IN MEMORIAM: THOMAS DEARBORN BURLEIGH

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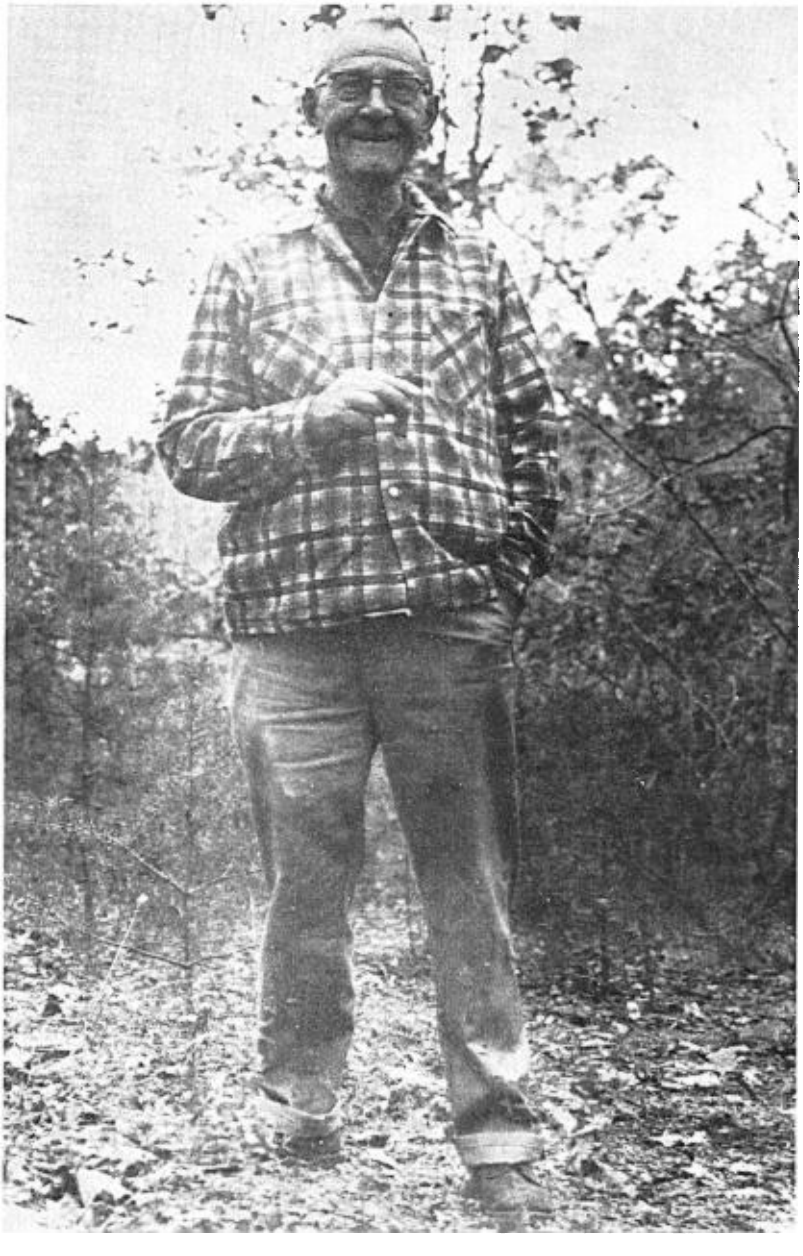
FEW people are so completely dedicated to the study of birds or devote so much of their lives to that activity as did Thomas Dearborn Burleigh. He was born in Pittsburgh, Pennsylvania, 24 November 1895, son of Dr. and Mrs. William Thomas Burleigh. An interest in studying birds in his native western Pennsylvania hills developed at an early age and when 15 years old he published his first paper, entitled "Yellow Warbler" (1910, Oologist 27: 117). The paper described a Yellow Warbler's nest in which a cowbird egg and an egg of the warbler had been covered over with nest lining material above which three well-incubated warbler eggs reposed. In his second paper "Nesting birds of Harmarville, Pa." (1911, Oologist 28: 155) Burleigh listed the dates, contents, and localities of the nests of 31 species of birds that he had examined. His mention of four eggs found in a Broad-winged Hawk's nest 75 feet from the ground indicated considerable agility in climbing trees in those days. Three other notes by Burleigh that appeared in The Oologist in 1911, all on nesting birds, were the forerunners of a lifelong progression of publications numbering 171 titles, 3 of book length. He shared the pages of The Oologist in that early period of his life with Richard C. Harlow who later became his friend and instructor in egg collecting and later still a famous football coach at Harvard. In all of his teenage writings, Burleigh showed a keen interest and enthusiasm in observing the habits of birds during his daily "tramps," as he called them, in the western Pennsylvania hill country.

