We conclude that: (1) Illinois hunters in 1938 were mistaken in their belief that ducks were in poor flesh because of a scarcity of food. (Perhaps these hunters were killing unusually large numbers of juveniles which average from 4 to 9 per cent lighter than adults.) Because of mobility, ducks undergo little change in weight with adverse tood and weather conditions in a limited area. (2) Canvas-backs are the heaviest of the ducks that migrate through Illinois, followed by Mallards and Black Ducks, Pintails, and Gadwalls; Green-winged Teals are the lightest. (3) Very few Mallards or Black Ducks weigh over three pounds; no ducks of these species were found to weigh four or five pounds.

LITERATURE CITED

BALDWIN, S. PRENTISS, AND KENDEIGH, S. CHARLES

1938. Variations in the weight of birds. Auk, 55: 416-467.

ELDER, WILLIAM H.

1946. Age and sex criteria and weights of Canada Geese. Journ. Wildl. Manage., 10: 93-111.

Носнваим, Н. А.

1942. Sex and age determination of waterfowl by cloacal examination. N. Amer. Wildl. Conf. Trans., 7: 299-307.

KORTRIGHT, F. H.

1942. The ducks, geese and swans of North America. 476 pp. (Amer. Wildlife Institute, Washington, D. C.)

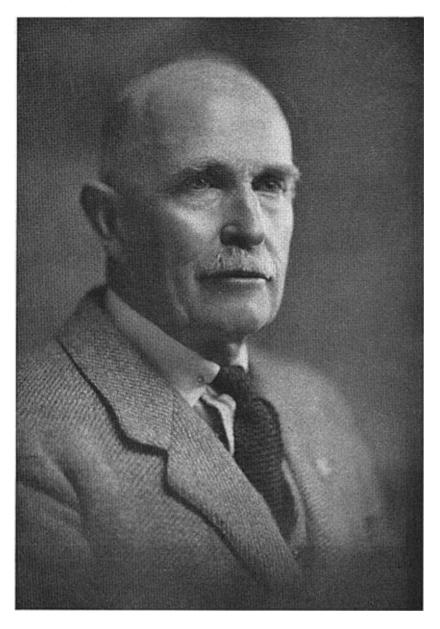
Illinois Natural History Survey Urbana, Illinois

ALLAN BROOKS, 1869-1946

BY HAMILTON M. LAING

Plate 15

A REVIEW of the life of the late Allan Brooks reminds us anew that naturalists, like poets, are born—or made very young. Scion of a naturalist father, William Edwin Brooks, of Newcastle-on-Tyne stock, engineer by profession but ornithologist in heart, young Allan had the blood. Named after one of his father's greatest friends—Allan O. Hume—he seems to have climbed out of the cradle into an environment which in tenderest years shaped a course that through life never wavered. Destiny marked him for ornithology. In a biography covering the greater part of his life (Condor, Jan.—Feb., 1938) Marjorie Brooks has given us almost all the salient points about Allan's early days that probably we shall ever know, and everything points to the fact that he was born with a genius for biological study, a vast



allan Brooks

thirst to know, and the physique and determination to make use of his talents.

For those of us who knew intimately the man of later years, it is easy to understand the enthusiasm with which as a boy not yet even in his teens, at school in England (1873-1881) where he was sent from his birthplace in India, he investigated the bird life of the Northumberland moors, listened to the conversation of such men as Henry Seebohm, or took instruction in egg-blowing and butterfly collecting from John Handcock. Or later the joy with which he applied himself to the new world of birds in the woods of Ontario (1881-1887) when his father, quitting India, moved his family there. American ornithological science was then very much younger than it is today and an entrancing field of study opened for both father and son, though doubtless it was one that did not mate well with pioneer farming. However, the father seems to have been content to let young Allan follow his natural bent and so the boy studied birds a great deal more than he did agriculture. In those six grand years, the young naturalist learned to make good skins, even of Passenger Pigeons. He learned also the pleasures of duck shooting, which he was never to forsake, and on fascinating trips to Lake Ontario with his father, met at Burlington Bay the then numerous waders, a tribe of birds that all through his life were of absorbing interest to him.

