

1974 PLANT RECORDS FROM SASKATCHEWAN; REDISCOVERIES, DISCOVERIES AND OTHER CURIOSITIES

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The summer of 1974 was even more fruitful of botanical finds for me than the summer before. Treated here as finds are three plants apparently new to Saskatchewan, two confirmations of ancient records, and nine others which are either range extensions or at least rare enough to merit mention. Perhaps the rediscoveries, that is, confirmations of old records for Saskatchewan, could be treated first, since they gave me more joy than did even those for which no earlier report existed.

Halimolobos virgata (Nutt.) O. E. Schultz. J. H. Hudson No. 2902, 1 June 1974, dry sandy slightly disturbed but grassy flat, Camp Can-ta-ka-ye near Birsay, NW1/4 18-24-VI W3rd; J. H. Hudson No. 2909, 9 June 1974, dry eroded south-facing silty slope on overgrazed prairie with high development of winter annuals, Riverhurst Ferry, SE1/4 5-23-VII W3rd. Also seen 15 June near gravel pit on SE1/4 12-26-X W3rd, south of Macrorie. This plant was collected by John Macoun at Twelve Mile Lake and at Sucker Creek (Cypress Hills) in 1895 and reported by his son, J. M. Macoun (1895); there do not seem to be any subsequent reports. Presumably it has been passed over because of its extreme likeness to many of our species of *Arabis* (Rock Cress). In life, it is almost indistinguishable from *Arabis retrofracta* or *A. divaricarpa* except for having erect pods upon divergent stalks; then, too, the somewhat smaller and whiter flowers open while in a terminal position at the tip of the stem. At least in *Arabis retrofracta*, only

unopened flower buds are found at the tip of the stem; the flowers blossom after growth of this tip has left them behind in a lateral position. I would not have recognized *Halimolobos* (there is no common name) had I not memorized the drawing in *Flora of the Pacific Northwest* by Hitchcock, et al (1964), having learnt from Boivin (1968-1969) that it had been found in Saskatchewan. The report in Breitung (1957) is a conglomeration of citations of this plant and of *Arabidopsis glauca* (Nutt.) Rydb. [= *Thellungiella salsuginea* (Pall) O. E. Schultz] to which the common name Mouse-ear Cress properly belongs. Breitung's citations from Vawn, Mortlach, and Sutherland are of this *Arabidopsis*; the Vawn sheet is in the Fraser Herbarium and the Mortlach and Sutherland collections are my own.

I'd like to add that the Camp Can-ta-ka-ye find came about as a result of being prevailed upon by Mary Houston to go down and help lay out nature trails for the Girl Guide camp there. After the trail laying was over, I botanized and found this *Halimolobos*, which goes to show that virtue occasionally does get rewarded.

Carex pedunculata Muhl. J. H. Hudson No. 2916, 16 June 1974, abundant in dense moist aspen woods 6.2 mi. N. of Hudson Bay Junction, 52° 57' N. and 102° 23' W.; J. H. Hudson No. 2932, 17 June 1974, occasional in rich cut-over woods west side Little Armit Creek, 52° 43' N. and 101° 48' W. This small woodland sedge was collected by Sir John Richardson at Cumberland House, presumably in the 1820's (no



Woodland Trail, Prince Albert Park.

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date on label). Dr. B. Boivin of the Biosystematics Research Institute, Ottawa, in 1969 sent me a photograph of the sheet as preserved in the Gray Herbarium of Harvard University. At the time I thought it odd that the plant hadn't turned up in Saskatchewan during the following 150 years, and wondered whether Richardson at the time had not been in what is now Manitoba. It is, of course, widely distributed in the eastern woodlands, extending west to Manitoba — Scoggan (1957) cites three locations there.

The first find of this year's trio of plants new to Saskatchewan was *Chorispora tenella* (Pall.) D. C., J. H. Hudson No. 2913, 9 June 1974, solid stands in summerfallowed field on fine sandy loam, L.S.D. 12 in 28-34-VIII W3rd, east of Delisle on Highway 7 and one mile west of the Cominco Potash Mine access road. This winter (?) annual weed of Eurasian origin may be identified at once as being a mustard with mauve flowers 1 cm diam., the colour of those of Indian Pink (*Cleome serrulata*), and further by the long-beaked pods, constricted between the many seeds, but indehiscent like those of a radish. Since Hitchcock (1964) says of it, "widely established in much of the more arid parts of the Pacific Northwest", and Boivin (1967a) attributes it only to British Columbia, one presumes this one has come in from the west. The infestation was seen from the car as a cake of green with pink icing looking like a solid stand of Indian Pink, but second thoughts informed me that it was too early for Indian Pink, and that I'd better stop and examine it. Later on the farmer worked the field and sowed oats. This spring the infestation was again in full flower, but then he summerfallowed the field.

