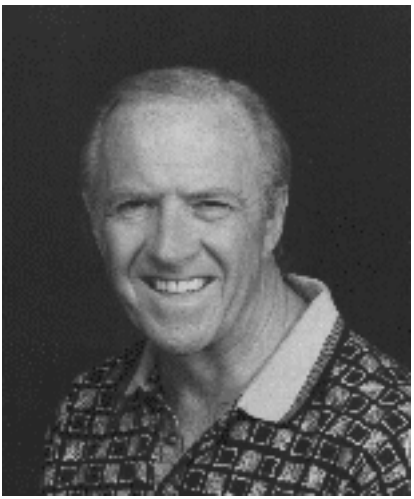
Born in Missouri, Silvy developed a love for wildlife walking the fields and streams during his youth in Missouri, eastern Oregon, and Kansas. He began his academic career in electrical engineering but realized his true love was wildlife and completed both a bachelor's and master's degree in wildlife from Kansas State University. He went on to complete his doctorate at Southern Illinois University, doing his research in the Florida Keys.

Developing future wildlifers has always been one of Silvy's passions. He has mentored more than 25 doctoral and 39 master's degree students over his career and advised more than 325 undergraduate students. This dedication to education has been recognized with seven Professor of the Year Awards, a Vice-Chancellor's award for excellence in graduate teaching, a university-wide award for distinguished performance in teaching, student counseling, and student relations, and an Educator of the Year award by a state chapter.

While student education and mentoring occupy a great deal of time, Silvy has also maintained an active research program that has advanced the state of our knowledge for two endangered species. He has also published more than 125 articles and received the Best Paper Award from a local chapter three times indicating this research was exceptional in quality as well as quantity.

David R. Anderson

2004



David R. Anderson was one of the first to bring concepts from theoretical ecology and decision theory to the wildlife field in his groundbreaking research into population abundance. His 1975 paper in *Ecology* developed the basis for the management strategies adopted by the U.S. Fish and Wildlife Service for continent-wide waterfowl harvest in the early 1990s.

Anderson received his B.S. in Wildlife Management in 1964 and his M.S. in Wildlife Biology in 1967, both from Colorado State University. He went on to receive his Ph.D. from the University of Maryland in 1974 in Theoretical Ecology.

In the early 1990s, when waterfowl management was in a state of acrimony caused by the droughts of the 1980s and 20 years of restrictive harvest regulations, Anderson provided the mechanism, now known as adaptive harvest management, which put national waterfowl management back on its feet. Throughout the 1990s, he provided leadership to the ongoing status reviews of the northern spotted owl, regularly winning awards and acclaim from his employers in the Department of the Interior. And a decade earlier he was dispatched to Australia to develop crucial information, from both scientific and diplomatic perspectives, regarding exploitation of three kangaroo species whose status was at issue between the U.S. and Australia.

Over a career that has spanned more than 40 years, 18 years as the leader of the Colorado Cooperative Fish & Wildlife Research Unit, Anderson has systematically re-written the basis for how wildlife populations are measured and interpreted. He has written or contributed to 14 books and monographs that have transformed and defined how populations estimates are collected, from line-transects to mark-recapture processes, and he has collected 4 Publication of the Year awards from The Wildlife Society.

E. Charles Meslow

2005

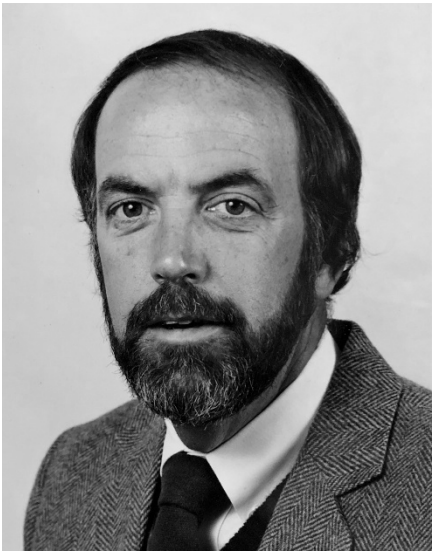
A greater lover of floating the Pacific Northwest's free-flowing rivers, E. Charles Meslow is best known for his work regarding management of old-growth forests in the Pacific Northwest. Working on controversial issues surrounding species like the northern goshawk, northern spotted owl, marbled murrelet, and the red tree vole, Meslow has a knack for bringing people together and helping them reach consensus without feeling they have compromised their principles.

Born in Waukegan, Illinois in 1937, Meslow graduated from the University of Minnesota in 1959 with a B.S. in Fish and Wildlife Management. Next came a stint in the U.S. Navy serving as an Operations Officer in the Pacific. In 1962, deciding that life on the high seas was not for him, Meslow returned to school, earning an M.S. in Wildlife Management from the University of Minnesota and a Ph.D. in Wildlife Ecology and Zoology from the University of Wisconsin, Madison. Meslow began his professional career as an Assistant Professor of Zoology and Veterinary Science at North Dakota State University. In 1971 he moved to the Oregon Cooperative Wildlife Research Unit, serving as Assistant Leader until 1975 and as Leader from 1975 until 1994. In 1994 he became the Northwest Regional Representative of the Wildlife Management Institute, a position he held until 1999.

Meslow played an important role in, and gained notoriety during, the "spotted owls/old-growth wars" in the 1990s when he served on the Interagency Scientific Committee charged with developing options for the management of federal lands in Oregon and Washington that addressed the conservation needs of the Northern Spotted Owl. He was also a member of the Endangered Species Committee Team that provided information to the "God Squad." His knowledge about and devotion to wildlife resulted in significant changes in forest management in the western U.S.

Paul R. Krausman

2006



Paul R. Krausman is a recognized expert on desert bighorn sheep and desert mule deer ecology but his academic career reached beyond North America. Paul's research program included studies on chimpanzees, and large mammals in India, Mexico, and the United States. He's published over 300 peer-reviewed papers and book chapters and edited, compiled, and wrote > 20 books.

Born in Washington D.C., in 1946, Paul R. Krausman was raised in North Africa, Europe, and Asia before returning to the United States. In 1960, Paul met Carol, the love of his life in Dreux, France where they attended high school. Unsure of a career path, Paul followed Carol to Ohio where he was exposed to TWS. Paul attended a student chapter meeting at The Ohio State University and found his vocation. Paul earned a B.S. from The Ohio State University, a M.S. from New Mexico State University, and a Ph.D. from the University of Idaho.

Paul began his academic career at Auburn University (1976) before moving to the University of Arizona in 1978, and to the University of Montana in 2007, where he held the Boone and Crocket Chair until retiring in 2015. He taught an array of wildlife-related classes across his academic career. Paul's greatest pleasure was the mentoring of his students. He advised nearly 100 graduate students on a diverse range of ungulate and predator studies. Today, he is close friends with many of his students who hold positions across the wildlife profession.

