

CLARENCE COTTAM, 1899-1974 (From a photograph taken in 1961)

IN MEMORIAM: CLARENCE COTTAM

ERIC G. BOLEN

A distinguished career ended with the death of Clarence Cottam¹ in Corpus Christi, Texas on 30 March 1974. He was long respected for his contributions to wildlife management and a host of related fields in conservation and natural history. But ornithology, whether research or simply a day afield with binoculars, always remained his foremost interest.

Clarence was born in the farming country near St. George, Utah, on 1 January 1899, one of several children issued of hardy pioneer stock. Like many a farm boy, he worked hard with chores and visited closely with nature. He later extolled the virtues of living near rugged mountains where birds of several life zones were available for study. Florence Merriam Bailey's "Handbook of the birds of the western United States" was his bible in those days, and the diligent young Cottam was soon its master. It was already clear that ornithology would be the nucleus of his career.

Cottam's early education was completed at Dixie College, the University of Utah, and Brigham Young University. He received a B.S. (1926) and M.S. (1927) from Brigham Young. He earned his Ph.D. at George Washington University (1936) while employed full time as a government biologist. His own teaching experience included service (1922-25) as a principal in a consolidated grade and high school in Alamo, Nevada, where his bride, Margery Brown, also taught. At Brigham Young University he capped an earlier stint as Instructor (1926-29) with an appointment as Dean of the College of Biology and Agriculture (active in 1954, on leave of absence, 1955-58). While Dean he taught an upper level course in ornithology. In later years he was appointed an Adjunct Professor at Texas Tech University and Texas A&I University/Corpus Christi. He valued the latter positions, and donated long runs of Auk and other journals to Texas Tech. His estate donated much of his library to Texas A&I University/Corpus Christi and established a scholarship in his name there as well.

It is fair, I think, to say that this man of so many accomplishments made a twofold mark in science, first, as a biologist-administrator in what is now the U.S. Fish and Wildlife Service in the Department of the

¹ The bearer of no middle name, Cottam was occasionally endowed editorially with the middle initial "M" (see 1963, Trans. North Amer. Wildl. Conf. 28: 28, for example).

Interior, and secondly, as the Director of the Rob and Bessie Welder Wildlife Foundation.

His government career began in 1929 when he joined the then U.S. Bureau of Biological Survey in Washington, D.C. as a Junior Biologist. There Cottam later came to the notice of "Ding" Darling, the famous cartoonist and conservationist. The two men soon formed an admiration for each other that was to last far beyond their government service. Their affection was genuine, as was their mutual concern for waterfowl. As Director of the Survey, Darling charged Clarence with a good measure of the responsibilities concerning duck hunting regulations. Cottam rose quickly, taking the position of Senior Biologist and Chief of the Section of Food Habits in 1934 and later as Assistant to the Director and Chief of the Division of Wildlife Research (1945–46). He finished his 25-year tenure as Assistant Director in 1954.

After a year's active service as Dean at Brigham Young University, Cottam responded to the challenge of becoming the first (1955) Director of the Welder Wildlife Foundation, where I met him in 1962. The will of the late Rob H. Welder of Sinton, Texas, left just under 8000 acres of rich wildlife habitat and the oil royalties thereon dedicated to the furtherance of "wildlife research and education." It remained for Cottam and Assistant Director W. Caleb Glazener to transform this bequest into a viable program. They achieved unparalleled success; in 1972 the Rob and Bessie Welder Wildlife Foundation was presented with The American Motors Conservation Award, ample measure of the vision and application of Mr. Welder's wishes. Nearly 150 students from 39 universities throughout North America and elsewhere have thus far attained graduate degrees under the Foundation's sponsorship. The research activities had no boundaries, covering a spectrum from soil science to the parasites of deer. Cottam delighted in the breadth of the Welder program, but he held a special endearment for those projects dealing with bird life. Many students worked on the immediate grounds, others were far afield; but all were selected on their abilities, character, and the merits of their research. Cottam had no greater pride than to extoll the achievements of Welder students and their contributions to zoology, botany, wildlife management, conservation, and range management. He held the position as Director until his death, thus spanning a period of nearly 20 years (1955-74).