Another novelty found this year was *Viola pubescens* Ait. var *leiocarpa* (Fern. & Wieg.) Boivin, J. H. Hudson No. 2931, 17 June 1974, moist rich soil under Ostrich Fern on old flood plain of Little Armit Creek, 8 miles S. of Armit, 52° 43' N. and 101° 48' W. This leafy-stemmed forest violet looks

much like the common *V. rugulosa*, Western Canada Violet, but for the flowers being yellow. It is of eastern distribution but Scoggan (1957) cites many Manitoba records.

With uncertainty is reported *Viola blanda* Willd., as J. H. Hudson No. 2924, 17 June 1974, alder swamp, 14.9 miles south of Armit, 52° 38' N. and 101° 48' W. The material is a stemless violet, the leaves more or less uniform, the petals white — the lower three with purple lines. It would have been assigned without a second thought to *V. renifolia*, Kidney-leaved Violet, if it had not possessed long thin rhizomes. On keying this in Boivin (1967b) one gets to *V. blanda* Willd., with which he has merged *V. pallens* (Banks) Brainerd. Scoggan (1957) kept these two separate (as do the standard eastern floras) and gave several citations of both from Boreal Forest points in northern Manitoba. The occurrence of violets of this sort at Armit is hence not surprising.

Now to begin the list of plants previously reported for Saskatchewan but of which records may be of some interest. I picked up *Anemone quinquefolia* L. var *interior* Fern. twice in this fruitful Hudson Bay Junction area: J. H. Hudson No. 2921, 16 June 1974, rich mixed forest 6.2 mi. N. of H.B. Junction, 52° 57' N. and 102° 23' W.; J. H. Hudson No. 2930, 17 June 1974, in moist rich soil under Ostrich Fern on old floodplain of Little Armit Creek, 8 mi. S. of Armit, 52° 43' N. and 101° 48' W. This eastern anemone looks much like a half-sized Canada Anemone (*A. canadensis*) except that the whorl of stem-leaves comprises 3 or 4 stalked leaves which are each made up of 3 fully separate leaflets. The plant has been reported from Somme, Saskatchewan, by Breitung (1957) and ranges widely eastward from there.

In this same general area, showed up *Sambucus racemosa* L. var *pubens* (Michx.) Watson, Red Berried Elder, as J. H. Hudson No. 2929, 17 June 1974, along banks of Little Armit Creek 8 miles S. of Armit in 52° 43' N. and 101° 48' W. This is a large shrub



From Spy Hill (SW6-19-30W1) looking west toward Spy Hill village. 1958.

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with cream-coloured flowers, well known in cultivation. Wild material was reported by Fraser and Russell (1944) from 60 miles northeast of Nipawin; the Fraser Herbarium has also a sheet from Madge Lake.

Other oddities from various locations in the province were:

Hypoxis hirsuta (L.) Cov., Hairy Star Grass, J. H. Hudson No. 2947, 30 June 1974, moist meadow between aspen bluffs with slight groundwater influence, N.E. cor. S.W.1/4 6-19-XXX W1st, near Spy Hill. This species was reported by Breitung (1957) from Buchanan and Yorkton; the Fraser Herbarium has the specimens, which are over 50 years old. It is a small stemless plant bearing long hairy grass-like leaves from a bulb and a cluster of a few dime-sized yellow flowers on a naked stalk also directly from the bulb.

Drosera linearis Goldie, Linear-leaved Sundew, J. H. Hudson No. 2958, 7 July 1974, very wet quaking calcareous bog, SW1/4 11-47-III W3rd, Garthland P.O. area (west end of MacDowall Forest reserve).