When, in 1887, W. E. Brooks moved his family from Milton, Ontario, to a new farm at Chilliwack, British Columbia, Allan, now a youth of eighteen, found another new world of natural history ready for conquest. From this time on he adopted the West. For though in 1891 the father sold the Chilliwack place to return to a new Ontario farm at Mount Forest, and Allan had to follow a year later, he left his heart in British Columbia. Three years later, in 1893, he returned. His bondage to agriculture—truly Pegasus hitched to a plow!—was ended forever. And it seems he had left behind him the only period in a long life in which he worked at anything he did not want to do.

Now followed a period that until about 1905, while it was outwardly a time of drifting, was really a stern apprenticeship to his life work. Of this time he later said jokingly that he was then most concerned over earning a dollar a day so as to get all the hunting he wanted (both birds and big game) including one big game hunt a year in some new region. He got the hunting and he kept solvent, and he held his independence and with it the right to study Nature in whatever form it appealed to him. But every expedition was more than a hunting trip; always bird study was the real mainspring, and in addition to collecting specimens, he made drawings of them—both in black and

white and watercolor. From boyhood years he had never let this natural faculty go fallow. To finance this program he resorted to collecting zoological material in the summer, particularly small mammals, and to trapping fur in the winter. The valley of the Fraser River in the vicinity of Sumas Lake was then rich in forms of small mammalian life and it is a certainty that Brooks was skillful in its capture. But at that time markets for such material were few and prices for specimens pitifully low. He searched for them everywhere. Up in the Lihumption alpine basin, nearly 5000 feet above the Chilliwack Valley a blazed tree stands today showing a record of exploration of A. Brooks and E. Brooks (his brother) dated 1895. There were no trails up that mountain then.

His quests in this period took him from the Fraser to the Okanagan in 1897 for two years; the Cariboo, Horsefly region, 1901; Penticton, winter of 1901–1902; Comox, east side of mid-Vancouver Island, 1903; Quatsino, northwest side of Vancouver Island, 1904. Next year he moved from Sumas in the Fraser Valley to the Okanagan to make his future home there at The Landing.

From about the turn of the century, a few of Brooks's bird drawings had caught the editorial eye in such outdoors magazines as 'Recreation,' but it was about 1906, when he was given his first commission to illustrate scientific bird works, that he really showed his mettle. From this time forward there was but one pattern to his life, interrupted only by the years of the first World War. New commissions merely meant hard work to be followed when possible by new birding expeditions farther afield.

It was in the few years previous to the war that he concluded his big game hunting with several trips into his beloved mountains: the Gold Range, Selkirks and Rockies, and such places. His trophies were brought home and mounted by himself! Thus, when his one-time cabin later blossomed into a more splendid home, the walls of his spacious museum-study-workroom were hung with representatives of practically all the big game to be found in British Columbia.

From about 1910 the itinerary of his restless feet, as set down by Marjorie Brooks, shows the following:

- 1911. First trip to California, largely in connection with illustrations for Dawson's 'Birds of California.'
 - 1912. Second, longer trip to California, collecting in several parts of the state.
- 1913. A continuation into Arizona, collecting at Tucson and in the Chiricahua Mountains.
 - 1914-1919. War years. England and France.
- 1919. On return to Canada (April) collected at Comox, Vancouver Island and the Queen Charlotte Isles.

1920. Trip to Alberta, thence to his first A. O. U. meeting in Washington, D. C., followed by a winter in Florida.

1921. A continuation, collecting in Florida, Texas and California.

1922. A trip to Alberta (Sullivan Lake); later to California—the latter an extensive trip of eleven months, including exploration at Snelling, Merced County, Buena Vista Lake, Mt. Pinos, the San Bernardino Mountains and Morro Bay.

1934. Brooks-Swarth expedition to Atlin, B. C.

1925. Winter, Nanaimo, Vancouver Island.

1926. Wedding trip to Alert Bay and Comox, Vancouver Island.

1927–1928. Winter, Brownsville, Texas; Silver City, New Mexico; Tucson, Arizona.