During his student days at Pennsylvania State College, where he obtained a Bachelor of Science degree in 1919, he published accounts of the birdlife in central Pennsylvania, including the first record for the state of the Boreal Chickadee. Before completing his studies at Penn State, the scene of Burleigh's bird observations shifted suddenly in 1918 from Pennsylvania to southwestern France where he served during World War I with the American Expeditionary Force in the 10th Engineers. It was a forestry regiment engaged in cutting pilings, ties, and other necessary items of lumber. Even under those wartime conditions, he was able to find time for birding, as is evidenced by his 17-page paper "Bird life in southwestern France" (1919, Auk 36: 497).

In 1920 Burleigh's activities shifted again to the Pacific Northwest. While securing his Master of Science degree in forestry from the University of Washington in Seattle, he made extensive notes on the birds of that region, including the first Eastern Fox Sparrow to be identified from



THOMAS DEARBORN BURLEIGH, 1895-1973

Thomas D. Burleigh, age 60, at the Washington Biologists' Field Club headquarters on Plummers Island in the Potomac River near Washington, D.C., April 30, 1960.

that state. While still a student at the University of Washington, a summer job in a logging camp in western Montana provided the opportunity to study the birds there. His observations in the vicinity of the University of Washington appeared much later as "Notes on the birds of northwestern Washington" (1929, Auk 46: 502; 1930, Auk 47: 48). During his stay in Seattle, he profited from association with the veteran Puget Sound ornithologists D. E. Brown, J. Hooper Bowles, and E. A. Kitchen—to whom he gave credit in his publications.

Immediately following graduate school in 1920, Burleigh moved to the southeastern United States where he obtained a teaching job at the College of Agriculture, Athens, Georgia. From that position, he rose to become Chairman of the School of Forestry at the time of its founding in the University of Georgia where he remained until 1930. On August 2, 1924 he married Dorothy Barrett of Athens, and his family life began.

Burleigh's delight in his new birding experiences in the southland is well illustrated by his enthusiastic and graphic description of finding nests with eggs of Swainson's Warbler in the difficult terrain of a southern swamp. He spent the summer of 1922 in a forestry camp at Brasstown Bald in the mountains of northern Georgia with resulting notes on the breeding birds of that area (1925, Auk 42: 70). Those notes that recorded the extension southward of the known breeding ranges of several "northern" species of birds into Georgia clearly demonstrated Burleigh's keen interest in bird distribution and the value of his aptitude for locating nests and eggs. In the accounts of his experiences in the south (nine articles between 1925 and 1928, with five in 1927 alone!) he repeatedly evinced special interest in the differences in nesting habits of birds there compared with the same species he had studied earlier in Pennsylvania.

