OBSERVATIONS ON THE CHURCHILL, STURGEON-WEIR AND SASKATCHEWAN RIVERS FROM PAUANAK TO THE PAS

by **S. D. Riome,** Nipawin, Saskatchewan

The ornithological map of Saskatchewan contains several areas which require field study and research. It is evident that in many cases the paucity of records is directly related to the inaccessibility of the area or the limited population density of the species. The Pasquia Hills and the Porcupine Hills of the east, the Moose Mountain and Wood Mountain of the south and the Great Sand Hills, Thickwood Hills and Mostoos Hills of the west support the premise. The creditable work of Dr. Robert Nero and his colleagues, evidence in publications covering the far north and northeast, show, however, that it is possible for trained and dedicated men to produce sophisticated literature when resources and time are made available.

One area which has seen a stream of men pass through it over the past two centuries while pursuing their objects of exploration, commerce, adventure or proselytism is the Churchill River, yet data relating to its flora and fauna are extremely limited.

In 1967, between July 1 and July 15, the writer travelled by canoe as a member of the Historic Trails Canoe Club from Otter Rapids to The Pas, and in 1969, between June 29 and July 6 from Patuanak to Otter Rapids. The overall distance covered totalled 518 miles through a drop of 528 feet in altitude. The principal concern was to travel safely between two points within a predetermined schedule. Each man was expected to perform his duties toward that end, and any deviation was understandably misinterpreted by his colleagues. Fortunately, as the men became acquainted with my interest in wildlife, they soon began to watch for and point out every flower, mammal and bird en route, even the distinction between "right and left turns"! The publication of the resultant records is intended solely to show what was seen or heard or taken under the circumstances of limited skill, experience and time.

Sightings are recorded in geographical sequence from west to east, followed by a date. By referring to the accompanying map and key, the locality may be found. Example: "Common Loon . . . L2 June 28-69" indicates "Common Loon, Shagwenaw Lake, June 28, 1969".

Seventy-nine species of birds are listed, followed by nine species of mammals and 12 species of flowers. In addition a Red-sided Garter Snake was seen near Needle Falls on July 2, 1969 and Tiger Swallowtail butterflies were photographed at Mountain Portage on July 2, 1967.

As one of the few who have had the privilege of sensing the proud, pristine, untrammelled beauty of the Churchill River, I contemplate with a grievous sense of impending loss the plans now being made to build a massive forest-product processing plant on one of its nourishing tributaries.

As an appendix to my list, I am grateful to be able to include the observations made by John Goering on the Churchill River from Ile-a-la-Crosse to Otter Rapids, in the month following my second trip.

John Goering is a man of wide interests and considerable stamina, a professional engineer and educator, who is at present teaching at Trinity College School, Port Hope, Ontario. His interests include many areas of natural history and conservation, but his real passion is wilderness travel. During the past six summers, he has undertaking gruelling trips by canoe and paddle covering every sector of northern Canada. In 1966 he was a member of an expedition down the Coppermine River to its mouth on the Arctic Ocean, one of his team mates being Pierre Elliott Trudeau. In 1969, he travelled with seven other men from Ile-a-la-Crosse through the

Churchill River to Otter Rapids. His keen interest in natural history enabled him to record 22 species of birds positively identified and three species of mammals. These observations (which I have listed as an appendix) add to the extremely limited data for the area.

Acknowledgments

In addition to Mr. John Goering, who has kindly made his list of observations available for publication, sincere appreciation is extended to: Dr. George Ledingham who identified the 12 plant specimens taken and offered considerable editorial advice; Dr. Robert Nero who suggested the concise method of recording a large volume of data and checked the copy for accuracy; Dr. C. Stuart Houston who read the material and gave freely of his considered criticism; Dr. Kees Vermeer and Mr. Robert Isbister of the Canadian Wildlife Service who graciously produced the accompanying map; my wife, Gladys, who patiently typed the drafts; my canoeing partners who made the whole exciting experience possible.

Birds

Common Loon: L2, June 28-69; L19, July 6-69; L22, July 1-67; L27, July 4-67; L34, July 8-67; L41, July 12-67.

Red-necked Grebe: L6, June 29-69; L8, June 30-69; L22, July 1-67; L27, July 3-67; L38, July 10-67.

