



IN MEMORIAM

George Curtiss West, 1931–2016

Stanley Senner

National Audubon Society, Portland, Oregon, USA
ssenner@audubon.org

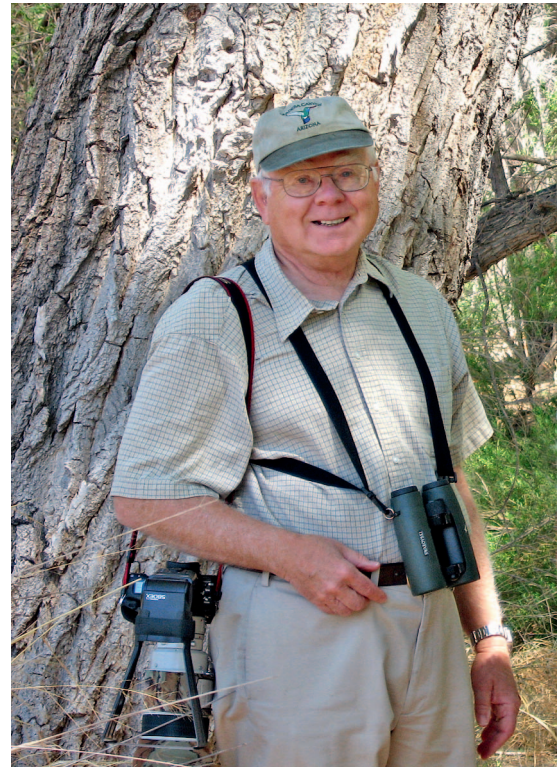
Published March 29, 2017

Inspired by a fourth-grade teacher in his hometown of Newton Center, Massachusetts, George Curtiss West (May 13, 1931–August 31, 2016) enjoyed a lifelong personal and professional interest in birds. As recently as the year before his death, he published *North American Hummingbirds: An Identification Guide* (2015) and was coauthor of a paper on Orange-crowned Warblers (*The Wilson Journal of Ornithology* 127:29–42).

George attended high school at the Vermont Academy in Saxtons River, Vermont, and remained in that state for his undergraduate education, graduating in 1953 from Middlebury College with a zoology major. He earned an M.S. (1956) and a Ph.D. (1958) in zoology and physiological ecology, respectively, at the University of Illinois at Champaign-Urbana, under the tutelage of pioneering physiologist and ecologist Charles Kendeigh. His dissertation on the energy balance of Tree Sparrows in relation to migration was based on field research conducted at Churchill, Manitoba, and combined his interest in birds, physiology, and ecology—a combination that characterized much of his professional work.

George conducted postdoctoral research at the University of Illinois under Kendeigh (1959) and at the National Research Council of Canada in Ottawa under J. S. Hart (1960). Following three years (1960–1963) as an assistant professor of zoology at the University of Rhode Island, in 1963 he landed at the University of Alaska Fairbanks (UAF), where he would spend the rest of his academic career.

Laurence Irving, a pioneer in comparative physiology, was the founding director of UAF's Institute of Arctic Biology, and George was among the first invited to help establish what would become a premier research institution in Arctic biology, physiology, and ecology. George started as an assistant professor and attained the rank of professor of zoophysiology in 1968. On sabbatical leave in 1971–1972, he was a Fellow at the Max Planck Institut für Verhaltensphysiologie, in Erling-Andechs, West Germany, where he conducted research on circadian rhythms in birds with H. Pohl and J. Aschoff. George was director of the Biome Center, which sponsored the International



George Curtiss West in White Mountains, Arizona, 2014.
Photo credit: Ellen West

Biological Program's tundra biome studies, from 1970 to 1979; and director of the Institute of Arctic Biology from 1974 to 1977. During the last four years of his career at UAF (1980–1984), he served as vice president for academic affairs and institutional planning for the university's statewide system of higher education. He retired as emeritus professor of zoophysiology in 1984.

George was author or coauthor of more than 80 scientific papers, most concerning the metabolism, thermoregulation, energetics, nutrition, ecology, and migration of birds at high latitudes. Redpolls and Willow Ptarmigan were frequent subjects, but George was broadly interested in adaptations to Arctic and Subarctic environments. His

body of research includes significant work on a wide variety of birds as well as on mammals (such as caribou, Dall sheep, walrus, and seals) and on the structure and function of tundra and taiga ecosystems.

George believed that his most important scientific contribution was to establish that “in the extreme cold, small birds are able to raise and sustain their metabolic rate through shivering at five times basal for many hours overnight.” He considered his work on “shivering and heat regulation” with J. S. Hart to be among his most satisfying experiences, and his 1965 paper on “Shivering and Heat Production in Wild Birds” (*Physiological Zoology* 38:111–120) is his most frequently cited publication.

George was always innovative in his research. For example, at a time when radio tracking of wildlife involved placing large collars on the necks of moose, he purchased brightly colored hackle feathers from craft shops and glued them to the tails of Lapland Longspurs so that he could follow individual birds as they migrated north in spring along the Alaska Highway (*The Auk* 85:639–653).

As the Cold War began to thaw, George led the first expedition of scientists to Far Eastern Soviet Siberia and worked to establish cooperative research projects in tundra ecology at Magadan and Chaun Bay in what was then the Soviet Union (1974–1981). In 1975, he established a permanent UAF field station at Toolik Lake, Alaska (north of the Brooks Range), where groundbreaking research on climate change in the Arctic has been conducted; the site is now part of the National Science Foundation’s Long Term Ecological Research Network. George also served as chair of the executive committee of the Alaska division of the American Association for the Advancement of Science (1976). He was elected a Fellow of the American Ornithologists’ Union in 1976.

George’s academic career put him in the field throughout Alaska, in leadership roles helping to build key research institutions there, and at meetings and conferences with professional colleagues around the world. In

many respects, however, George’s life and career—especially his contributions to the appreciation and conservation of birds—blossomed after his 25 or so years in academia.

In 1985, George and his wife, Ellen, moved to Homer, Alaska, where they chose a house on a bluff overlooking Kachemak Bay. Here George emerged as a renaissance man, pursuing his interests in and talent for music (the recorder), art, photography, boating, fly-fishing, and public education. He led an effort in Homer to upgrade and accredit the Pratt Museum of the Homer Society for Natural History, founded the Kachemak Bay Shorebird Festival (1992), and established a now long-running shorebird monitoring project, served as an advisor for the development of a visitor center for the Alaska Maritime National Wildlife Refuge, and wrote identification and bird-finding guides. He was especially proud of the fact that he helped persuade the Homer City Council to protect an area of sedge flats and mudflats on the Homer Spit for the benefit of migrating shorebirds. For his stewardship of wetlands in Homer, George was recognized by the national Partners in Flight program in 1996.

In 1996, George and Ellen moved to Green Valley, Arizona, where he learned the finer points of banding hummingbirds from Steve and Ruth Russell, among others. George ultimately processed more than 14,500 hummingbirds, founded the Hummingbird Monitoring Network, served as a board member for the Friends of Madera Canyon, and provided—mostly free of charge—thousands of meticulous bird and natural-history illustrations and photos for use in the educational materials and publications of many nonprofit organizations and government agencies. His artwork and educational efforts helped introduce many people outside scientific circles to nature and birding.

George is survived by his wife of 36 years, a brother, four sons, a stepson, and five grandchildren.

Memorials Editor: Ted Anderson, ted020@centurytel.net