1928. Summer, Comox, Vancouver Island. Built winter home here.

1930. Trip to New Brunswick and Nova Scotia; particular attention to Grand Manan, Bay of Fundy.

1931. Trip to New Zealand. Winter spent there.

1933. Trip to California and New Mexico, collecting along the Mexican border.

1934. Trip to Fort Simpson, B. C.; district north of Skeena River; valley of the Skeena, itself; outlying islands of near-by coast. Round-the-world trip begun via New Zealand.

1935. Continuation of world trip—Australia, Ceylon, India, Mediterranean ports, England, Washington, D. C., Ottawa, Canada. During these wanderings pelagic birds were a special study.

1936. Trip to California, working the Suisan Marshes and Tomales Bay with several sea trips collecting shearwaters and albatrosses. Later in this year a trip to the north shore of Queen Charlotte Islands.

1939. Trip to California and Arizona.

It will be noted that in the foregoing the one deviation from the pattern is that, in the spring of 1926, Brooks made a side trip into the field of matrimony. In April he married Marjorie, daughter of the late Mr. and Mrs. Richard Holmes of Arundel, England. To some of his startled, more intimate friends, it was difficult to fit him into the new picture—Leander stroking the Hellespont with a grindstone tied to his neck! But his friends were soon reassured. Marjorie proved a woman of understanding heart, accepting bird men in general and her husband in particular without attempts at impossible alterations. To Allan, marriage was but a necessary detail in the larger biological pattern. When the couple called at Comox after the short wedding trip to Alert Bay-where the groom annexed a fine series of springplumaged Surf Birds over which he was still gloating!—he declared that he was going to be the best husband he knew how to be. The two later shared many expeditions afield, near and far, including the New Zealand and round-the-world trips, during which latter, while they stopped at Arundel, Sussex, England, they gloried alike in the English birds of the spring song season and heard the Nightingale. The fruit of this union, their son, Allan Cecil Brooks, now in his 20th year, and in his fourth year at the University of B. C.—Biology, of course, a third generation naturalist—bids fair to pick up and carry the banner dropped by the hand of his remarkable father.

The 1939 trip was the last one far afield. But though he was now in his seventieth year, it was the cramping restriction of World War II, rather than his age or lack of enthusiasm, that restrained him. Denied the use of his winter home at Comox because of war regulations, he wintered in 1942 at Sooke, in the southwest corner of Vancouver Island, and in 1944–1945 at Yellow Point, on the southeasterly side, his zest for the field as keen as ever. The last local field trips included an 18-day round in the Kamloops region in June, 1944—the Flammulated Screech Owl, sought for years, a special desideratum—and in May, 1945, a 17-day exploration of the Oliver district, Okanagan Valley, and also the near-by Similkameen Valley, working in both cases close to the Canada-U. S. boundary.

It was at Yellow Point, Vancouver Island, from the Lodge windows that his ever-prying binoculars discovered the almost unbelievable under-water action of the alula of the wings of White-winged and Surf Scoters—the basis of one of his last published papers (Auk, 62: 517–523, Oct., 1945). And it was the the basis also of his usual charming greeting card of Christmas of the same year, at which time, as it arrived in the homes of hundreds of his friends, he lay dying in Comox hospital.

Now that Brooks is of the past and we can assemble at least some of the details of his full life, the one thing that stamps him a man apart is his singleness of purpose. From his birth in India, at Etawah, to his last rational day at Comox, there seems almost nothing that does not point like a compass to one magnetic pole. No environmental handicap seems to have been able even to waver the needle of his life. Of formal schooling after the age of twelve years, he must have received little. He was self taught, a voracious reader aided by a remarkably retentive memory. Whether this last was a natural asset or a matter of cultivation, who can say? Certainly his was no tired brain, weary of collegiate cramming, that he brought to face the world in early manhood. He read, remembered, and for the rest went direct to Nature. Thus by training his head became his filing cabinet. And both from books and from Nature he read widely.

He probably was endowed naturally with the gift of memory. On seeing Brooks sit down and paint a bird accurately as to details of anatomy, attitude and color, quite without aid of a model, field sketches or notes, many folk have marvelled. "What is my head for?" he would reply. Yet he seldom painted 'out of his head'; his love of accurate detail was too strong. Usually he worked with one of his skins at hand.