White Pelican: L4, June 29-69; L10, July 1-69; 35 on a small island between L12 and L13 with 20 "white-headed" unidentified gulls on July 2-69; L35, July 8-67; approximately 100 at L38, July 10-67.

American Bittern: L8, June 30-69; L43, July 14-67.

Mallard: L2, June 28-69; L6, June 29-69; L28, July 5-67; L29, July 6-67; L38, July 11-67, 2 females with swimming young; L41, July 12-67, female with young.

Blue-winged Teal: L10, July 1-69; L27, July 3-67; L45, July 14-67.

American Widgeon: L10, July 1-69; L27, July 3-67.

Lesser Scaup: L3, June 29-69; L6, June 29-69.

Common Goldeneye: L2, June 28-69; L10, July 1-69; L19, July 6-69; L23, July 2-67; L27, July 2-67; L28, July 3-67; L34, July 9-67; L36, July 10-67, 9 males, 1 female with young; L38, July 10-67; L39 July 11-67; L41, July 12-67.

Bufflehead: L5, June 29-69, female with young; L8, June 30-67.

White-winged Scoter: L6, 1 with 8 Surf Scoters, June 29-69; L40, 3 birds July 11-67; L43, 2 birds, July 14-67; L45, July 14-67.

Surf Scoter: L6, 8 birds, June 29-69.

Common Merganser: L32, July 8-67; L38, July 10-67, 2 adults with 8 young; L41, July 12-67.

Red-breasted Merganser: L15, July 2-69.

Sharp-shinned Hawk: L2, June 28-69.

Cooper's Hawk: L38, July 10-67.

Red-tailed Hawk: L39, July 11-67; L41, July 12-67; L46, July 14-67.

"Eagle": 42 eagles were recorded between Patuanak and The Pas. In addition to the positive Golden and Bald, the following uncertain sightings are listed for numerical information; L3, 1 bird, June 29-69; L7, 3 birds, June 30-69; L10, 2 birds, July 1-69; L13, 7 birds, July 1-69; L19, 3 birds, July 6-69; L22, 1 bird, July 2-69; L31, 3 birds, July 7-67; L34, 1 bird, July 8-67; L43, 2 birds, July 14-67.

Golden Eagle: Pair about nest, 1 mile west of Keg Falls between L27 and L28; L28, 1 bird, July 6-67.

Bald Eagle: L2, 1 immature, June 28-69; L8, 1 bird, June 30-69; L16, 2 birds, July 3-69; I bird at Birch Rapids between L17 and L18, July 4-69; L27, 1 bird, July 3-67; L29, 1 bird, July 6-67; pair with flying immature L36, July 9-67; L38, 1 bird, July 10-67; L39, 2 birds, July 11-67; L41, 3 birds, July 12-67.

Osprey: L9, July 1-69; L39, July 1-69; L41 July 12-67.

Pigeon Hawk: L38, July 10-67.

Sparrow Hawk: L38, July 10-67.

Ruffed Grouse: L27, July 4-67, female in grey phase with young; L28, July 5-67, grey phase; L31, July 7-67, female in grey phase with young; L41,

July 12-67, female in brown phase with young.

Killdeer: L43, July 14-67.

Spotted Sandpiper: L2, June 28-69; L3, June 29-69; L17, July 3-69; L18 July 5-69; L23, July 2-67; L27, July 3-67; L34, July 8-67; L35, July 9-67, several; L38, July 10-67, several.

Greater Yellowlegs: L5, June 29-69; L7, June 30-69; L13, July 2-69; L18, July 5-69; L43, July 14-67.

Lesser Yellowlegs: L44, July 14-67.

Franklin's Gull: L2, June 28-69; L36, July 9-67; confluence of L44 and L46, July 14-67, thousands feeding on flying insects; L45, July 14-67.

Bonaparte's Gull: L6, June 29-69.

Common Tern: L7, June 29-69; L8, June 30-69; L25, July 3-67; L27, July 4-67; L32, July 8-67; L38, July 10-67; L40, July 11-67.

Black Tern: L3, June 29-69; L6, June 29-69, abundant; L10, July 1-69; L22, June 28-69; L28, July 5-67; L29, July 6-67; L38, July 10-67; L40, July 11-67.