He served as faculty advisor to the student chapters of TWS at Auburn, Arizona, and Montana. He has also served as editor of JWM, Wildlife Monographs, and the TWS Wildlife Book Series. He served as President of the Arizona Chapter and Southwest representative to Council. Paul was awarded the Aldo Leopold Medal from TWS in 2006 and was elected President of TWS in 2011.

Today, Paul lives outside of Santa Fe, New Mexico with Carol, their dogs, and horses. Together, they are kept busy by their 2 children, 7 grandchildren, and 3 great-grandchildren They enjoy volunteering, writing, traveling, and cooking and eating lots of Mexican food.

James E. Miller

2007

James E. Miller ("Jim") was a dedicated hunter conservationist. Jim's deepest passion was for spring wild turkey hunting, which he did every spring from 1953 until 2021. During his 35+ year career, Jim led with his heart and often spoke ardently about the importance of wildlife conservation, hunting ethics, and the future of wild things and wild places.

Jim was born and raised in northern Alabama, where his family struggled with poverty. Jim graduated with B.S. (1965) and M.S. (1970) degrees in wildlife from the University of Florida. Jim worked for federal agencies for 33 years, include 23 years as national program leader for wildlife and fisheries in the U.S. Department of Agriculture. In 2001, he joined the Wildlife, Fisheries and Aquaculture Department at Mississippi State University as an extension and outreach professor and coordinator for the Sustainable Natural Resource-Based Enterprises program. After his retirement in 2005, he continued to be active in wildlife issues and remaining a presence within the wildlife profession.

A TWS Fellow and honorary member, Jim joined TWS in 1963 and served as state president for two chapters, Southeast Section representative to Council, and TWS President. Throughout his career, Jim was a steadfast supporter of TWS and actively recruited new Members, chartered two state chapters, served on multiple executive boards, and helped develop numerous working groups. He was known for carrying a TWS membership application and TWS policy statements with him to hand out at meetings and conferences.

Jim was a selfless mentor to many in the wildlife field. He helped found Conservation Leaders for Tomorrow, where he served as an instructor for many years. He also served the profession as a consultant, motivational speaker, and volunteer long after his retirement. Jim's story-telling and excitement for wildlife conservation was infectious and positively influenced many future professionals.

While TWS President, Miller held the first TWS plenary session on diversity in the profession at the 1999 conference in Austin, TX. He was also instrumental in starting the Minorities and Natural Resources Program (MINRC) within the Southeastern Section of TWS and the Southeastern Association of Fish and Wildlife Agencies.

Richard D. Taber

2008

Richard D. Taber, or "Lucky Dick" as he wrote about himself, was a pioneering wildlife biologist whose extensive research on the ecology of deer species helped shape modern understanding of ungulate behavior and management in North America, shifting the field from simple game management toward a broader ecological and systems-based approach.

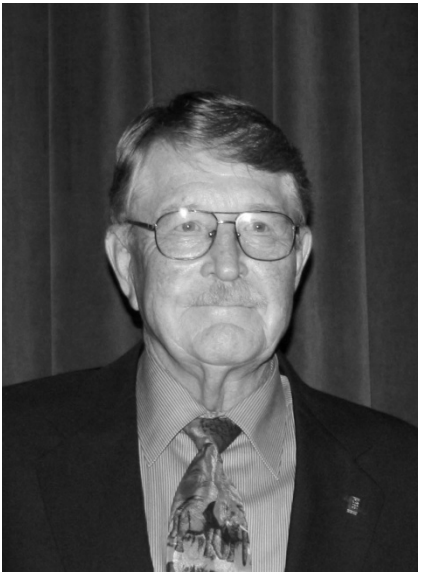
Taber was one of the last students of Aldo Leopold at the University of Madison in Wisconsin. He recalled he first became aware of Leopold in 1934 on his 14th birthday when a friend gave him a copy of Game Management; he set his sights on having Leopold be his advisor. He started his Master's degree under Leopold working on pheasants, and went on to receive his doctorate in zoology in 1951 from the University of California, Berkeley, under A. Starker Leopold. Taber's dissertation work resulted in many publications of which the best known is The Black-tailed Deer of the Chaparral. He joined the faculty at the University of Montana in 1955 but left in 1968 to start a new wildlife program in the College of Forest Resources at the University of Washington in Seattle.

During his career, Taber addressed key wildlife issues ranging from the reduction of elk in Yellowstone in the 1960s, herbivore impacts in alpine areas in National Parks, and pesticides, powerlines, sewage, fire and forest management impacts on wildlife. He served on prestigious panels convened by the Academy of Science, NSF and The Wildlife Society. His influence extended internationally through conservation efforts in Canada's far north, Poland, India, Taiwan, and Nepal among others. His keen interest in human and wildlife relationships lead to a co-authored book Wildlife Conservation and Human Welfare — A U.S. and Canadian Perspective at the age of 83.

Taber was recognized not only for his scientific contributions but for his integrity and mentorship. His students, who now have wildlife careers and oversee programs around the world, recognized him for his wealth of ideas, encouraging networking among peers, and the fun social activities at his home, which led to he and his wife, Pat, publishing their entertaining book entitled Parties without Pain.

Ronald F. Labisky

2009



Ron Labisky's professional contributions to the wildlife profession are many and include research and education. Also of note is his academic connection to Leopold as a student of Leopold's first grad student, Robert A. McCabe, also a Leopold Awardee (1986).

Ron was born in Aberdeen, SD and received a B. S. degree from South Dakota State (1955), M. S. (1956), and Ph. D. (1968) from the University of Wisconsin- Madison. His M. S. focused on waterfowl and his Ph. D. on ring-necked pheasants Phasianus colchicus stemmed from his extensive research in Illinois with the Illinois Natural History Survey.

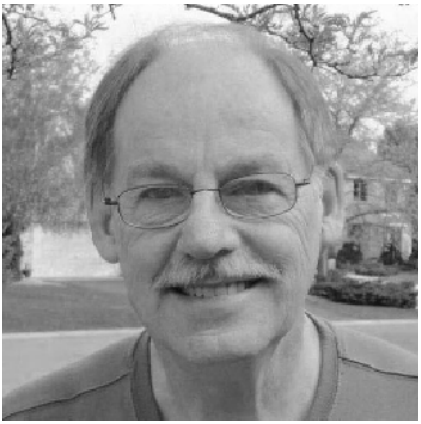
After completion of his M. S., Ron took a position as an Assistant Wildlife Specialist with the Section of Wildlife Research at the Illinois Natural History Survey in Urbana. Over a period of 20 years with INHS, serving under two Leopold Award Winners (Thomas G. Scott 1982, Glen C. Sanderson 1992), he was involved in extensive studies of pheasants and published numerous papers on pheasant biology and ecology in east-central Illinois where the was important pheasant range. He also did some important work on mourning doves Zenaida macroura and prepared a bulletin for the Illinois Department of Conservation (now Department of Natural Resources) that analyzed a long-term set of data on annual small game surveys. This extensive analysis and synthesis was an important contribution to Illinois wildlife management. He contributed to a 1969 Illinois 4-H wildlife conservation manual that was used extensively by many 4Hers for years. While at INHS he promoted from Assistant Wildlife Specialist to Associate Wildlife Specialist, and finally to Wildlife Specialist. During part of his tenure at INHS he was also an adjunct professor at Ohio State University.