But memory, however good, is likely to be fickle, especially with mounting years; and no head could file away all the details of a life spent on such broad interests as captivated young Brooks. He must have realized this, for whether from precept, example or sheer instinct, he early adopted the diary habit, recording in his journals almost daily through the years a wealth of minutiae that otherwise largely would have been lost. The following is the last note from his pen, written at Comox, in 1945.

"Dec. 12. The last two days have been fine and frosty (26°). One of the ravens that nest about a mile east of here was chasing an intruder [raven] over the house and westward. He (or she) kept up a continuous rattling cry: Craak-craak-craak-craak while in full pursuit. Each time he overtook the intruder the latter turned a double roll and uttered a single cry, Klook! as his pursuer overshot him. I have seen this act many times in the past 18 years, sometimes both the birds of the resident pair pursue but only one attacks."

Drawn into the text is a thumbnail sketch, one raven overshooting the other, which latter is turned on its back, presenting extended feet and open beak to the attacker.

It was in the field that Brooks was most truly in his element. He was never happier than when setting out with gun and collecting bag to tramp the 'commonage' above his Okanagan home, or to invade some new field afar. Equipped by Nature with the sharpest of eyes and ears and the general physique to apply them, he prowled endlessly. From tiny shrew to bighorn sheep or elk, from hummer to eagle, he knew from experience the technique of capture and preparation of the specimen. Though many hunters might outwit big game as successfully, in the field of birds he was unique, early developing a technique of his own not only in the capture of the specimen but in its make-up as study material.

At the art of calling birds he was an expert. The many field workers who today in western woods make use of the simple magic of the note of the Pygmy Owl in calling up small birds, have Brooks to thank, and he in turn owed a debt to his father who learned the trick from the natives of India. At mimicry of the Horned Owl, he was past master, and by means of it called not only *Bubo* but many hawks, endless crows and magpies and many other birds. In his unrelenting war on crows he needed no artificial call—his instrument was his larynx. The boom of the owl, the angry cry of *Corvus*, followed by the latter's terrified squall in the clutches of death—all worked their magic in a matter of seconds. The dry honk of Brant, the plaintive whistle of the Poor-will came equally true off the same reed—a very versatile instrument.

Though he came home from World War I deafened to the extent that the Skylark's ethereal song never again could reach him, nor any high-pitched bird note of his own woods, he seldom admitted the handicap but merely leaned more heavily on his vision and plied his legs the harder. Fortunately, the world of low-pitched sound was still open to him. In his earlier years he had done most of his bird hunting by ear.

In the field, with no apparent display of armament, he was proficiency personified. Heavy loads and light, and half loads as well as two auxiliaries were ready for instant use without any fumbling; and often he carried in addition a long-barreled .22 pistol with which he was expert and took many large specimens that defied shotgun range. A firm believer in the Boy Scout motto, he was always ready for anything the day might bring. Binoculars lay on his chest as though they were a part of him and sometimes he packed afield even a small, low-powered telescope. There must be no mysteries left behind him.

Though old-fashioned to high degree in certain respects, he was constantly striving for something new and better. In a few years I saw him turn from his highly efficient decoy squeak of his own lips, to a very vocal toy rubber mouse that he declared the perfect 'killer'; and in turn forsake the toy for a new love of wood and film of his own making, that he was sure—in advance—would prove the best bird call ever. He was seldom long static, never quite satisfied.

The same striving for the ideal haunted him in the matter of specimen make-up. Many times he changed his methods. Though he credited McIlwraith with inciting him to sound skin-making, the certainty is that he would soon have come to it himself. A gift skin in hand dated 1893 (Blackburnian Warbler, Mt. Forest, Ont.) shows at least clean, careful workmanship—historic, as a symbol of his bondage to agriculture! From that time forward he seems to have striven constantly to improve the quality of the cabinet skin, and also to teach others to do so. With the novitiate at his elbow as he plied deft fingers, he glowed in his element. Especially did he extend himself over the waterfowl, and most of his later ducks, and indeed many other birds, are really mounted specimens minus the living pose. This took time, but he seldom if ever sacrificed make-up to speed. The finished product was what counted. Even the arduous methods of degreasing fat skins were cheerfully undertaken. The greasy seam, the stained label, were badges of poor workmanship. He would have none of it. Thus it is that his combination of field technique and manual dexterity at the skinning table built up through the years an individual collection of over 9000 skins, unique not only for geographical coverage, and for completeness in its life history within a given species, but also for sheer quality.