Great Horned Owl: L41, July 13-67; L44, July 14-67, adult with 2 flying young.

Common Nighthawk: L8, June 30-69; L27, July 4-67; L38, July 10-67.

Belted Kingfisher: L2, June 28-69; L6, June 29-69; L7, June 30-69; L8, June 30-69; L13, July 1-69; L17, July 4-69; L22, July 1-67; L28, July 5-67; L32, July 8-67.

Yellow-shafted Flicker: L15, July 2-69; L18, July 5-69; L19, July 6-69; L23, July 3-67; L30, July 6-67, adult with young; L34, July 9-67.

Pileated Woodpecker: L2, June 28-69; L15, July 2-69; L22, July 1-67.

Yellow-bellied Sapsucker: L15, July 2-69; L22, July 2-67; L24, July 3-67; L28, July 5-67; L41, July 12-67.

Hairy Woodpecker: L21, July 6-69; L22, July 2-67.

Downy Woodpecker: L41, July 13-67.

Eastern Kingbird: L6, June 29-69; L45, July 14-67.

Eastern Phoebe: L32, July 8-67; L37, July 10-67.

Yellow-bellied Flycatcher: L41, July 13-67, yellow-breasted and yellow-throated, most likely of this species.

Traill's Flycatcher: L29, July 9-67.

Least Flycatcher: L8, June 30-69; L13, July 2-69; L21, July 6-69; L27, July 4-67; L28, July 5-67; L37, July 10-67; L41, July 12-69.

Olive-sided Flycatcher: L21, July 6-69.

Tree Swallow: L22, June 28-60, July 2-67; L29, July 6-67; L45, July 14-67.

Bank Swallow: L45, July 14-67.

Barn Swallow: L38, July 10-67.

Common Raven: L2, June 28-69; L7, June 30-69; L10, July 1-69; L17, July 4-69; L19, July 6-69; L27, July 4-67; L34, July 8-67; L38, July 10-67; L41, July 12-67; L45, July 14-67.

Common Crow: L2, June 28-69; L10, July 1-69; L45, July 14-67.

Black-capped Chickadee: L27, July 4-67; L41, July 13-67; L43, July 14-67; L46, July 14-67.

Boreal Chickadee: L28, July 6-67.

Brown Creeper: L39, July 11-67.

Robin: L6, June 29-69; L8, June 30-69; L38, July 10-67.

Hermit Thrush: L2, June 28-69; L8, June 30-69; L18, July 4-69; L39, July 11-67.

Swainson's Thrush: L8, June 30-69; L13, July 1-69; L22, July 1-67; L27, July 3-67; L32, July 8-67; L34, July 8-67; L38, July 10-67; L41, July 12-67; L45, July 14-67.

Ruby-crowned Kinglet: L19, July 6-69.

Cedar Waxwing: L27, July 3-67; L40, July 11-67; L41, July 13-67.

Red-eyed Vireo: L2, June 28-69; L7, June 30-69; L8, June 30-69; L10, July 1-69; L19, July 6-69; L22, June 28-67; L24, July 3-67; L27, July 4-67; L28, July 5-67; L32, July 8-67; L38, July 10-67; L41, July 12-67.

Philadelphia Vireo: L34, July 8-67.

Tennessee Warbler: L2, June 29-69; L8, June 30-69; L13, July 2-69; L15, July 2-69; L17, July 4-69; L19, July 6-69; L41, July 13-67.

Yellow Warbler: L3, June 29-69; L7, June 30-69; L8, June 30-69; L10, July 1-69; L25, July 3-67; L34, July 8-67; L38, July 10-67.

Myrtle Warbler: L22, July 2-67; L29, July 6-67.

Chestnut-sided Warbler: L27, July 5-67.