Drosera anglica Hudson, Oblong-leaved Sundew, J. H. Hudson No. 2959, same time and place as J. H. Hudson No. 2958. These two sundews differ from the common *D. rotundifolia*, Round-leaved Sundew, in leaf shape as the common names indicate. They also differ from *D. rotundifolia* in habitat, being out in the wet calcareous bog rather than on lumps of sphagnum moss under black spruce. From one

another they seemed not to differ in habitat, yet intermediate leaf shapes were not seen. Breitung (1957) reported collections of both species from Prince Albert and McKague. *Drosera anglica*, however goes much further north in Saskatchewan than *D. linearis*, as it has been collected on the south shore of Lake Athabasca by Argus (1968) and in the Patterson-Hasbala Lakes area in the extreme northeastern corner of Saskatchewan by Argus (1966).

Carex buxbaumii Wahl; J. H. Hudson No. 2966, 11 July 1974, moist road ditch where road cuts through marly groundwater seepage area on west side Assiniboine River Valley, S. edge S.E.1/4 22-33-IV W2nd, east of Tadmore. This rare sedge was previously known from nine stations in the Boreal Forest from Candle Lake northward, but this station is much further south in Saskatchewan. In this area groundwater seepages forming springy marl bogs may be recognized from afar by the presence of isolated stands of black spruce. I found also *Liparis Loeselii* (L.) Richard, Bog Tway-blade, around a pool in the wettest part of the marl bog here.

Scirpus clintonii A. Gray, Clinton's Rush, J. H. Hudson No. 2979, 14 July 1974, clearing in dry sandy woods of pine and black spruce, at height of land on No. 4, 31 miles north of Glaslyn, 53° 47' N. and 104° 25' W. This species was reported by Breitung (1957) from Meadow Lake, the collection having been made by him in this

same "Height of Land" area. The plant looks much like *Scirpus cespitosus*, Tufted Club-rush, but grows in dry woods rather than wet bogs.

Juncus stygius L. var *americanus* Buch., American Bog Rush, J. H. Hudson No. 3036, 15 September 1974, very wet marl bog in not quite the wettest spots, SW1/4 11-47-III W3rd, Garthland P.O. area. This circumpolar plant of disrupted boreal to subarctic range has earlier shown up in Saskatchewan only near Lake Athabasca, both on the north shore (Raup, 1936) and on the south shore (Argus, 1968). It may be recognized by being a rush with one or two heads containing two or three capsules apiece, these capsules being oversize — to 8 mm long — in comparison with the commoner species. In this bog, from which came also the Sundews mentioned earlier, were also found *Rhynchospora alba* (L.) Vahl. and *R. capillacea* Torr., our two species of Beaked-Rush. I had collected the latter in a bog west of Mennon; the former I had not encountered before.

Malaxis paludosa (L.) Sw., Bog Adder's-Mouth, J. H. Hudson No. 3039, 15 September 1974, moist shady glade in black spruce woods, L.S.D. 14 in 2-47-III W3rd, Garthland P.O. area. A small and inconspicuous little orchid, of which I found only one plant — hence no duplicates can be distributed. Normally I don't collect a specimen if there is only one to be seen, but this one was collected with *Malaxis monophylla* (L.) Sw. var *brachypoda* (Gray) Morris & Eames, Adder's-Mouth, (J. H. Hudson No. 3040) and was recognized as different only during the pressing process. These two orchids are our smallest: *M. monophylla* is about 10-15 cm high, with one bulb, one elliptic sub-basal leaf a few cm long, and a spike of yellowish flowers about the size and shape of dead fruit flies; *M. paludosa* is perhaps smaller, with two or more bulbs in tandem, about two basal leaves and similarly unimpressive flowers. *M. monophylla* has been reported by Breitung (1957) from Waskesiu Lake, and also George F. Ledingham and I collected it at

MacDowall in 1952. *Malaxis paludosa* is not mentioned by Breitung, but Boivin (1967a) placed Saskatchewan within its range on the basis of collections unknown to me. The scarcity of reports is likely due to the exceedingly great difficulty of seeing these minute orchids. Fall is the least unfavourable time to spot them, as the tiny (2-3 mm long) capsules turn yellow-green, while the leaves wither to quite a pale colour.

Duplicates of all of these collections except No. 3039 have been deposited with the W. P. Fraser Herbarium at the University of Saskatchewan. The fourth set of my 1974 collections, which should include most of the above numbers, went to Dr. Ledingham at the University of Regina. The third set (which should include all but No. 3039 and No. 2924) has been sent to the Biosystematics Research Institute of the Canada Department of Agriculture in Ottawa.

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