In 1976 Ron took a position at the University of Florida where he remained until retirement. In Florida he served as Assistant Director/Acting Director of the School of Forest Resources and Conservation, Acting Chair of the Department of Wildlife and Range Science, and Professor of Wildlife Ecology and Conservation. He retired in 2003.

As a long-standing supporter of The Wildlife Society, Ron became a TWS Fellow in 2005.

Douglas H. Johnson

2010



Douglas H. Johnson devoted his professional career to the U.S. Department of the Interior, primarily at the Northern Prairie Wildlife Research Center in Jamestown, North Dakota. Over five decades, his research spanned waterfowl, cranes, grassland birds, and other taxa in a variety of ecological systems. As a statistician with ecological interests, he made broad contributions to both ecology and wildlife biometrics, shaping how ecologists conceptualize habitat selection — as a hierarchical process— and how they draw scientific inferences, advocating for appropriate use of indices, statistical replication, and alternatives to traditional null hypothesis testing. Dr. Johnson's influence extended far beyond his own research. Through collaboration, thoughtful mentorship, and guidance, he helped shape the direction of wildlife science and its application to conservation decision-making.

He earned a B.A. in Mathematics and Psychology from the University of Minnesota in 1965 and an M.S. in Statistics from the University of Wisconsin–Madison in 1969. While pursuing a Ph.D. in Statistics, he joined Northern Prairie as a statistician and in 1986 completed his Ph.D. in Zoology at North Dakota State University.

At Northern Prairie, Dr. Johnson held numerous leadership roles, including supervising the biological staff and acting as Assistant Director under two Directors. He also briefly served as Chief Biologist at U.S. Geological Survey headquarters. Following the birth of his first grandchild, he with his wife Judy relocated to the Twin Cities, as a Research Professor in the University of Minnesota's Department of Fisheries, Wildlife, and Conservation Biology, while still employed by Northern Prairie.

In addition to the Aldo Leopold Award, he has been honored by The Wildlife Society with an Award of Excellence from the Biometrics Working Group, two Wildlife Publication Awards, and the North Dakota Award from its North Dakota Chapter. The U.S. Department of the Interior conferred both Distinguished Service and Meritorious Service awards. His contributions were also acknowledged with awards from the U.S. Forest Service, Ducks Unlimited, and the American Statistical Association.

Kenneth P. Burnham

2011

Kenneth P. Burnham was a biometrician who successfully developed biologically realistic statistical models for wildlife applications. His broad expertise improved study design, especially estimation of population abundance and dynamics parameters. Statistical inference methods for ecological, wildlife, and fisheries studies, and data-based modeling of biological processes were his specialties. Later research was on theory and application of information-theoretic data-based model selection and multi-model inference.

Burnham received his B.S. in Biology from Portland State University in 1966 and his M.S. (1969) and Ph.D (1972). degrees in Statistics from Oregon State University. He worked as a Statistician, Migratory Bird and Habitat Research Laboratory, U. S. Fish and Wildlife Service, 1973-1975, then as biometrician, Western Energy and Land Use Team, U. S. Fish and Wildlife Service, 1975-1983, and as Area Statistician, USDA-Agricultural Research Service, South Atlantic Area, from August, 1983 until September, 1988. Burnham then joined the Colorado Cooperative Fish and Wildlife Research Unit at Colorado State University where he remained until retirement in 2009.

Burnham is known for his research providing a underpinning to many wildlife statistical problems, such as individual heterogeneity in mark-recapture sampling, estimation of survival rates from band recovery models as well as live recapture models and their merger, and distance sampling, with monograph-level publications on all these topics. His work has provided the foundation for many further extensions. Burnham was usually involved in the actual data collection allowing him to experience the realities of these methods. His patience with those he worked with was greatly appreciated.

Burnham's methodology has been used extensively in wildlife management controversies, e.g., status reviews of the northern spotted owl, salmon smolt survival in the Columbia River Basin, CITES Monitoring the Illegal Killing of Elephants, and as a participant of the Scientific Committee of the International Whaling Commission. The citation rate of Burnham's research is beyond extraordinary with >160,000 citations.

For Burnham's statistical accomplishments, he was selected as a Fellow of the American Statistical Society. For his federal service, Burnham received the Meritorious Service Award from the Department of the Interior. For his wildlife science accomplishments, he received the Leopold Award and Medal.

Daniel J. Decker

2012

Growing up pursuing fish and wildlife in his native Catskill Mountains, Dan took this strong early interest in wildlife and went on to earn a B.S. in natural resources at Cornell University. Dan continued to work and study at Cornell, where he earned M.S. and Ph.D. degrees in one of the early graduate studies of human dimensions of wildlife management.

Dan continued at Cornell as assistant, associate, and full professor; Chairman of the Department of Natural Resources; Director of the Cornell University Agricultural Experiment Station; Associate Dean of the College of Ag and Life Sciences; Director of the Office for Land Grant Affairs, and all the while directed or co-directed the Human Dimensions Research Unit, a flagship research entity for conservation social science, that has educated multitudes of wildlife professionals to integrate social sciences in contemporary wildlife management.

A life-long member of TWS, Dan is a Certified Wildlife Biologist and Fellow. He served as Chair of the Northeast Section of TWS, on TWS Council (Northeast Section) and as the 58th President of TWS (2003-2004). The list of awards Dan received includes among others: TWS Wildlife Publication Awards for an article and a book; Jack H. Berryman Award for Wildlife Damage Management; Leedy Urban Wildlife Conservation Award; Outstanding Wildlife Professional, NY TWS Chapter; Pearce Memorial Award, NE Section TWS; a SUNY Chancellor's Award for Excellence in Faculty Service; and, the George Bird Grinnell Memorial Award.

Although Dan was not the first to highlight the importance of the social sciences in conservation decision-making, he was arguably the most effective and productive scientist integrating human dimensions insights from the incubator of academia into the mindset of wildlife managers. He actively advised or consulted state and federal wildlife agencies as well as myriad NGOs across North America.

Although he employed an inconceivable work ethic, paired with generous compassion for others, Dan credits collaborations with students, colleagues, and agency personnel for his professional effectiveness. When asked about the most rewarding aspects of his career, Decker asserts, "The successes of my students and others I've played a part in mentoring really stand out."

Anthony R.E. Sinclair

2013

Tony Sinclair is best known for his seminal work on the African Buffalo and more broadly on the Serengeti ecosystem. His research in the Serengeti has resulted in 4 volumes (Serengeti I-IV) that define a scientific basis for management and he continues to provide advice to the Tanzania National Park Authorities. Tony has defined the value of national parks and protected areas as ecological baseline reserves from which we can document the consequences of development and human activity beyond park boundaries.