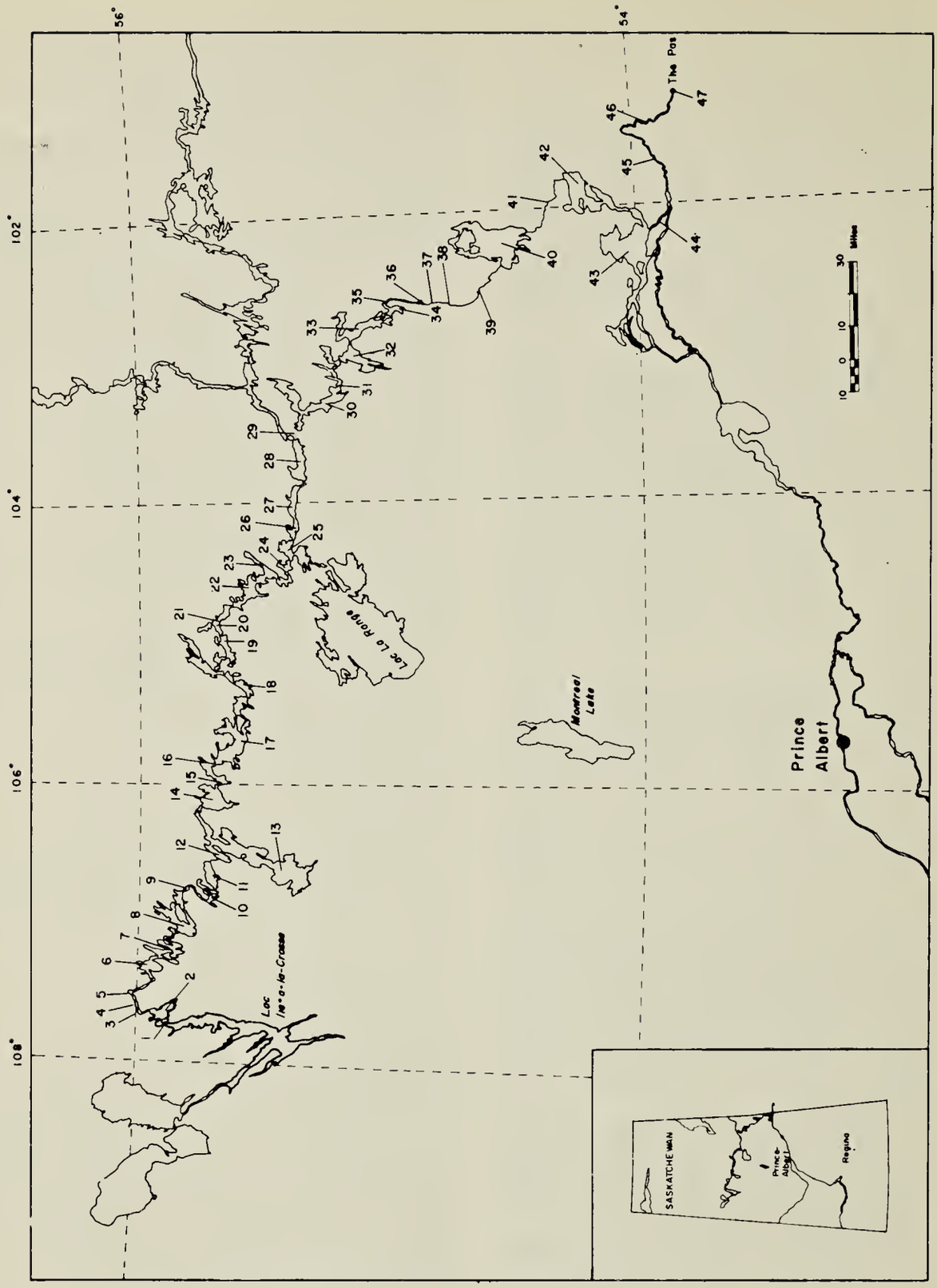

Fig. 1. Observation points from Patuanak to The Pas. L1 Village of Patuanak; L2 Shagwenaw Lake; L3 Drum Rapids; L4 Leaf Rapids; L5 Deer Rapids; L6 Dipper Lake; L7 Prirreau Lake; L8 Knee Lake; L9 Elak Dase Indian Reserve; L10 Dreger Lake; L11 Sandy Lake; L12 MacDonald Bay; L13 Snake Lake; L14 Sandfly Lake; L15 Needle Falls; L16 Silent Rapids; L17 Black Bear Island Lake; L18 Trout Lake; L19 Dead Lake; L20 Hayman Lake; L21 Great Devil Rapids; L22 Otter Lake; L23 Mountain Lake; L24 Drope Lake; L25 Nistowiak Lake and Falls; L26 Drinking Lake; L27, Keg Lake; L28 Trade Lake; L29 Frog Portage; L30 Wood Lake; L31 Grassy Narrows; L32 Pelican Lake; L33 Mirond Lake; L34 Corneille Lake; L35 Dog Rapids; L36 Birch Rapids; L37 Leaf Rapids; L38 Scoop Rapids; L39, Snake Rapids; L40, Amish Lake; L41, Lower Sturgeon-Weir; L42, Namew Lake; L43 Cumberland Lake; L44 Tearing River; L45 Barrier Settlement; L46 Saskatchewan River; L47 The Pas, Manitoba.

Bay-breasted Warbler: L17, July 4-69; L18, July 5-69; L24, July 3-67; L27, July 4-67.

Ovenbird: L8, June 30-69; L10, July 1-69; L13, July 2-69; L27, July 4-67; North east shore of L28 due north of Archibald Island, July 5-67, a nest with 4 eggs, photographed; L36, July 10-67; L41, July 13-67.

Northern Waterthrush: L2, June 28-69: L15, July 2-69; L17, July 4-69.

Yellowthroat: L2, June 29-69; L7, June 30-69; L10, July 1-69; L22, July 2-67, June 28-69; L31, July 7-67; L32, July 8-67; L36, July 10-67; L43, July 14-67.

Yellow-headed Blackbird: L43, July 14-67.

Red-winged Blackbird: L2, June 28-69; L10, July 1-69; L29, July 6-67; L38, July 10-67; L39, July 11-67; L43, July 14-67.

Common Grackle: L3, June 29-69; L7, June 30-69; L10, July 1-69; L19, July 6-69; L27, July 3-67; L29, July 6-67; L34, July 8-67.

