

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## THE BUTTERFLY COLLECTING EXPEDITIONS OF GEORGE SHIRLEY BROOKS TO CHURCHILL, MANITOBA, AND AN UNPUBLISHED MANUSCRIPT CONCERNING THEM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

the species he collected at Churchill. Because of limited storage space, his personal collection was not especially large. For the most part it was strictly restricted to Manitoba specimens and very short series. Brooks' collection and correspondence files were both bequeathed to the Manitoba Museum of Man and Nature in Winnipeg.

Brooks' list of Manitoba butterflies was patterned after an earlier list of Manitoba Lepidoptera (Brodie, 1929) and was inspired by the knowledge of several new species to the Manitoba list from his first three collecting trips to Churchill. This is the only manuscript that he ever published and, no doubt, the difficulties he encountered with its publication discouraged further efforts. W. J. Brown was then editor of the *Canadian Entomologist* and was obviously not interested in Brooks' manuscript; although he accepted it for publication on October 7, 1940, it was not published until February, 1942. This was a considerable delay for that time period and Brown generally did not respond to inquiries by Brooks during the interval. Another problem was that seven rather serious typographical errors appeared in the published form.

The Brooks' checklist (1942) is much abbreviated. It contains a list of Manitoba species and localities, but with no notations on the flight dates, abundances, habitats or habits of the species. An unpublished manuscript, found attached to a letter to Austin H. Clark of the Smithsonian Institute, dated January 5, 1940, is also very interesting. It summarizes the results of Brooks' 1937 and 1939 collecting expeditions along the Hudson Bay Railroad from The Pas to Churchill. It is reproduced below in its original form:

\* \* \* \* \*

"DIURNAL LEPIDOPTERA  
TAKEN JUNE AND JULY, 1937  
AND 1939 BETWEEN N. LAT 54 &  
59 by G. Shirley Brooks.  
THE MANITOBA MUSEUM,  
WINNIPEG"

"*Papilio machaon* var *hudsonianus*  
Clark. Gillam. (Old name Kettle

- Rapids)  
*Papilio glaucus* var *canadensis* R. & J.  
Common at Gillam, and not rare at  
Churchill.  
*Euchloe ausonides* Bdv. Gillam and  
Churchill.  
*Colias hecla* var *glacialis* McLach.  
Churchill  
*Colias hecla* var *hela* Stkr. Churchill.  
Rare.  
*Colias eurytheme* Bdv. Churchill.  
*Colias interior* Scud. The Pas, Mile 200  
H.B. Ry.  
*Colias gigantea* Stkr. The Pas, Mile  
200 H.B. Ry., Churchill.  
*Colias palaeno* var *chippewa* Kby. Mile  
200 H.B. Ry., Gillam, Churchill.  
*Colias nastes* var *moina* Stkr. Chur-  
chill.  
*Pieris occidentalis* var. *calyce* Edw.  
Churchill.  
*Pieris protodice* Bdv. & LeC. Churchill.  
*Pieris napi*, gen. vern. *oleracea* Harr.  
Churchill.  
*Oeneis chryxus* var. *calais* Scud.  
Gillam.  
*Oeneis jutta* Hbn. Churchill. Very  
common.  
*Oeneis polixenes* Fabr. Churchill. Very  
common.  
*Oeneis melissa* Fabr. Churchill. Rather  
rare.  
*Erebia rossi* var *ornata* Leuss. Chur-  
chill. Very common.  
*Erebia disa* var *mancinus* Dbldy. &  
Hew. Gillam. Rather rare.  
*Erebia discoidalis* Kby. Churchill. Very  
common in '39, not so in '37.  
*Brenthis myrina* Cram. The Pas, Gil-  
lam, Mile 200.  
*Brenthis aphirape* var *dawsoni* B.&  
McD. The Pas, Gillam, Churchill.  
Very common.  
*Brenthis chariclea* var *boisduvalii*  
Dup. Churchill.  
*Brenthis chariclea* var. *grandis* B.&  
McD. The Pas.  
*Brenthis freija* Thun. Gillam, Chur-  
chill.  
*Brenthis polaris* var *grontandicus*  
Skin. Churchill.  
*Brenthis frigga* var *gibsoni* B.&B. The  
Pas, Gillam, Churchill.  
*Brenthis bellona* Fabr. Gillam.  
*Nymphalis milberti* Godt. Churchill.  
*Nymphalis antiopa* L. Churchill.

*Vanessa atalanta* L. Churchill.  
*Vanessa cardui* L. Gillam, Churchill.  
*Limenitis arthemis* Dru. Mile 200.  
*Limenitis arthemis* var *rubrofasciata*  
 B. & McDd. Mile 200.  
*Limenitis archippus* Cram. Mile 200.  
*Lycaena dorcas* Kby. Mile 200.  
*Everes amyntula* Bdv. Mile 200, Gil-  
 lam, Churchill.  
*Plebeius scudderii* Edw. Mile 200.  
*Plebeius aquilo* Bdv. Churchill.  
*Glaucopsyche lygdamus* var *couperi*  
 Grt. Churchill. Very common.  
*Pyrgus centaureae* Ramb. Gillam,  
 Churchill.

"It is interesting how some of our common southern forms work North. The Pas is just below Lat. 54 and Churchill just under 59. The railroad is 510 miles long and goes in a N.E. direction to Kettle Rapids crossing over the Nelson River; thence it is nearly straight North. Churchill town is surrounded for about 4 miles by tundra, after that the country is covered by bush and small timber, spruce and larch, with willow."

"The butterflies were named by Dr. McDunnough."

"*B. frigga* v *gibsoni* is, so far as I can tell, identical with *saga*. Dr. W. T. M. Forbes has told Austin H. Clark that he has received specimens of *P. machaon hudsonianus* from Churchill.

I did not see it in my two trips, nor can I learn of it being taken there."

\* \* \* \* \*

A few notations, to update to current taxonomic concepts in Lepidoptera, would seem to be required: The species placed by Brooks in *Brenthis* are now placed in *Boloria*; the species *aphirape* is now considered as being *eunomia*; the specimens that Brooks placed as *chariclea* are undoubtedly *titania*, although *chariclea* is also reported from Churchill. The designation of "var" by Brooks is undoubtedly a shortened form of variety; he used it, however, for taxons usually considered as subspecific.

#### ACKNOWLEDGMENTS

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## OF ERAGROSTIS AND RANGE EXTENSIONS; 1970 BOTANICAL REMARKS

by J. H. Hudson, 103 Richmond Crescent, Saskatoon

In the summer of 1970, for the first time since 1965, I had the good fortune to collect a plant new to Saskatchewan. It is *Eragrostis poaeoides* Beauv., a native of Europe. Boivin (1967) reported it from no further west than Ontario.

It was collected, as J. H. Hudson #2680, in the C.N.R. downtown yards, west from about the 500 block 1st Avenue, amid railway spurs on soil made largely of cinders plus gravel, on July 29, 1970. Some account of

how I came to find it may be of interest. A few days earlier Mr. J. Greaves of Saskatoon had brought me for identification a flowering stem of *Echium vulgare*, a European Borage Family weed with a long spike of large deep blue flowers. This has previously shown up in Saskatchewan but plainly is not persistent. As I remembered what he had said of its habitat, it had come from a lot used for parking machinery somewhere near his place of employment on First Avenue. Only