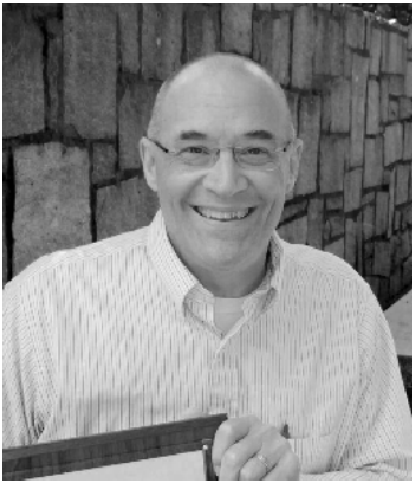
Tony was born in Zambia and was educated in the U.K receiving his D.Phil. studying under Niko Tinbergen. During his doctoral work at Oxford he began his studies in the Serengeti.

Since 1975 he has been at the University of Brish Columbia but has continued his work in Africa with research mainly in the Serengeti-Mara ecosystem of Tanzania (> 40 years) but also in Sudan and Kenya. He also collaborated with Charles Krebs in long-term research in the Yukon on forest ecosystems, including an experimental study of the lynx-hare cycle. Since 1992 he has become involved with a conservation experiment in Australia to prevent exotic predators causing the extinction of marsupials. Similarly, he has advised the New Zealand government research group, Landcare Inc., in conservation experiments to save endangered endemic birds.

Tony is a Fellow of the Royal Society of Canada and the Royal Society in the U.K. From 1996 to 2002 he was Director of the new Beaty Biodiversity Research Centre at UBC, an interdisciplinary group within the Faculty of Science interested in exploring issues concerning the conservation of biodiversity, including inventory, ecosystem processes, and mechanisms for conservation.

Robert J. Warren

2014



Robert J. (Bob) Warren was an inspiring mentor, educator, and scientist. Across his 35+ years as faculty member at the University of Georgia, Bob mentored hundreds of undergraduate wildlife students, supervised 64 graduate students, and dozens of colleagues. Bob taught numerous classes in wildlife management, wildlife physiology, wildlife field studies, graduate seminars, and human dimensions. His research focused on white-tailed deer management and physiology, wildlife contraception, human wildlife conflict resolution, and applied wildlife management problem solving in southeastern ecosystems. He worked with numerous state and federal agencies including the National Park Service, Fish and Wildlife Service, and Georgia Wildlife Resources Division. His students work across the United States in universities and state and federal natural resources agencies.

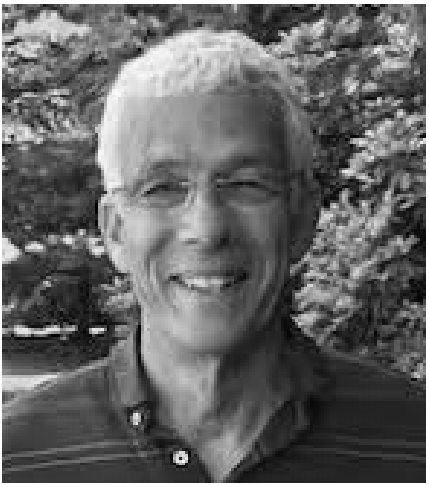
Bob was born in Oklahoma and earned his B.S. at Oklahoma State University and his master's and Ph.D. degrees from Virginia Tech. He is a Certified Wildlife Biologist; a member of The Wildlife Society (and state chapter and SE section); past-President of TWS (2002-2003) and a TWS Fellow (2009). He has served on numerous TWS committees and elected positions at multiple organization levels.

Bob did not solely excel at professional service; he excelled at teaching. He received the highest teaching award at the University of Georgia in 2000 and TWS Excellence in Wildlife Education Award in 2013. He was a Senior Teaching fellow at the University and received several superior teaching awards at the college or department level. In 1998, he received the Communication Award from the Berryman Institute at Utah State University for exemplary work on reducing human-wildlife conflicts including his work to edit a special issue of The Wildlife Society Bulletin focused on deer overabundance (1997).

In addition to teaching and professional service, Bob maintained a vigorous research program producing numerous graduate theses and dissertations in addition to 133 peer-reviewed publications, multiple technical agency reports, 192 presentations at professional conferences including numerous international venues, 6 invited seminars, and contributed several invited book chapters.

James D. Nichols

2015



James (Jim) Nichols is arguably the most influential researcher in animal population dynamics worldwide. Over his career he has relied on a transdisciplinary approach to address biological questions on dispersal, demographic strategies, and population estimation and growth. Jim's approach involves first identifying and addressing the right biological questions, then selecting or developing an appropriate quantitative tool to address the question(s).

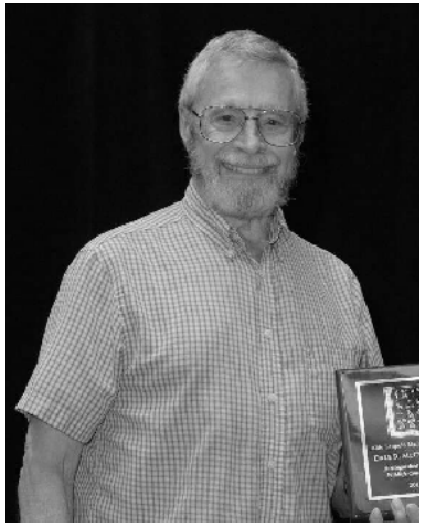
Throughout Jim's career he has greatly contributed to a wide range of methods that can be used to 'census' game and non-game wildlife populations. While the originality and breadth of Jim's contributions to wildlife ecology and conservation are evident, his contributions to conservation decision-making and his commitment to education and outreach, both within the US and abroad, are equally impressive. Notably, his leadership role in developing and advancing Adaptive Resource Management (ARM) and Structured Decision Making (SDM) helped bring these applications into the wildlife profession sooner than they otherwise would have, and with greater rigor.

Jim was a pioneer in the rigorous application of quantitative approaches to problem solving in wildlife management at the Patuxent Wildlife Research Center. Jim established close collaboration with the USFWS Migratory Bird Management Office (MBMO), focusing on the integration of analytical and monitoring advances into management decision making, initially with the annual process by which MBMO proposed hunting regulations for ducks and geese. Jim continued and expanded this focus to scale-appropriate statistical analysis and life-cycle modeling for migratory birds (including non-harvested species), resulting in numerous publications in quantitative, ecological, and applied journals.

Over his exemplary career, Jim has drawn a blueprint for how work on the science-management interface is approached, and this leadership has had an indelible influence on those with whom he has mentored and collaborated. It is no coincidence that many of the new conservation initiatives that are defining science-based and objective-driven management are led by those who worked under or alongside Jim. Indeed, the emerging decision-analytic focus that can be seen throughout the Department of Interior, in state wildlife agencies, and in other countries traces its origin to philosophies espoused by Jim and his protégés.