Brown-headed Cowbird: L45, July 14-67.

Evening Grosbeak: L41, July 13-67.

Savannah Sparrow: L6, June 29-69.

Slate-colored Junco: L17, July 4-69.

Chipping Sparrow: L18, July 5-69; L22, July 1-67; L34, July 8-67; L41, July 13-67.

Clay-colored Sparrow: L15, July 3-69.

White-throated Sparrow: L2, June 28-69; L8, June 30-69; L13, July 2-69; L15, July 3-69; L22, June 28-69; L23, July 2-67; L24, July 3-67; L27, July 4-67; L32, July 8-67; L41, July 12-67.

Song Sparrow: L7, June 30-69; L8, June 30-69; L13, July 2-69; L15, July 3-69; L19, July 6-69; L22, June 28-69; L24, July 3-67; L30, July 6-67; L32, July 8-67; L34, immature birds, July 8-67; L36, July 10-67; L39, July 11-67; L41, July 12-67.

Mammals

Black Bear *Euarctos americanus americanus*: L18, July 4-69, sow with 2 cubs; L27, July 3-67; L29, July 6-67; L45, July 14-67.

Snowshoe Rabbit *Lepus americanus*: L9, July 1-69; L27, July 4-67.

Red Squirrel *Tamiasciurus hudsonicus*: L17, July 4-69; L18, July 4-69.

Beaver *Castor canadensis*: L9, July 1-69; L17, July 3-69, skull found and retained by Kamil Pecher, 88mm. x 60 mm.; L28, July 5-67, trees cut by beaver; L41, July 10-67; L45, July 14-67.

Deer Mouse *Peromyscus maniculatus borealis*: 15 trap nights from Patuanak to Otter Lake, took two specimens now kept in collection of David Riome, #0071: L13, July 1-69, LT 76mm., LO 171 mm., HF 20 mm., #0072: L19, July 6-69, LT 65 mm., LO 153 mm., HF 18 mm.

Muskrat *Ondatra zibethicus*: L41, July 10-67.

White-tailed Deer *Odocoileus virginianus*: L27, July 5-67; another deer seen at L20, July 6-60, but species not identified.

Moose *Alces alces*: 10 miles north of Montreal Lake, July 1-67; L17, July 4-69, droppings; L28, July 5-67, droppings; L41, July 13-67, tracks; L42, July 13-67, bull and cow.