Indeed, it is doubtful that such another collection could ever again be made by any future naturalist. In this hurrying age with its eyes on atomic energy, the task would be almost insuperable even should an individual with the Brooks genius be born. The incentive of the new and unexplored field must, in future, largely be lacking.

It will be seen that the Brooks expeditions took him across the face of the continent. Naturally he worked most thoroughly the southern part of his beloved province of British Columbia. It will be noted that the North, so often a lodestar to ornithologists, held little appeal for him. Not even ornithology could entice him into a mosquito-cursed region after his experiences in youth with the Sumas breed in the Fraser Valley. It was largely because of these pests that he made his permanent home in the dry Okanagan Valley.

Details of these numerous field trips through half a century, giving only the highlights of each, would require space far beyond the limits of this sketchy biography. However, much of them has been committed to paper already through the Brooks diaries. With his usual attention to detail he set down with almost day to day constancy the natural history that came under his eye. In reporting his home area, details included the weather, temperature, rainfall, migration data, abundance or scarcity of birds and mammals, or even the lower forms of life such as toads, frogs or grasshoppers. At the end of each game season was given a summary, with Colonel Harry Hawker exactitude, of the daily and total bag of game taken. The future was never to be left in doubt over such matters of the past.

In the cabinet, Brooks was meticulous in his care of specimens. They were not cordwood, as he once reminded a rough handler. Here also order was to him Heaven's first law; no confusion could be tolerated. He gloated over a tray where all specimens were made to a single model; uniformity was a high desideratum. They were beautiful things; his touch was almost a caress; yet he insisted on well-built specimens that could stand usage. To have to place poorly made exchange material among his own sleek treasures hurt him, and this, perhaps, had something to do with the driving urge that took him to far fields to get material first hand and bring it to the cabinet as he wanted it.

Whatever the verdict of time will be on Brooks as an authority on systematic ornithology, the present certainty is that he was often critical of those in high places and refused their judgments. That he brought to bear on his problems keen discernment and wide experience, cannot be denied. In his later years he seemed satisfied with his own verdicts almost to the point of autocracy, and one of his best

friends once remarked that what scientific bird study needed most was an ornithological Pope and he elected Allan to the Holy See! He was seldom given to hasty opinion, however, and I have seen him pore over a dozen Purple Finches for an hour without a word.

We are all more or less the products of environment in early years. It is doubtful that Brooks would have been quite Brooks in any other province of the Dominion. "Now," said a contemporary naturalist, "I know where Allan Brooks gets his backgrounds!"-gazing as he spoke across Comox Bay upon the blue Beauforts of Vancouver Island. Yet his was the painting more of knowledge than of scenic inspiration. because knowledge was the first interest of his life. He seems to have had little interest in art for its own sake. To him it was but a means to an end—to show his bird to others as he himself saw it. Thus his work was elemental. Of the newer schools of 'impressionism' and 'interpretation' of Nature, it is doubtful that he knew they existed. He called himself an 'illustrator.' His painting, early in life, of the perishable parts of his birds in order to record the true colors as in the living, doubtless was good training as a step to more ambitious picture making later; but this same attention to minute detail was never forsaken and is evident in the last stroke of his brush. He literally painted his bird feather by feather, and if the savant sometimes might call for more freedom of expression, more suggestion and imagination and less detail, the certainty is that every painting that left his hands in the fullness of his later years, bears in it a note of finality—something that will pass down the generations as a thing of beauty, well done.

There is every indication that, as an artist, though he possessed finest qualifications, he worked a trifle handicapped by the demands of science. He voluntarily clipped the wings of his imagination that he might worship more sincerely at the shrine of Things As They Are.