Dale R. McCullough

2016



A pioneer in behavioral ecology and qualitative population dynamics of ungulates, he wrote a classic book on the topic using the isolated white-tailed deer herd at the Edwin S. George Reserve in Michigan as a reference population. Besides ungulate research in North America he published papers and books on elk, feral horse, big-horn sheep, grizzly bear, grey wolf, coyote, and bobcat. He also studied population dynamics of kangaroos in Australia, sika deer in Asia, and the Amur leopard in Russia.

Born December 1933 in Sioux Falls, South Dakota, Dale received his B.S. in Wildlife Management from South Dakota State University in 1957, his M.S. in Wildlife Management from Oregon State University in 1960, and his Ph.D. in Zoology from the University of California, Berkley in 1966. He began his professional career prior to receiving his Ph.D. as an Acting Assistant Professor at Berkley. After graduating he became an assistant professor at the University of Michigan, then associate professor and Chairman of the Resource Ecology Program becoming full professor in 1974. He moved back to Berkley in 1980. At Berkley he served as vice-chair of the Department of Forestry and Resource Management from 1986 to 1990 and held the A. Starker Leopold Endowed Chair from 1985 until his retirement in August 2004.

McCullough has been influential in the training of future scientists that have gone on to make their own mark in the field of wildlife management and the environment having mentored more than 80 master's students, 24 Ph.D candidates, and countless others stemming from those that graduated through his mentoring.

Winifred Kessler

2017

Only the second woman recognized with the Leopold Memorial Award, Dr. Winifred "Wini" Kessler exemplifies accomplishment, respect, professionalism, and contributions in wildlife conservation. A dual citizen of the United States and Canada, she influenced strides by The Wildlife Society to stress cross-cutting natural resources conservation internationally and the role of diverse backgrounds and heritage to achieve those ends.

Dr. Kessler represents enviable achievements in academics and resource management. She was educated in zoology and range management (B.A. and M.S. – UC-Berkely) and range science (Ph.D.–Texas A&M University). She held faculty positions at University of Idaho and Utah State University and chaired the Forestry Program at University of Northern British Columbia. She worked as Alaska regional ecologist; national wildlife ecologist; and Alaska regional director of wildlife, fisheries, ecology, and watershed management for the U.S. Forest Service in developing new approaches, research, and policies to embrace wildlife benefits in forest practices implementation. Dr. Kessler has varied, long-term service with high-level conservation organizations and boards including Ducks Unlimited Canada, Habitat Conservation Trust Foundation, Wildlife and Hunting Heritage Conservation Council, and Boone and Crockett Club.

Dr. Kessler's service in prominent and challenging roles distinguished her globally. She has broad international experience and contributions in Costa Rica, New Zealand, Germany, Hungary, Russia, Mongolia, India, and Peru. Her endeavors especially benefited wildlife conservation programs and education in Canada and the U.S.

Wini displays pioneering and engaging spirit while caring for people around her. She served many roles within The Wildlife Society including Student Chapter advising, State and Provincial Chapter work, assisting TWS journals editing, and extensive involvement on TWS Council, including President of TWS in 2012-2013.

Key evidence regarding her professional features and capabilities were voiced in award nomination support letters such as "… it is contributions well beyond her academic and professional jobs that reflect her dedication and impressive record …" and "… I would call her a Master Bridge Builder in wildlife conservation". Wini is a distinguished role model in the wildlife profession.

Leigh H. Fredrickson

2018

Dr. Leigh H. Fredrickson's career spanned over 50 years. He specialized in ground-breaking research to advance wetland and waterfowl management and conservation.

Growing up in Iowa near the Missouri River, Dr. Fredrickson's love for wildlife and the outdoors followed him throughout his life. After earning his undergraduate and graduate degrees from Iowa State, he began his career at the Gaylord Memorial Laboratory researching wood ducks and hooded mergansers. For the bulk of his career (1967-2002), Dr. Fredrickson served as the Laboratory's Director, which is a collaborative venture between the Missouri Department of Conservation and the University of Missouri.

His work yielded groundbreaking findings important to the advancement of waterfowl and wetlands ecology while training scores of graduate students. Dr. Fredrickson took his students across the country to expose them to diverse landscapes and habitats and study complex wetland management problems. During his career he worked with wildlife professionals at over 300 national wildlife refuges, as well as on state and private wetland complexes in all 50 states. He is widely acknowledged as one of North America's most highly respected and knowledgeable waterfowl and wetland ecologists.

A member of The Wildlife Society since 1959, Dr. Fredrickson was honored with the 2018 Aldo Leopold Memorial Award. With his family at his side, Dr. Fredrickson's acceptance speech moved many to tears in a moving tribute to his professional colleagues, mentors, and especially his students. Dr. Frederickson acknowledged the critical role of his mentors in shaping his professional ethic: "I was fortunate to be mentored by the best of the best, including five recipients of the Aldo Leopold Memorial Award—Milton Weller, Paul Errington, Lucille Stickel, Frank Bellrose and Thomas Baskett."

During this address, he emphasized the importance of observation, as can only be accomplished by hours in the outdoors: "…biologists need to invest 10,000 hours on a bucket in the wild to understand wetland ecology and management." In an era of highly advanced technology available to today's students and professionals, Dr. Fredrickson clearly recognizes the irreplaceable value of direct observation of nature in the marshes, forests, and prairies of this Continent.

W. Alan Wentz

2019

Born in 1946, Dr. Wentz spent much of his youth hunting, fishing, trapping and observing nature along the Scioto River in Ohio. This led to a 40+ year career helping conserve wildlife and their habitats.

As Director of the Fisheries and Wildlife Division at the National Wildlife Federation, Dr. Wentz and his staff led efforts to require non-toxic shot for waterfowl hunting. Ultimately lead shot in waterfowl hunting was banned nationwide in 1991. He also played a key role in development and implementation of the North American Wetlands Conservation Act of 1989 (NAWCA). Since then, more than 3,300 NAWCA projects have contributed to conserving more than 32.6 million acres of wildlife habitat across North America. Alan was key in development of "Swampbuster" provisions in the 1985 Farm Bill, resulting in the loss of wetlands to agriculture dropping nearly 90% from 1992 through 1997.

Under his leadership as Assistant Secretary for the Kansas Department of Wildlife and Parks, the Department developed a partnership with Ducks Unlimited and The Nature Conservancy for major wetlands restoration in Cheyenne Bottoms, now the largest wetland in the interior United States. It has been designated a Site of Hemispheric Importance by the Western Hemisphere Shorebird Reserve Network and also a Wetland of International Importance under the Ramsar Treaty.

As Chief Conservation Officer for Ducks Unlimited (DU), Dr. Wentz provided primary leadership in international collaboration with DU Canada and DU de Mexico to conserve waterfowl habitats throughout North America. Under his direction, the three organizations developed the International Conservation Plan that guides DU's conservation work across the continent to this day.