Cottam's affiliations were numerous; a partial list includes: American Ornithologists' Union, Wilson Ornithological Society, Cooper Ornithological Society, The Wildlife Society, Wildlife Management Institute, American Fisheries Society, National Audubon Society, American Society of Range Management, American Society of Mammalogists, Na-

tional Parks Association, Ecological Society of America, Soil Conservation Society of America, Wilderness Society, Sierra Club, American Institute of Biological Sciences, National Wildlife Federation, Southwestern Association of Naturalists, and Sigma Xi.

Many organizations benefited from his leadership; those for which he served as President include: The Wildlife Society (1949–50), Texas Ornithological Society (1957–58), National Parks Association (1960–63), and the Council of Southwest Foundations (1962–63). He was also Chairman of the Board of Trustees of the National Parks Association (1963) and a Trustee of both the J. N. (Ding) Darling Foundation, Inc. and the Rachel Carson Trust.

He was a leader in many organizations and held fellowships in several prestigious scientific societies, among them the A.O.U. Notable awards include: Laval University Medal (1952), the Leopold Medal from The Wildlife Society (1955), Utah State University Distinguished Service Award (1957), National Audubon Society Distinguished Service Medal (1961), Conservation Service Citation of the National Wildlife Federation (1964), Conservation Service Award of the Department of the Interior (1965), Distinguished Service Award of the Texas Chapter of The Wildlife Society (1971), Talmadge Scientific Achievement Award from Brigham Young University (1971), "Eminent Distinction" status in the National Register of Prominent Americans and International Notables (1971), and Distinguished Service Award of the Texas Ornithological Society (1972). Complete lists of his other honors and associations are available in such publications as the various "Who's whos" and "American men of science."

Cottam's contributions are legion. Among those in printed form, the most notable is perhaps his landmark, "Food habits of North American diving ducks" (1939). This work was based on his doctoral studies at George Washington and he was rightfully proud of it. I once naively asked if he had in fact personally examined each of the nearly 7000 duck stomachs in the sample, as he was then in charge of a staff dealing with food habits. He replied, "Every D-A-M one!", and I thereby learned early in our association of his deep commitment to scientific study. A copy of this bulletin, with his holograph citation to me, is one of my most prized possessions.

Some 250 other publications carry his name as author, co-author, or editor. Many of his earlier papers dealt with the food habits of birds, in keeping with his successive government positions involving food habits research. These ran the gamut from Roseate Spoonbills and other uncommon species to his several thorough papers about Brant and the eelgrass decline. He co-authored a chapter on food habits in Stoddard's

classic "The Bobwhite Quail" (1931), two chapters in "Birds in our lives" (1966), one in "Waterfowl tomorrow" (1964) with Ira N. Gabrielson, three sections on waterfowl habitat in the second volume of Trippensee's "Wildlife management" (1953), and co-edited with James B. Trefethen the book, "Whitewings" (1968). He also co-authored with Herbert Zim the "Insects" volume in the widely available Golden Nature Guide series.

Other contributions include his activities on special advisory committees, most importantly those for the Secretary of the Interior dealing with Wildlife Management in the National Parks (1963), Predator and Rodent Control in the United States (1964), and The National Wildlife Refuge System (1968); these were in turn each known as "The Leopold Committee," and Cottam was much committed to their work and subsequent recommendations.