This last is borne out by the very medium in which he did most of his best work. Early in life he seems to have followed the conventional black and white and transparent water color. Clippings in my file, reproductions of waterfowl drawings printed in Recreation Magazine about 1901, show proficient handling of black and white. A gift painting of the years of World War I (1917) given to me some years later, is done in transparent water color. By this time, as an illustrator of scientific bird books, he had gained recognition; but he had now changed method and used tempera. In October and December of 1925, when he paid two short visits to Comox, making skins and painting in my home, he seemed to have forsaken transparent color entirely and more than once went to some length to explain the advantages of the opaque for reproduction. This last method he main-

tained through the remainder of his life. He worked little in oils and not so happily; the medium was little suited to the fine details he insisted on portraying. But characteristically, he had not picked the easy way. Opaque is difficult of manipulation; yet he shows in the softness and tenderness of many backgrouns scenes a mastery that is high genius.

And those backgrounds fit. His Kootenay elk is in the shrubbery of that region; his Harris's Hawk poses against a southern scene; his Sooty Grouse is backed by details that would fit nowhere else in America. For he carried in his head a wealth of such detail. Though no botanist, he was interested in every tree and plant by his trail, as he was in every creeping thing of the ground and the finny denizens of the waters. Before the artist he was the naturalist. To see a thing and not know what it was worried him; here was something new to be solved.

An inward urge drove him relentlessly. Thus when the products of his brush became comfortably lucrative, this was not allowed to crowd him an inch from the path his feet had always trod. He only toiled harder up a steeper trail. Bigger contracts meant only longer birding trips farther afield—new worlds to conquer.

In his attitude toward his contemporaries in his own particular field, he was apt to be sharply critical—warm in praise or loud in condemnation. His eye searched out details as the eye of hawk seeks prey. Any slipshod work incensed him—wrongly colored eye in the bird, or the eye badly placed; bad attitude divulging lack of anatomical study, or study in the field—away with it! As for art not connected with biology, the only opinion I ever heard him express was warm praise for Fripp's landscapes of the western mountains. He wished he could have them all.

On his more human side he was tolerant and painstakingly helpful and generous to any young biologist showing earnestness. He was impatient of the half-hearted, the fudger, the sham. He loved a man of enthusiasm and forgot his shortcomings. Once he was heard to chide an old friend: "P—, you'll die a miserable old man! You have no hobbies!" His pet aversions other than those folk who would restrain collectors afield, were: the 'balance of Nature,' which he was sure did not exist in fact, and wild life sanctuaries left with native predators uncontrolled. Despite the fact that he disliked the publicity of the platform, he was bold to address a game association meeting, at any place or time, on the subject of game matters. And he put his preaching into practice—with conviction bordering on fanaticism. Crows and magpies and bird-killing hawks beware! He was proud of

the little bird sanctuary about his Okanagan home—between 1905 and 1914, forty species had been listed as nesting successfully in the tiny area that he so rigidly policed. He called himself 'gamekeeper' to Ring-necks, European Partridges and native grouse over a good extent of his neighborhood.

Despite the urge of science, Brooks never forgot the humanities and ever remained very human. A wide reading of nonscientific matter kept his mind elastic. Possessed of a fine sense of humor, he rarely if ever laughed loudly, but could chuckle gleefully and always relished a joke. His humor was of the dry, Scotch type. In politics a Conservative—naturally; in religion, nonsectarian. He did not attend a church; never once did I hear him discuss religion, and probably he paid his highest homage and reverence to Nature, the wonderful world about him-a world in which, he declared in one of his last letters, he saw more beauty as life declined. If the usual games of youth seem to have been pushed aside in favor of bird-nesting, the competitive spirit in him nevertheless was very strong. For he relished card games and was a keen and skillful bridge player. In the realm of music he pronounced himself a dub, but in reality he had a discerning appreciation of good music; and if he never hummed a tune, vet his remarkable skill in bird mimicry, both by whistling and by vocal note, proved that he possessed an excellent musical ear and memory. He did not play a musical instrument probably for the same reason he did not smoke: it was a waste of time: he had tried it.

By most standards Brooks was very temperate in his habits. He had been heard to say that he believed his stomach was no larger than his fist—a shrinkage from the normal, I judge, attributable to his long bachelorhood through years when he was too busy on the quest of birds and mammals, large and small, to waste time over such a detail as food. If he relished the warmth of good liquor, especially to thaw out the pipes of conversation at meetings of bird men, he at least knew how to use it and when. His son recounts that one day in recent years, when fire threatened the Brooks premises, especially the precious museum, his father looked the situation over calmly, turned away to his cabinet, poured himself a stiff bracer, then turned to fire-fighting with his usual enthusiasm and determination. This was Brooks's second fire, for in 1921 he had a disastrous visitation that played havoc with specimens, books, guns and equipment, in attempted rescue of which he badly burned his hands.

