

Some New and Interesting

PLANT RECORDS

For the Prairie Province

by J. LOOMAN*

Introduction

In the 3 years since I reported range extensions of several species in Manitoba, further new or interesting records have been collected.¹⁰ Specimens of the species mentioned are all in the herbarium of the Research Station, Swift Current, Saskatchewan under the collection numbers quoted.

Data and Discussion

Beech Fern (*Thelypteris phegopteris* (L.) Slosson). McLennan Lake, Saskatchewan, at about 55° 53' N 104° 22' W, Looman 16533. Along small stream in shaded coniferous forest; fairly plentiful.

Boivin gives the distribution of this species as ranging from Nova Scotia to British Columbia, but remarks: "With only one known collection per province, we admit to being puzzled by this high degree of sporadism."³ Scoggan mentions a single collection (at about 57° N, 102° W) for Manitoba¹³; Moss does not list the species for Alberta¹²; Fraser and Russell have the species as occurring in the coniferous forest zone⁷, and Breitung gives records at Lake Athabasca, Clut Lake (north of Fond du Lac), and Porter Lake (which may be in the Northwest Territories, rather than Saskatchewan).⁵

The present collection is not only that of a rare species, but also well south of the known collections.

Smooth Crabgrass (*Digitaria*

ischaemum (Schreb.) Muhl.), Moose Lake, Manitoba, 49° 12' N 95° 20' W, Looman 14998. In disturbed area along roadside, with Witch Grass (*Panicum capillare* L.).

Previously reported only from Winnipeg.¹³ This species has glabrous sheaths and leaves, and its inflorescence has usually three racemes while in *D. sanguinalis* (L.) Scop. the sheaths and leaves are pubescent, and the inflorescence usually has five or more racemes.

Smooth Grabgrass is a rather common and troublesome weed in Eastern Canada but is very rare in the West. At Moose Lake it was plentiful along the side of a now apparently little used road to a former logging camp.

Pine Grass (*Calamagrostis rubescens* Buckl.) Nipawin Provincial Park, Grace Lake, Saskatchewan, at about 54° 01' N 104° 32' W, Looman 16633. Along trail in moderately dense coniferous forest.

This species was known in Saskatchewan only from the Cypress Hills Provincial Park.^{4 6 7 14} Boivin gives the distribution as southwest Saskatchewan to British Columbia.² Moss lists the species only for Western Alberta, and de Vries and Bird do not include it in their list of "Cordillera species."^{12 15} However, Tisdale and Budd mention that the species was collected in the Albertan Cypress Hills by Bolton, and a specimen labelled "Cypress Hills, Alta." collected by Bolton in 1936 is in the herbarium at the Research Station, Swift Current. Breitung also lists a specimen from the Albertan Cypress Hills.⁴ The present location is far north and east of the hitherto known distribution and it

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possible that further locations in the Boreal forest will be found. Several of the Cordilleran species, listed by Breitung and de Vries and Bird show this type of distribution, for example, Pipsissewa (*Chimaphila umbellata* var. *occidentalis*), Pinesap (*Monotropa hypopithys*), and Pinedrops (*Pterospora andromedea*).^{4 15}

Muhly (*Muhlenbergia andina* (Nutt.) Hitchc), Birch River Community Pasture, Manitoba, at about 52° 30' N 101° 01' W, Looman 15334. Wet area in shallow depression. Duck Mountain Provincial Park, Laurie Lake, Manitoba, 51° 33' N 101° 03' W, Looman 15415. On moist rocky beach. Uncommon in the Birch River Community Pasture, but very abundant on the shore of Laurie Lake. New to Canada.

This species has not previously been reported east of the Rocky Mountains. Abrams gives its distribution as "open ground, Arid Transition zone. Cascade and Sierra Nevada Mountains from Washington to California, east to Wyoming."¹ Hitchcock includes Montana, at medium altitudes, in the distribution area.⁹ Its occurrence some 2° or 3° north, and possibly 14° east of the hither-to known range is rather puzzling. Though it is not impossible that this species has been overlooked in the intervening area, I doubt whether this alone can account for the apparent discontinuity in the distribution of *M. andina*. Superficially, confusion with Bog Muhly (*M. comoserata*) and Marsh Muhly (*M. cemosata*) is possible, and both these species are widely distributed in the Prairie Provinces. It is therefore not entirely impossible, though rather unlikely, that some misidentified specimens of *M. andina* are in herbaria. Examination under moderate (10x or more) magnification will bring such specimens to light. Also, while Bog Muhly is a plant of oligotrophic marshes, and Marsh Muhly occurs mainly in forest margins and shrubbery on rather dry soils, *M. andina* occurs on somewhat saline, wet soil in both locations in Manitoba.

Stemless Lady's-slipper, (*Cypripedium acaule* Ait.), Moose Lake,

Manitoba, Looman 14977; McKay Lake, Saskatchewan, 55° 27' N 104° 56' W, Looman 16623; Lac Ile a-la-Crosse, Saskatchewan, 55° 25' N 104° 56' W, Looman 16953. Shady and open coniferous forests on sandy soil (Fig. 1).



Fig. 1. Stemless Lady's-slipper (*Cypripedium acaule* Ait.)