The 1930s were rich in the history of wildlife management, and Clarence was a force in much of its making. The combined plagues of the dust bowl and the depression witnessed a host of conservation activities, not the least of which were major additions to the national wildlife refuge system. TVA and other water conservation projects created new habitats for wildlife and the selection of specific sites as refuges often fell to Clarence's discretion. Many of these became waterfowl sanctuaries, but Cottam's eye never missed the concomitant benefits to nongame species that refuges might provide. He delighted in this work, and I can now think of no greater tribute than to formally designate a suitable area as the Clarence Cottam National Wildlife Refuge, and I call here for the appropriate action in support of such a measure.

Clarence delighted in his recollections of government service. The old Bureau of Biological Survey apparently had its share of characters, and Clarence entertained many a listener for hours with his rich assortment of stories. He told of one unsuspecting companion, given to heavy drinking in the field, who received a Cottam-prescribed dose of laxative in his lunch on the premise that the resulting biological activities were more in keeping with the work at hand than the regular pickling of one's mind. On reflection it seems Clarence was himself one of the more colorful characters in the Bureau. There are many other stories, of course, and I regret that I lacked the foresight to tape these as the resulting oral history would have been a splendid and priceless anthology.

To assert that Cottam was a stalwart supporter of Rachel Carson and her environmental concerns is a gross understatement. His fight against the abuses of pesticides is too well-known to bear repeating here, but it was constant and dedicated. One needs only to recall the horrors of the *first* fire ant program to understand Cottam's ire at a *second*,

this time with Mirex. "Scalping the patient to cure the dandruff" was a favorite jab of his at the excesses of this and similar schemes. On a trip to Mexico just months before his death, we passed through the once cotton-rich agricultural area around Tampico. Cottam noted that the gins were in idle disrepair. Succeeding generations of insects had simply adapted to the steady deluge of chlorinated hydrocarbons to the point where further attempts at cotton production were futile, and the abandoned gins were ample proof. He suggested that such a hard-learned lesson might be wasted on agriculturalists north of the border.

Cottam's watchdog attitude towards the Army Corps of Engineers was a passion combining vocation and avocation; he welcomed a fight on any terms, but especially if it involved defending his beloved wetlands. He facetiously characterized the Corps' working motto as, "If it's wet, drain it; if it's dry, dam it." I cannot recount here the many times he scolded the Corps, but in recent years he especially fought the continuing havoc wrought to the Cache River in Arkansas where tens of thousands of Mallards winter each year. In the name of increased soybean production, irreplaceable oak bottoms for these and other birds were being reduced to barren concrete-lined channels, and Cottam was incensed into action. As but one positive aftermath of his stand on these affairs, he joined an advisory group to the Corps at the invitation of a general who had heard that Clarence was "just a bit critical" of their program. His impact on the Corps' more damnable projects—the double meaning is intended—cannot be fully measured, but the Corps was painfully aware that a champion for the environment was surely on guard whenever a dredge or bulldozer began scarring mother earth.

Clarence was the soul of integrity, and with his quick mind he could be a formidable adversary irrespective of any pressures involved. During his government years, he conducted some 85 public hearings on waterfowl regulations, a task that often took him into some mighty hostile country. There, as always, he rigorously protected the waterfowl resources from abuse. His stand on baiting was particularly contrary to the wishes of the duck hunting fraternity, but he waded into every confrontation with undiminished vigor, and when needed, a penetrating remark. Birds and other wildlife quite simply came first. His concern was otherwise nonpartisan and he made no secret of his view that Democrats and Republicans were too often the actual menace suffered by wildlife.

In the field and laboratory Cottam was a master of the genus, a skill he developed from years of work with food habits. He could identify a surprising array of plants and animals, including many invertebrates—especially those eaten by birds—at the generic level with relative ease,

an ability that always impressed his companions. He knew the birds thoroughly, of course, and could discuss the finer points of racial characteristics in a vast number of species. He found the avifauna of southern Texas particularly intriguing, and regularly carried interesting specimens with him to Washington for one reason or another. (The advent of searching packages at airports never proved too troublesome, but it did provide for some amount of appropriate joking about little old men and birds by the security staff.) Birding was a constant passion, and with extensive travels over the years, he was elected to the 600 Club with species to spare.