Among his intimates, the Brooksian dry humor is history. Of a woman who saw, a priori, in her birds what wasn't there, he exclaimed: "That woman has chromatic aberration!" Chiding me once for not

working more enthusiastically the Comox Spit, he remarked that I would not recognize the place he got the Horned Lark anyhow, as the fir tree there had grown since my last visit. When once I remarked on McIlwraith's splendid facial pubescence, in a photograph depicting the ornithological pioneers of the '90s in Ontario, Brooks remarked drily: "And many a time I have seen him shoving grub into that with a knife." On dismounting from my motorbike carrier after some rough miles: "There was an English queen said she had 'Calais' engraved on her heart. I think I have 'Harley-Davidson' stamped on another part of me!" He was wont to explain, with a chuckle, the prominence of his serviceable ears, by the fact that as there were no cows in India, they fed him during infancy on asses' milk.

He was old-fashioned by instinct, yet to save time to the goal he sacrificed some of these deep-rooted leanings. When he cheerfully mounted the rump of the motorbike, it was not to save his legs—for he prowled afoot with the persistence of a covote—but to keep up his end at that rendezvous with Duck Hawks. For the same reason he adopted the outboard motor. His radio gave him war news, not grand opera. He never used a typewriter, though his correspondence became voluminous, nor owned or drove an automobile; he rode in them for but one reason. He detested the telephone in his home. Despite the splendid game heads on his study walls, he never owned a modern high-powered rifle. His .22 caliber, a favorite collecting weapon, was of early type; and even in his last years of impaired vision, he would not resort to a scope mount. To the end of his field career, in order to get the precise load he desired, he was still reloading brass shotgun shells—the only man in my generation I have seen do so. His shotguns (for game) were high-grade, hand-made English twelves, though for collecting afield through the last twenty-odd years, he wore out an American twenty-gauge. As for the modern pumpguns and autoloaders. I doubt that he would have been seen in the same field with a user of such. In field dress he never appeared in the standard togs of the hunter or out-of-doors man, but favored British tweeds, knickers, cap, and wore them across the slopes of the 'commonage' after Ring-necks or partridge, or in quest of specimens, with the stiffbacked, plodding gait of the Old Country gentleman.

Just why Brooks gave up big game hunting so early, I was never able to learn. As for the quest of upland game and waterfowl, he loved it second only to ornithology. "How can you give up duck-shooting," he wrote, "when you were so fond of it?" and he carried on with the double barrel through the hunting season just prior to his death. Enthusiasm for a canoe trip to the North Arm of his beloved

Okanagan Lake, or to Swan Lake—a spot even more favored for ducks—never forsook him, and to the last, each year he insisted that he shot on the wing as well as he ever did. He loved to hunt and played according to the rules, and his code of field ethics was rigid.

Nor was this an affectation of later years. The following anecdote contributed by R. M. Stewart, one of Brooks's early hunting 'tillicums,' is enlightening. About 1901 the two arranged a deer hunt at Okanagan Lake, and after leaving their boat, climbed up to the benches in quest of mule deer. On the very first bench they came upon a big buck and two smaller deer. Before Stewart could do more than raise his rifle, his comrade sprang into the air, waving his arms and shouting like mad to send the animals bounding over the ridge. Brooks explained that he had come out for a hunt, not just to kill a deer. He would start now. Three or four hours later he came staggering back to the boat with all he could carry of the big buck.

To Brooks, the hunter of game big and small, the fisherman—for he was a devotee of the fly rod, too—the taxidermist, field and cabinet naturalist and artist, we must add Brooks the soldier. The breaking of World War I must have presented to him rather a gloomy outlook. Recognized now for what he was—about eight years previously he had illustrated Dawson and Bowles's 'Birds of Washington'—having already tasted the delights of field work in California and Arizona, he suddenly found Kaiser Wilhelm's lines across his path to ornithology. On the outbreak of war he was in England, shooting at the Bisley matches. He at once returned to Canada, where already he was enrolled in the militia with an officer's commission, to train with the First Contingent at Quebec.