Dr Wentz served as 47th President of The Wildlife Society. Never boisterous, impolite, seeking the limelight, nor reticent to do the right thing, Dr. Wentz's career demonstrated the value in showing up, being positive, persevering through failure, and humbly framing conservation policy work as an area of strong bipartisan agreement. While he received many prestigious awards throughout his career, he and his family are most proud of his being named to the first class of the Kenton Ohio City Schools Hall of Fame in May 2018.

John Organ

2020

Born in Northampton, Massachusetts in 1954, John F. Organ spent the majority of his childhood hiking, camping, hunting, and fishing among the wooded hills of the Connecticut River. It was during these formative years that he honed his tremendous skills as a naturalist and generated a deep personal love of wild creatures and wild country that eventually led to his distinguished career in natural resources conservation.

After graduating from Northampton High School in 1971, John earned a Bachelor of Science Degree from the University of Massachusetts, Amherst (UMass) in 1975 followed by Masters and PhD Degrees from UMass in 1983 and 1989, respectively. His first advisor was Dr. Fred Greeley, Aldo Leopold's final graduate student.

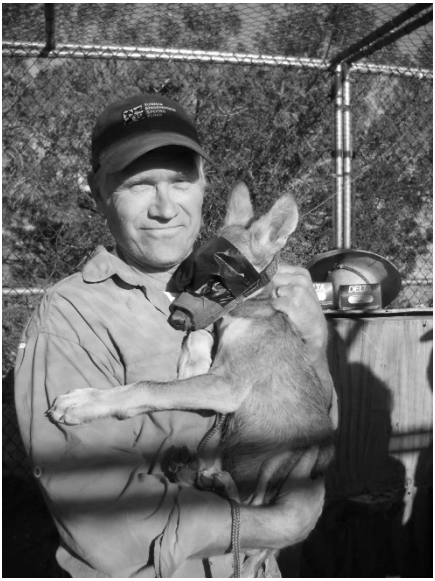
John began his professional career with the Massachusetts Cooperative Wildlife Research Unit as a remote sensing specialist. He later joined the U.S. Fish and Wildlife Service, and eventually served as Chief of the Northeast Region Wildlife and Sport Fish Restoration Program. In 2014, John was appointed Chief of the U.S. Geological Survey's Cooperative Fish and Wildlife Research Unit Program. The Coop Program was initiated in 1935 by conservation luminary and fellow Leopold Medalist Jay N. "Ding" Darling and John, as Chief, led a nationwide effort to refocus the program to better address state fish and wildlife agencies' research priorities. He was also a tireless advocate for retaining and/or increasing congressional funding for the unit system.

In addition to his agency duties, John conducted a multitude of research projects across the globe, ranging from determining population status and habitat selection of Canada lynx in Maine, to estimating the contribution of spotted-neck otters to ecotourism in Tanzania, to modeling species distribution of the Andean bear in Peru.

Lastly, John is widely recognized as one of the principal authors of the North American Model of Wildlife Conservation. This ground-breaking historical compilation of wildlife conservation into a simple to understand "model" has provided a common philosophical foundation for every hunting and conservation group in North America and will continue to influence national wildlife policy far into the future.

Michael K. Phillips

2021



Mike Phillips received his B.Sc. in Ecology, Ethology, and Evolution from the University of Illinois in 1980 and his M.Sc. in Wildlife Ecology from the University of Alaska in 1986. He has served as the Executive Director of the Turner Endangered Species Fund and advisor to the Turner Biodiversity Divisions since he co-founded both with Ted Turner in June 1997. Since inception they have stood as the most significant private effort in the world to redress the extinction crisis through reintroduction projects to benefit imperiled species.

Starting in 1981 Mike worked for the U.S. Fish and Wildlife Service and National Park Service leading historic efforts to restore red wolves to the southeastern US and gray wolves to Yellowstone National Park. He conducted research on the impacts of oil and gas development on grizzly bears in the Arctic National Wildlife Refuge, predation costs for gray wolves in Alaska, black bear movements in northeastern North Carolina, and red fox ecology in Australia. From 1995 through 2020 Mike conceived and led the successful effort to restore gray wolves to western Colorado via a citizen-initiated ballot measure. It was the first time in history that direct democracy had been used to secure a restoration mandate for an endangered species.

Mike has authored hundreds of project reports and over 70 publications and delivered over 200 public presentations for conservation organizations and professional conferences.

In 2006 Mike was elected to Montana House of Representatives where he served until 2012 when he was elected to the Montana Senate through 2020. His legislative work focused on climate change and energy policy, and he was responsible for passing the nation's most comprehensive legislation on geologic sequestration of carbon. This led to an invitation from the White House in 2009 to work directly with the Obama Administration and the US Senate on comprehensive green energy and climate change legislation.

John L. Koprowski

2022

John Koprowski's is recognized for his research focusing on the ecology, conservation, and management of biodiversity through community-based approaches in the United States, Mexico, Peru, Colombia, India, Nepal, China, Mongolia, Malaysia, South Africa, and many other international locations. Koprowski's experiences led him to join the Haub School of Environment and Natural Resources as Dean and a Wyoming Excellence Chair in the Fall of 2020.

A native of northern Ohio, Koprowski possesses a lifelong passion for our wild and working lands. Koprowski earned a Bachelor of Science degree from Ohio State University, Master's degree from Southern Illinois University, and PhD from the University of Kansas. He served as a Professor of Wildlife Conservation and Management, Associate Director, and Director at the University of Arizona's School of Natural Resources and the Environment. Koprowski also directed the Desert Southwest Cooperative Ecosystems Studies Unit and the Mount Graham Biology Programs, and held affiliations with the Institute of the Environment and the Genetics Interdisciplinary Degree Program.

As Dean of the Haub School, Koprowski has taught undergraduate courses in wildlife conservation and management, and graduate courses that address the complexity of environmental and conservation challenges in human-dominated landscapes. He has taught courses in Ecuador, Mongolia, China, and Italy. Koprowski brings a passion for interdisciplinary teaching that is rich in experiential learning to immerse students in the challenges facing our society, and to empower students to make a difference.

With over 250 peer-reviewed articles and 7 books, Koprowski and his 60+ graduate students have worked to provide funding and data-informed solutions to numerous conservation challenges. These efforts have led to Koprowski's election as a Fellow of The Wildlife Society, the American Association for the Advancement of Science, the Explorer's Club, and the Linnean Society of London. Koprowski also holds an honorary faculty appointment with the University of Insubria in Italy, is an emeritus professor at the University of Arizona, and serves as an Expert Speaker on wildlife conservation for the US Department of State.

Koprowski has a passion for addressing important challenges and an appreciation for interdisciplinary approaches to complex environmental issues.

Carol Chambers

2023

For over 35 years, Carol Chambers' leadership and mentoring have dramatically changed careers, projects, and people. She continues to be at the forefront of those who championed human diversity in the wildlife profession and the critical role it plays in advancing wildlife conservation. For Carol, her students, many of whom have gone on to advance wildlife conservation in their own careers, are her legacy.