Clarence Cottam was as indefatigable as anyone I know. Even in his later years, when I came to know him, he could maintain a pace that might weary younger men. It was a matter of pride, of course, but whatever stiffness or fatigue he may have felt went unmentioned, and the work went on. Last winter, at 75, he scrambled about the steep slopes of southern Veracruz checking mist nets with a student sponsored by the Foundation. This was his last fieldwork before his death, but if the effort took any toll, it was not apparent—he was simply ecstatic to be involved, and handling some rain-forest birds for the first time was not the least of his delight.

Cottam was deeply involved with both the spiritual and administrative matters of his church. Born to a Mormon family, he quickly developed a strong and abiding faith that was to sustain him always. His church service included a 2-year missionary assignment early in his life, an overseas educational study in 1954, and a presidential post in a regional administrative unit. Cottam's faith asked that he practice certain restraints sometimes foreign to his companions (e.g. abstinence from tobacco, coffee, and liquor) yet he never lectured or admonished those about him who felt otherwise, although abuse of alcohol was a special frustration for him as he saw more than one colleague suffer from its excesses.

He didn't cuss much but was habitually given to a verbally spelledout "D-A-M!", when needed. The expletive was frequently applied to those who abused the environment, and almost as often to his ill-fitting false teeth. The latter plagued him much of his adult life as he had fallen victim at 21 to a traveling dentist bent on extraction as a cureall. On those occasions when Cottam was caught without his false teeth in place, he made it plain that the D-A-M things fitted his pocket better than his mouth. The Cottam wit was seldom at a loss for a worthy target.

Over the years I have conversed with many persons, some of them now rather prominent, who made a point of recalling their indebtedness to

Clarence for his patient encouragement in bygone years.² He especially championed students and their particular needs for guidance and moral support, and his correspondence with them reflected a deep human understanding of young people. Nor was he ever too preoccupied in his office to put aside the voluminous correspondence he maintained and visit unhurriedly with callers. Ouite likely even a casual visitor would be treated to an extensive tour of the Foundation and its groundsreplete with an intimate conversation on the region's birdlife. He was something of a daredevil on the Foundation's unpaved roads, taking every mudhole and slough as a personal challenge to his driving skills (often completely forgetting his car's more limited abilities and the physics of traction). As a result, he made a fine distinction between being "stuck" and "detained." But the long walks home when he failed (that is, "stuck") never fazed him other than the familiar D-A-M!, and his accounts of these forced marches were a constant source of humor for all concerned.

Cottam had experienced relatively few health problems, notably diverticulitis and periodic problems with pneumonia, and all who knew him marveled at his extraordinary vitality. But March 1974 was different. He had just returned from one of his frequent trips complaining of abdominal discomfort. He entered the hospital for observation on 4 March, experiencing continuing pain. Finally exploratory surgery was performed, but the diagnosis, cancer, left no real chance for lasting recovery and he steadily lost ground. He is survived by his wife of 53 years, and four daughters, Mrs. Ivan Sanderson of San Francisco, Mrs. Douglas Day of Salt Lake City, Mrs. Margery Osborn of Amherst, Massachusetts, and Mrs. Dwayne Stevenson of McLean, Virginia—and a patriarch's dream, a host of grand- and great-grandchildren.

Finally, the editor has permitted me a brief personal note. Clarence Cottam was forever in good humor, as much as any man, and the twinkle in his blue eyes served notice that wit and intellect held forth. His energies for causes and his compassion for others were limitless. I loved the man, and looked to him as one might a second father, and, bless his heart, he left me his gold watch, as one might to a son.

Rob and Bessie Welder Wildlise Foundation, P. O. Drawer 1400, Sinton, Texas 78387. Accepted 1 August 1974.

² Me too, ever since 1930 when he helped me over many a rough spot in the old Bureau of Biological Survey.—Ep.