Bison *Bison bison*: Solitary animal, south tip of Montreal Lake, June 28-69.

Flowers

Wood Lily *Lilium philadelphicum*: L17, July 3-69; L32, July 7-67; L34, July 8-67.

Stemless Lady's Slipper or Two-leaved Lady's Slipper *Cypripedium acaule*: L34, July 8-67.

Blunt-leaved Sandwort *Arenaria lateriflora*: L13, July 1-69.

Pink Corydalis *Corydalis sempervirens*: L14, July 2-69.

Rough Cinquefoil *Potentilla norvegica*: L14, July 2-69.

American Vetch *Vicia americana*: L18, July 4-69.

Pink Wintergreen *Pyrola asarifolia*: L2, June 28-69.

Tufted Loosestrife *Lysimachia thyrsiflora*: L14, July 2-69.

Starflower *Trientalis borealis*: L18, July 4-69.

Marsh Hedge-nettle *Stachys palustris*: L14, July 2-69.

Twinflower *Linnaea borealis*: L13, July 1-69; L17, July 2-69.

Harebell *Campanula rotundifolia*: L18, July 4-69.

APPENDIX

Observations made by John Goering on the Churchill River between Ile-a-la-Crosse and Otter Rapids, August 9-22, 1969.

Birds — Common Loon, Red-necked Grebe, White Pelican, Great Blue Heron, Mallard, Common Merganser, Broad-winged Hawk, Bald Eagle, (20-30 between Ile-a-la-Crosse and Black Bear Island Lake), Osprey, Sparrow Hawk, Ruffed Grouse, Greater Yellowlegs, Lesser Yellowlegs, Common Tern, Black Tern, Belted Kingfisher, Common Raven, Black-capped Chickadee, Black-and-white Warbler, Red-winged Blackbird, White-throated Sparrow, Song Sparrow. In addition, several "white-headed gulls" and a "flock of blackbirds" were reported.

Mammals — 1 Black Bear at Dipper Rapids and 1 Black Bear at Trout Lake, 1 White-tailed Deer at Otter Rapids.

THE BUTTERFLY COLLECTING EXPEDITIONS OF GEORGE SHIRLEY BROOKS TO CHURCHILL, MANITOBA, AND AN UNPUBLISHED MANUSCRIPT CONCERNING THEM

by **John H. Masters,** Box 7511, St. Paul, Minnesota

George Shirley Brooks is best known for the butterfly collections he made at Churchill, Manitoba and for his published list of Manitoba Lepidoptera (1942). Shirley Brooks (he used his middle name) was born in Suffolk, England in 1872. He developed an interest in natural history during his youth and with his brother, C. J. Brooks, he built collections of English Lepidoptera (butterflies) and Diptera (true flies). He came to Canada in 1911 and soon went to work for the Canadian National Railways in Transcona, Manitoba. In the small amount of spare time available to him he continued his hobbies which included stamp collecting as well as entomology, but it was not until his retirement in 1937 that he was able to devote a great deal of time to them. Brooks was very active in the organization of the Natural History Society of Manitoba, for which he served at one time as president, and in the founding of the Manitoba Museum (now the Manitoba Museum of Man and Nature), for which he served as honorary curator of Entomology.

After his retirement, Brooks made use of his railroad pass to make eight collecting expeditions to Churchill in the years 1937, 39, 40, 41, 42, 43, 44 and 46. While many others had collected and studied the fauna at Churchill, Brooks was the first to devote time to it over several seasons, and thus obtained a very complete sampling of the Churchill area fauna. In order to offset the cost of his annual trip to Churchill, he sold duplicate specimens to museums and collectors. He always stipulated that he was selling them to offset his travel costs to Churchill and the low price that he asked for the specimens (an average of about 15¢ per specimen) certainly indicates that this was true. One effect of this activity is that it spread his Churchill specimens into many private and institutional collections, marking with them the fame of Churchill as a collecting locality. A second and more indirect benefit of this activity is that it created a good deal of correspondence, and since Brooks kept good records and carbon copies of his letters and invoices, a great deal of valuable information can be gleaned from them. The Brooks' correspondence files was one of my most beneficial sources of information for my study of Churchill butterflies (Masters, 1971). Even the invoice records are important because they provide a good indication of the relative abundance of