Carol is an inspiring teacher whose love of wildlife science and management is infectious. She has advised over 40 graduate students at Northern Arizona University (NAU) and increased awareness and appreciation of wildlife for hundreds of undergraduate students. She was recognized as NAU's School of Forestry's Teacher of the Year in 2021, Xi Sigma Pi Alpha Pi Chapter Teacher of the Year in 2025, and NAU's "Most Influential Faculty Member" in 2016 and 2019.

Her research focuses on habitat relationships (e.g., small mammals, bats, snag dynamics) and provided insight into more effectively managing forests for multiple resources. Carol's research on bat species and their habitats has influenced international conservation efforts. In Nicaragua, her hiring of local field assistants inspired a new generation of wildlifers and increased local understanding of the importance of bat diversity.

Carol continues to do the difficult work of promoting the value of human diversity in the wildlife profession with no road map in order to ensure that the profession is welcoming, relevant, and successful in the 21st century. She was instrumental in creating and nurturing the Women in Wildlife (WOW) community. Carol helped author and co-edit the book: Women in Wildlife Science: Building Equity, Diversity, and Inclusion, the content of which helped widen the lens of what it means to be a wildlife professional.

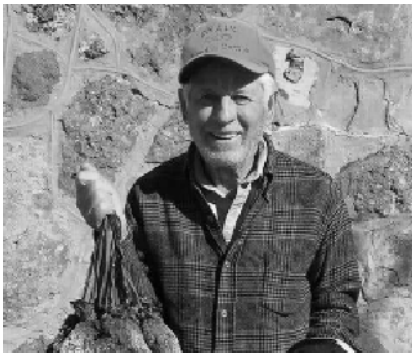
Carol received her B.S. in Biology in 1979 and her M.S. in Forestry in 1989 from the University of Kentucky. She earned her Ph.D. in Wildlife Sciences, minoring in Forest Sciences, at Oregon State University in 1996. Carol has published approximately 85 peer-reviewed journal articles, 12 book chapters, and edited 2 books. She served TWS as Southwest Representative to TWS Council and as its 75th President (2020-2021).

Maurice Hornocker

2024

Maurice's groundbreaking 60-year career focused on carnivores and their role in maintaining balance between herbivores and their environment. He emphasized the importance of carnivores' social organization and the makeup of individuals within that framework. His work documented that individuals are capable of self-regulation of the population through a system of territoriality. These findings contributed to theoretical and practical knowledge and were important applications to management of many species. His cougar research led to a major paradigm shift from viewing cougars as bountied vermin, to one of science-based management through regulated hunting.

Growing up in Iowa, he received his B.Sc. and M.Sc. from the University of Montana. Following grizzly bear work with the Craighead brothers, he envisioned and achieved the impossible -- the first to study the enigmatic cougar in the rugged central Idaho wilderness (1964). He completed his Ph.D. at the University of British Columbia (1967), and became leader of the Idaho Cooperative Research Unit at the University of Idaho. For 18 years, he conducted pioneering studies on cougars, bobcats, ocelots, wolverines, badgers, river otters, leopards, and jaguars. Recognizing the importance of "wilderness as a laboratory" expressed by Aldo Leopold, he spearheaded the University's purchase of the Taylor Ranch (1970) to serve in perpetuity as a wilderness research station.

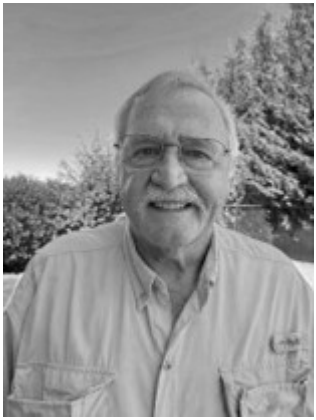


He founded the Hornocker Wildlife Institute (1985) that conducted long-term research on Siberian tigers, Amur leopards, New Mexico cougars, and cougars and wolves in national parks. The Institute merged with the Wildlife Conservation Society in 2000, with Maurice as Senior Scientist until his retirement in 2005. Over 150 scientific publications, 8 books, and articles and photographs in National Geographic, Smithsonian, and National Wildlife resulted from these studies. In his 90s, he continues contributing through his nonprofit Selway Institute; helping establish a quail research ranch in Texas; and publishing his memoir in 2023.

Widely respected, he mentored a legion of carnivore researchers (self-described “Hornocker Disciples”) with the foundation that "all true wisdom comes from direct experience" (Mao Tse-tung). They cite his humility, his ability to spotlight great passionate people, and credit his guidance as incredibly significant in their professional and personal lives.

R. Terry Bowyer

2025



Terry Bowyer is an internationally recognized wildlife biologist whose four-decade career has made significant contributions to the ecology, management, and conservation of large mammals. His research has focused particularly on ungulates and their predators, including social behavior, habitat selection, migration, reproductive ecology, predator-prey relationships, climate effects, and sustainable wildlife management. Terry is especially known for advancing understanding of sexual segregation in ungulates, demonstrating that males and females can have substantially different ecological and habitat requirements, with important implications for wildlife research and management.

Terry was born and grew up in Ojai, California, a small town located in the Topatopa Mountains near the Los Padres National Forest. He is a graduate of Humboldt State University (BS '70, MS '76) and the University of Michigan (PhD '85) and began work with moose in Maine, where he held the position of Assistant Professor of Wildlife Science at Unity College. In 1986, he joined the University of Alaska, Fairbanks, eventually becoming Professor and Department Chair of Biology and Wildlife, as well as Deputy Director of the Institute of Arctic Biology at UAF. He moved on to Idaho State University in 2004, where he served as a Professor and Department Chair of Biological Sciences until 2015.

His scientific influence extends internationally through collaborations across North America, Europe, and Russia and a body of more than 200 publications, including books on ungulate ecology and sexual segregation. Equally important is Terry's legacy as an educator and mentor. He advised 33 MSc and PhD students and served on committees for 45 graduate students. Many of his former students have become university professors, researchers, educators, and wildlife managers. He was also a strong advocate for women in wildlife science and helped foster their advancement within the profession.

Terry's honors include election as a Fellow of the American Association for the Advancement of Science and the Arctic Institute of North America, the C. Hart Merriam Award, Distinguished Moose Biologist Award, O.C. "Charlie" Wallmo Award, TWS Fellowship and Honorary Membership, the Arthur S. Einarsen Award, and seven TWS Outstanding Publication Awards (1 book, 4 monographs, and 2 articles).

Terry's enduring legacy combines influential science, dedicated professional service, and exceptional mentorship, with his impact continuing through the many students and colleagues he has inspired.

Estella Bergere Leopold

1951

Alvira Estella Bergere was born 24 August 1890 to a prominent New Mexico family whose history in the southwest dated to the 1500s. She worked as a teacher before marrying Aldo Leopold on 9 October 1912. Estella became highly skilled in wildlife and plant identification, hunting, and archery. She held the Wisconsin title for women's archery for 5 years straight and placed 4th in the archery nationals held in Chicago in 1930. Estella taught archery in the physical education department at the University of Wisconsin. She and Aldo raised their family to love the outdoors and to be curious and observant about the natural world. All 5 children chose a career path as researchers and naturalists, with 3 achieving highest distinction as members of the National Academy of Sciences.