In 1930, Burleigh was employed as a forest wildlife biologist by the Bureau of Biological Survey in the United States Department of Agriculture (predecessor of the Fish and Wildlife Service, U.S. Department of the Interior), and moved to the Appalachian Forest Experimental Station at Asheville, North Carolina. Forest wildlife study assignments in various national forests in the Appalachian Mountains enabled him to continue his earlier interest in the southward extension of distribution of northern birds, evidenced by a note on the summer occurrence of the Savannah Sparrow in West Virginia and Maryland and the first breeding record of the Song Sparrow in South Carolina. He also had an opportunity to bring out a compilation of his notes on the breeding birds of Center County, Pennsylvania (1931, Wilson Bull. 43: 37) based in part on his earlier work there while in college. By 1931 Burleigh had determined that Brewer's Blackbird was a regular and common migrant in the mountains of North Carolina. He found that species in Georgia for

the first time in 1932. Fieldwork conducted intermittently on Mt. Mitchell, North Carolina, from 1930–34 resulted in a published report on its bird life (1941, Auk 58: 334).

In 1934 Burleigh described his first new subspecies of bird. He named it the Athens Yellowthroat, *Geothlypis trichas typhicola,* based on specimens that he had collected during his 10-year sojourn in Athens, Georgia. It was the beginning of a long list of descriptions of new subspecies that were to flow from his pen in later years. This new development of Burleigh's ornithological interest into the more technical aspects of taxonomy was made possible by the transfer of his headquarters in 1934 to Washington, D.C. where he had access to adequate specimen material for comparison in the United States National Museum collections. During that period he made field trips to various localities along the middle Atlantic seaboard to collect birds, sometimes with Arthur H. Howell or Allen J. Duvall, who were also employed in the Washington office of the Biological Survey at that time.

Thomas Burleigh's next move was to the Gulf coast where he was stationed by the Biological Survey at Gulfport, Mississippi in 1937. His chief mission was to study the relationship of birds to the reseeding of longleaf pine. He dutifully carried out those studies and published one paper on the subject (1938, Occ. Pap., Southern Forest Exp. Station 75: 1). But his heart was not in that type of work and during that period he published a number of papers on the distribution of birds in the southeastern states, which he explored in his spare time with Arthur H. Howell and George H. Lowery, Jr.; also on his trips to Mexico with George M. Sutton and John B. Semple. Semple financed the Mexican trips, which were highlights of Burleigh's ornithological experience.

Although Burleigh's main assignment in the early 1940's continued to be investigating the relationship of birds to pine regeneration, in recognition of his expertise as a collector—a skill usually lacked by wildlife biologists—he was detailed during summers to assist Harold S. Peters on a comprehensive study of the birds of Newfoundland. This project was part of Peters' overall responsibility as Atlantic Flyway Biologist of the U.S. Fish and Wildlife Service. In the course of that investigation, Peters and Burleigh described several new subspecies of birds from Newfoundland based primarily on Burleigh's collecting and taxonomic study of his specimens during occasional visits to the U.S. National Museum. I first made his acquaintance at that time, but was associated officially with him during the rest of his government career. A book, "The birds of Newfoundland," by Peters and Burleigh, excellently illustrated in color by Roger Tory Peterson, was published subsequently by the Department of Natural Resources, Province of Newfoundland, in 1951.

Tom Burleigh returned to Georgia in 1945 to complete his studies of the birds of that state, begun 20 years earlier while at the School of Forestry in the University of Georgia. The new assignment was to implement an arrangement between the Georgia Department of Natural Resources and the U.S. Fish and Wildlife Service to complete investigations terminated by the death of Arthur H. Howell in 1940. Two years of full-time effort were required by Burleigh to finish the fieldwork, in addition to his 10 years of part-time study from 1920–30, and several more years to compile the data and complete the manuscript. He was aided in his writing by a preliminary manuscript and bibliography prepared by Arthur Howell before his death.

The book, "Georgia birds," was published in 1958 by the University of Oklahoma Press. It was beautifully illustrated in color by Burleigh's long-time friend, George Miksch Sutton, who painted the birds in natural Georgia habitats while living for a time at the home of Burleigh's and Sutton's mutual friend Herbert Stoddard on the Sherwood Plantation in Thomasville. "Georgia birds" is probably Burleigh's most significant contribution to ornithology. The fieldwork was thorough for an area the size of Georgia and embraced the work of many helpful and sympathetic ornithological colleagues, including Herbert Stoddard, J. Fred Denton, William Griffin, Frederick V. Hebard, David W. Johnston, Robert A. Norris, Eugene P. Odum, Gilbert R. Rossignol, Ivan R. Tompkins, W. L. McAtee, and Arthur H. Howell.