Brooks the soldier seems a bit incongruous until we realize the many-sidedness of the man. He was an expert rifle shot. Already he had hunted—usually alone—most of British Columbia's big game. He was primed with an intense patriotism—British to the core, though he always denied that he was a Canadian! So the Hun was removed from his path with an efficiency that won him three mentions in dispatches, the DSO and the rank on discharge of Lieut.-Colonel. More than once Brooks was heard to express the conviction that he was born lucky. But be the 'luck' as it may, he at least returned from the conflict with no more serious handicap than a slight deafness.

The mentions in dispatches date as follows:

Capt. Allan Brooks, Nov. 30th, 1915. French.

Major Allan Brooks, Nov. 13th, 1916. Haig.

Major Allan Brooks, Mar. 16th, 1919. Haig.

All are signed by Winston S. Churchill.

The Citation: Deed of Action. Dated Feb. 1st, 1919. Major A. Brooks 7th Canadian Infantry Battalion
Distinguished Service Order.

For conspicuous gallantry in the operations of 2nd and 3rd September in front of Arras. As brigade observing officer he showed great daring and initiative, pushing forward at all times with the most advanced troops under the heaviest fire. Taking a wire with him, he kept brigade headquarters well informed of the situation, and enabled the commander to make decisions that saved many lives. When the enemy were retiring he pushed forward over 500 yards in front of the infantry and telephoned back information from a long distance in front of our advance. During the two days he personally killed twenty of the enemy by sniping shots.

During his war years there is evidence that his mind was not always occupied in soldiering. His most pleasant occupation, most suited to his genius, doubtless was as chief instructor in sniping and scouting with the Imperial Forces. His diaries, indeed, hold little mention of the war in which he took such an active part. But he met again the continental birds of his youth; he made interesting ornithological contacts in England, even managed a small collection of specimens and did some painting—the latter mostly for the Red Cross.

During World War II, the Red Cross again received generous contributions from his brush. By his years now denied any active part in the struggle, he followed the daily course of events with an intensity that must seriously have impaired his capacity for his usual work. That he lived to see the culmination of the conflict gave him vast satisfaction.

Throughout this long and active life, the human contacts of Brooks were very wide, though he was of course bound with special ties to all those interested in natural history or the hunting field. In his scientific affiliations he was a member of the A. O. U. from 1901 and later a Fellow. From about 1908 he was a Member of the B. O. U. and later an Empire Member of which there are less than a dozen. Also he was a Life Member of the Cooper Ornithological Club and member of the Pacific Bird and Mammal Society, and from about 1920 he was linked to the hunting fraternity through membership in the Boone and Crockett Club.

Allan Brooks died as he had lived—in the midst of the work he loved. A few days before Christmas, 1945, when I visited him in his study at Comox, he was busily plying his brush—a commission of three paintings for the State College of Washington. A dozen fresh skins of waders and waterfowl were at hand on the drying tray. He was ill but made light of it. Next day he finished his last painting, signed it and went to hospital. When I called to see him the evening of Dec. 23, he looked well, talked strongly with the old authority—

natural history, every breath of it, though he took time out to 'chortle' over some of the juvenile 'howlers' in the book his son had brought him—special mention going to those with a biological flavor, such as: "Solomon with his wives and porcupines." Next evening, Christmas Eve, he underwent an operation. Nothing could be done for him. He sank rapidly but lived to see the New Year, passing away on January 3. Cremation followed his simple funeral. Later, on the range rising above the lake across the water from his Okanagan home—a view he never tired of watching, and a spot his feet so often had trod—loving hands scattered his ashes.

In conclusion of this short sketch, I wish to express thanks to many friends of Brooks, who on hearing of his passing, sent in to his biographer many little revealing touches of the man, the artist, the naturalist. Due to limitations of space, much of this had to be omitted or merely suggested. My grateful acknowledgments are due also to Marjorie Brooks who previously had collected and recorded life history details that otherwise might well have been lost; and also to Allan Cecil Brooks for working up the extensive bibliography of his father's published papers.

Comox

British Columbia