Aldo Leopold's biographer, Curt Meine, described Estella as "Aldo's most trusted critic and sounding board." She participated fully in the family's outdoor and conservation activities, including restoration of the abused and barren land they purchased in Wisconsin's sand country. After Aldo's untimely death, Estella and the Leopold children worked together to bring Aldo's unfinished manuscripts to publication. This included Aldo's seminal book, A Sand County Almanac. In the 3 decades following Aldo's death, Estella continued the restoration work on the Wisconsin property and was active in a variety of conservation and environmental causes. In 1951 The Wildlife Society presented Estella with the Aldo Leopold Memorial Award in memory of her life's partner.

SPONSORS

The following organizations contributed to the research, writing, design, and printing of the first edition (1950-2005) of this commemorative brochure. Estella Leopold's biographical sketch as well as those for 2006-2024 Leopold Memorial Award winners were provided by members of The Wildlife Society's Heritage Committee.

THE ALDO LEOPOLD FOUNDATION

Fostering the land ethic through the legacy of Aldo Leopold

P.O. Box 77
Baraboo, WI 53913
(608) 355-0279
www.aldoleopold.org

In 1982, Leopold's children, Starker, Luna, Nina, Carl, and Estella, all respected conservationists themselves, established the Aldo Leopold Foundation in response to the growing interest in their father's legacy. For more than twenty years, the Aldo Leopold Foundation has promoted the care of natural resources and fostered an ethical relationship between people and land.

Aldo Leopold viewed the land ethic as a product of social evolution, forming in the minds of a thinking community. Accordingly, the Foundation works daily to nurture that evolution through its mission: "Fostering the land ethic through the legacy of Aldo Leopold." As the primary advocate and interpreter of the Leopold legacy, the Foundation manages the original Leopold farm and now-famous shack, serves as the executor of Leopold's literary estate, and acts as a clearinghouse for information regarding Aldo Leopold, his work, and his ideas. The shack, a re-built chicken coop along the Wisconsin River where the Leopold family stayed during weekend retreats, continues to serve as the heart of the Foundation's programs. Each year, thousands of visitors are inspired through tours, seminars, and workshops in the same landscape that deeply moved Leopold.

Our educational outreach programs help people understand and accept their responsibility for the health of the land. Our stewardship initiatives and research programs encourage ecological and ethical use of private and public land, and promote an understanding of the total land community. Leopold's words have stirred many to a personal ecological awareness. The Foundation's goal is to share the legacy of Aldo Leopold and to awaken an ecological conscience in the people of our nation. As long as we care about people, land, and the connections between them, we have hope for sustainable ecosystems, sustainable economies, and sustainable communities.

THE NATIONAL CONSERVATION TRAINING CENTER

U.S. Fish & Wildlife Service
National Conservation Training Center
698 Conservation Way
Shepherdstown, WV 25443
(304) 876 7900

The National Conservation Training Center trains and educates natural resource managers to accomplish our common goal of conserving fish, wildlife, plants, and their habitats. As the "home of the Fish and Wildlife Service," NCTC brings exceptional training and education opportunities to Service employees and others.

NCTC is a gathering place where conservation professionals from all sectors can learn together in an environment especially designed for them. Government, non-profit organizations, and corporations can come together in a non- threatening, collaborative setting to learn new skills, share perspectives, break down barriers, establish networks, find common ground, and move toward field-based solutions built on consensus and mutual interest.

Located approximately 75 miles from Washington, D.C., the NCTC campus provides full-service residential facilities, complemented by professional staff, cutting-edge programs and curricula, and the most advanced technology available.

THE WILDLIFE SOCIETY

Excellence in wildlife stewardship through science and education

25 Century Blvd, Suite 505
Nashville, TN 37214
(301) 897-9770
www.wildlife.org

The Wildlife Society (TWS), founded in 1937, is an international organization of wildlife professionals and students dedicated to excellence in wildlife stewardship through science and education. For nearly 70 years, The Wildlife Society has worked to improve wildlife conservation by advancing the science of wildlife management, promoting continuing education of wildlife professionals, and advocating for science-based wildlife policy.

Society publications are considered the definitive source of information on wildlife science and conservation practices, and are sought out by professionals and students alike. Our certification program constitutes official recognition that a wildlife biologist meets the Society's rigorous standards for education, experience, and ethics. The primary objective of the program is to provide the public, private clients, and employers with access to qualified professionals and reliable advice in matters concerning wildlife resources. The Society's popular annual conference is an important forum for networking and continuing education for those active in wildlife conservation. Its diverse and compelling topics regularly attract 1500 to 2000 people. The Society's 50 chapters, 90 student chapters, and15 working groups provide our 8,200 members with many opportunities for involvement in TWS activities.

Through our wildlife policy program, The Society is recognized as a key player in influencing wildlife legislation, agency regulations, and conservation initiatives affecting the pressing wildlife issues of today including: sustainable use of wildlife and ecosystems, management of public lands, conservation on private lands, recovery of endangered species, restoration of degraded habitats, and management of abundant wildlife. Membership in TWS provides opportunities to network, learn, grow professionally, influence wildlife policy, and reach out internationally. Please join us!

For more information on TWS Aldo Leopold Memorial Award Winners, see the referenced articles in The Wildlife Professional

Name / Year won Award	TWP Issues
Ian McTaggart Cowan / 1970	4(2): 76; 10(4): 50-51
Tony J Peterle / 1990	6(3): 40-41
Jack Ward Thomas / 1991	6(3): 8-9; 10(1): 44-45; 10(4): 52
James Teer / 1994	6(2): 75
Gary White / 2000	6(3): 22-23
John Mumma / 2001	16(6): 62-63
Paul R. Krausman / 2006	
James E. Miller / 2007	1(4): 45; 3(1): 64-66; 16(2): 58
Richard D. Taber / 2008	2(4): 65; 10(2): 47
Ronald F. Labisky / 2009	3(4): 75; 5(1): 74-76
Douglas H. Johnson / 2010	4(4): 75-76; 6(1): 73-74
Kenneth P. Burnham / 2011	
Daniel J. Decker / 2012	16(3): 14-15
Anthony R.E. Sinclair / 2013	9(1): 38-39
Robert J. Warren / 2014	10(5): 48-50
James D. Nichols / 2015	11(5): 55-58
Dale R. McCullough / 2016	12(5): 56-59
Winifred Kessler / 2017	13(2): 28-32
Leigh H. Fredrickson / 2018	14(2):28-32
W. Alan Wentz / 2019	14(2):16-17; 15(2): 28-32
John Organ / 2020	16(1): 28-33
Michael K. Phillips / 2021	17(2): 26-30
John L. Koprowski / 2022	18(2): 28-34
Carol Chambers / 2023	19(2): 55-59
Maurice Hornocker / 2024	
Terry Bowyer / 2025	