The period of Burleigh's life while completing his work on the manuscript of "Georgia birds" was probably the most active and diversified of his entire career. During that period, 1945 to 1958, he not only was completing his investigations in Georgia and writing the book but also was conducting fieldwork in Newfoundland in collaboration with Harold Peters and publishing descriptions of new subspecies from there; taking a brief collecting trip to Cuba with Frederick C. Lincoln and Allen J. Duvall as part of a cooperative international study of bird migration through Cuba, looking toward a migratory bird convention (which never took place) between that country and the United States; and conducting extensive fieldwork in Idaho interspersed with studies at the U.S. Nation Museum of material collected from that state.

The Idaho project began in 1947 with the transfer of Burleigh's headquarters from Georgia to the Cooperative Wildlife Research Unit at the University of Idaho in Moscow. For the next 10 years, in addition to completing his several writing assignments, he studied and collected the avifauna of that state that was then relatively little known ornithologically compared with other parts of the United States.

In September 1958, Burleigh was transferred for the second time to

Washington, D.C. where he served as Chief of the Bird Section of the Bird and Mammal Laboratories in the Fish and Wildlife Service. His office was located conveniently next to the bird collections in the U.S. National Museum. While in Washington, until his retirement from the service in 1961, he devoted much of his time to writing up the results of his explorations and collecting in Idaho including the descriptions of several new avian subspecies from that region. It would have been out of character for Burleigh not to get out in the field with his shotgun at least twice a week to sample the local birdlife. That activity he continued in the general area of Alexandria, Virginia, where he lived during his Washington tour of duty. The results were the inevitable short paper "Recent records of interest from Northern Virginia" (1962, Raven 33 (2): 3).

Thomas Burleigh retired from government service in 1961 with his report on Idaho birds still incomplete, but he continued to work on it at home in Scottsdale, Arizona; Spokane, Washington; Reno, Nevada; and Monterey, California. After an apparent loss of interest in completing his Idaho manuscript, the opportunity for publication came through the initiative and effort of his son-in-law, George D. Frazier, who interested the Caxton Printers of Caldwell, Idaho, in publishing the work in book form. The result, "Birds of Idaho" (1972), illustrated by photographs, some in color of varying quality, shows the haste of a last minute effort to get the uncompleted manuscript in shape for publication. It was a disappointment to those who knew Tom and were familiar with his previous works. The old spark of enthusiasm was missing, and it was far inferior to the Georgia book, particularly in the introductory sections that were completely devoid of any appraisal of the avifauna of Idaho from ecological or zoogeographical points of view. In fact the book gave the impression of a lack of interest on the part of the author in presenting his certainly considerable knowledge of the birds of Idaho.

During his "retirement" years, Burleigh continued his lifelong practice of collecting birds as is attested by the continuing, although progressively smaller, flow of specimens to the collections of the National Museum and the associated short notes on new occurrences in the journals. In his later years Tom acquired an additional ornithological interest, birdbanding; so in one form or another he continued active in field ornithology to the end of his life.

Tom Burleigh's unusual qualities as an ornithologist and interesting personality traits, which I came to know rather well over the years of association with him, are demonstrated by the tales recalled by his associates.

George Sutton in his "Mexican birds, first impressions" (1951, Nor-

man, Univ. Oklahoma Press, p. 139) gives a vivid description of Tom's intensity in tracking down an unknown bird sound. Both ornithologists, unaware of each other's presence, were trying to locate the same bird that was making the sound. Sutton recalls: "How startling it was down in that nether world of nettles and vines and thorns to hear a twig snapping, to turn with gun half raised, to see Burleigh creeping forward, stalking the very creature I was after. Startling it was to be sure; more than this it was deeply revealing, for in my friend's movements there was something of a jaguar's self assurance and poise, something of a great snake's supple noiselessness, something of a deer's sensitivity to things underfoot. Had I not been deeply interested in the unknown creature we were both after I should gladly have given up the chase and observed primitive, predatory man."