In Manitoba this species is reported only from the Whiteshell Forest Reserve, Victoria Beach and Herb Lake Village.¹³ Fraser and Russell report it (as *Fissipes acaulis*) from forests in the Grey Podsol soils and Precambrian shield zone.⁷ Breitung lists Lac la Ronge and Lake Athabasca as the only locations in Saskatchewan.⁵

Moss gives northeastern Alberta, but does not indicate the abundance of the species.¹² Stemless Lady's Slipper has also been sent in to me for identification from "north of Green Lake."

Maiden Pink. (*Dianthus deltoides* L.). Cold Lake, Saskatchewan, 54° 33' N 109° 52' W, Looman 17686. Disturbed area in open pine-spruce forest on sandy soil (Fig. 2).



Fig. 2. Maiden Pink
(*Dianthus deltoides* L.)

Hitherto known in Canada from Nova Scotia to Ontario and British Columbia.² The only other *Dianthus* species in the Prairie Provinces are Wood-pink (*D. sylvestris* Wulfen), with a glabrous calyx (pubescent and somewhat glandular in Maiden Pink), and Sweet William (*D. barbatus* L.) which has a congested inflorescence.

The genus *Dianthus* is apparently not native to North America, and the occurrence of Maiden Pink in this isolated location forms another puzzle. There is a cabin about three-quarters of a mile north of the location and across the Cold River. But this

cabin belongs to a trapper who uses only in winter and there is no garden. Topographic maps of the area indicate a ranger's cabin approximately at the location, but this cabin was never there according to forest rangers whom I asked for information. At present, two picnic tables and a toilet are in the general area but old-timers in nearby Pierceland assured me that no one has ever lived permanently in the area or maintained a garden there.

Swamp Saxifrage (*Saxifraga pensylvanica* L. ssp. *pensylvanica*). Moor Lake area, Manitoba, Looman 1486. Very sparse in muskeg area (Fig. 3).



Fig. 3. Swamp Saxifrage
(*Saxifraga pensylvanica* L.)

The species is new to Manitoba and was previously known in Canada only from the Rainy River area in Ontario. It was collected there by Ward, dated, and Garton, 1961, as shown on herbarium labels. In a personal communication confirming identification of this species, Dr. Boivin notes that the species is cited by Macoun

collected by Day in low places near Fort Erie but that he has been unable to find the Day specimens anywhere." Hence, he considers the report unsubstantiated and notes further that Gleason includes Ontario in the range of the species on the basis of Macoun's report.⁸ The first authentic report for Canada is that of Boivin which is based on the Rainy River collections.² The present location in Manitoba is about 5 miles across Lake of the Woods from the Ontario locations.

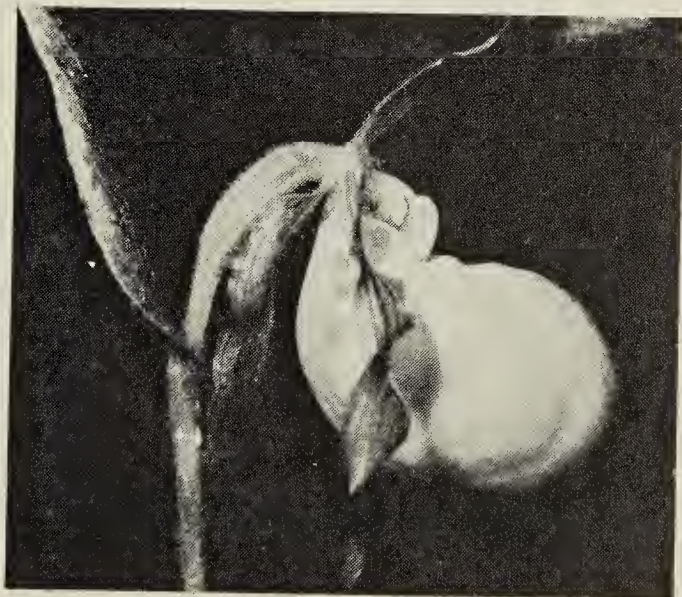
Northern Wild Comfrey. (*Cynoglossum boreale* Fern). Moose Lake, Manitoba, Looman 14800. In moist woods around the lake.

Previously known only from four other locations in Manitoba.¹³ This is another "rare" species. Dr. Boivin, in personal communication, remarks "A very rare plant. Can you guess at the reason for its rarity?"

It is possible to make a guess at rarity but it will be much harder to prove this guess correct or incorrect. In my opinion, native plants can be rare for three main reasons: Firstly, because of their limited tolerance to habitat conditions, which makes suitable habitat types scarce. In this case, a species may be found in only a few locations but may be quite plentiful there. Secondly, because of very special adaptations, such as those of the orchids which require a symbiont. This case is very similar to the first one, but the species can occur in other varied habitat types, as long as the symbiont is present. Thirdly, the reproductive capacity of the species may be limited so that it cannot become abundant.

It is possible that a species has two, or even all three of the above characteristics and is very rare indeed. Thus, Northern Wild Comfrey may well be limited to the moist, shady coniferous woods on sandy soils, as those at Moose Lake. It also appears to set fewer seeds, so that its reproductive capacity is limited. Given these conditions, the species must be and will remain rare in general as well as its occurrence.

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Yellow Lady's-Slipper

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