Burleigh might have been called a compulsive collector. I became well aware of that characteristic when Tom was assigned to make a breeding bird population study with me in connection with evaluating the effects of DDT spraying on bird life in Georgia. In the course of our preliminary inspection of the area where the bird population was to be determined, I was startled to hear the report of Burleigh's shotgun behind me. When I complained to him that we were supposed to census the birds, not to shoot them, he ruefully admitted that he could not resist collecting a bird that represented a new breeding season record for that part of Georgia.

David Johnston, who as a youngster in Atlanta in the early 1940's Burleigh taught to make a bird skin, recalls an amusing story about his tutor. While on the Gulf coast of Mississippi, Burleigh sighted a Vermilion Flycatcher beside a pond on a farm. The woman in the farmhouse whose permission he asked to collect the unusual bird consented until she learned that it ate flies, then reneged. Burleigh tried to shoo the flycatcher off her land without success then offered the woman five dollars, which she accepted as compensation for the flies it would no longer catch. But alas, when Burleigh looked in his wallet he found that he did not have the five dollars. He went all the way back to town to get the money, paid the woman, then discovered that the Vermilion Flycatcher had disappeared! This incident was especially unusual because Burleigh by dogged persistence usually got the birds he went after.

Another of Tom's characteristics was his enjoyment of anyone's concern over hazards of fieldwork. George Sutton recalls such an incident while collecting with Tom at Bay St. Louis, Mississippi. Sutton remarked about the size of the water moccasins, which were a surprise to him. Tom replied characteristically: "We just kick 'em aside." I, who have had

similar experiences in the field with Tom, can hear him say those words with that throaty chuckle of his and typical grin and twinkle of the eye.

Although giving the impression of being quite casual, Tom tended to follow a definite routine. Seymour H. Levy, who spent much time with Burleigh in the field in Idaho, recalls that Tom's daily routine, whether at work or on vacation, was to rise and be in the field at daybreak, collect six desirable specimens before noon, retire to his work table, put the six birds up in his immaculate fashion and spend the rest of the afternoon writing up the daily field notes. Levy recalls that Burleigh's self-discipline was demonstrated also by his ability to confine his cigar smoking to just three a day, one after each meal, which seemed more of a ritual than a craving for tobacco. Allen Duvall, who collected birds with Burleigh in the Washington, D.C. area at various times as well as in Cuba, commented on the regularity of Tom's cigar smoking after meals and extending to collecting periods immediately after eating. Duvall remembers Tom's interesting habit of sitting crosslegged on the ground to tend to a specimen he had collected. To have both hands free to handle the bird, Tom laid the lighted cigar carefully on the side of his boot heel.

With the passing of Tom Burleigh, American ornithology lost one of its most dedicated and knowledgeable investigators of avian distribution, whose accomplishments brought him the honor of being elected a Fellow of the A.O.U. in 1948. Tom was a friendly, quiet, unassuming person who was never so happy as when in the field studying and collecting birds or meticulously preparing their skins for subsequent study. His enthusiasm in discovering new distribution records or previously unknown geographical variation in his specimens was boundless. He enjoyed sharing his findings and skills with others, particularly younger people, many of whom he taught to identify birds and prepare specimens. I, personally, felt it a refreshing experience to be with Tom in the field and found his friendly good humor and enthusiasm contagious.

Thomas Burleigh died at Monterey, California, August 24, 1973. He is survived by his wife, Dorothy; two sons, Dr. Thomas D. Burleigh, Jr., of Grand Junction, Colorado; and Judge William B. Burleigh of Carmel, California; and a daughter, Mrs. George D. Frazier of Boise, Idaho. There are thirteen grandchildren. He was buried at Athens, Georgia, Mrs. Burleigh's home and the scene of much of Tom's most productive life in pursuit of ornithological knowledge.

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