- of Balsam Fir are 2-4 inches long purplish, and erect.
- 7. Creeping Juniper (Creeping Savin), Juniperus horizontalis Moench. Creeping Juniper is a prostrate or trailing evergreen shrub with long horizontal, often rooting, stems giving rise to short erect twigs, 2-6 inches high. The leaves are opposite, mostly scalelike, 1/16 inch long, blunt and bluish green. On young plants and leaders, however, the leaves may be awl-shaped, sharp-pointed and about 1/4 inch long. The seed cones are blue with a whitish bloom, round, berry-like and about 1/4 inch in diameter. Creeping Juniper is found on dry river banks and sandy knolls, particularly in the southern third of the province, although it is occasional the northern in
- coniferous forest as well.
- 8. Ground Juniper (Common Juniper, Dwarf Juniper). Juniperus communis L. Ground Juniper is a low, spreading evergreen shrub reaching only about 2 feet in height and often forming large clumps. The bark is thin, dark reddish-brown to gray, rough and scaly. The leaves are awl-shaped, 1/4-1/2 inch long, less than 1/16 inch wide, stiff, sharply pointed, whitish and grooved below, shiny yellow-green above and whorled in threes. The seed cones are dark blue covered with a whitish bloom, round, berrylike, hard and about 1/4 inch in diameter. Ground Juniper is found throughout Saskatchewan on riverbanks and exposed hills both in the prairies and in the northern woods, although it is somewhat rare in the latter area.

NODDING TRILLIUMS

In Eastern Saskatchewan

by BERNARD De VRIES*

En route to the Saskatchewan Natural History Society field-meeting at Hudson Bay, Saskatchewan, my wife and I tried to relocate the known locations of Nodding Trillium (Trillium cernuum L., fig. 1) in eastern Saskatchewan. Previous field trips in 1971 and 1972 were unsuccessful; however, Trillium cernuum L. variety cernuum and variety macranthum Eames and Wieg. were discovered at four separate and additional locations in eastern Saskatchewan between June 14 and 17, 1973.

Rather small, but well established populations of Nodding Trillium occur in aspen (*Populus tremuloides*) woods, mainly in association with Speckled Alder (*Alnus incana*), and on one occasion in a damp Speckled Alder - Ostrich Fern (*Matteucia struthiopteris*) woods.

The Saskatchewan localities are listed below with the number of each voucher specimen in the Fort Qu'Appelle (Sask.) Herbarium:

^{*}Fort Qu'Appelle Herbarium, Fort Qu'Appelle, Saskatchewan.



odding Trillium (Trillium cernuum var. macranthum)

recimen
No.

977 & 978

979 & 980

981

982

Location and Date

2 km (1.25 miles) southeast of junction of Highway 57 and Batka Road and 1 km (0.67 miles) west of the Manitoba boundary, Duck Mountain Provincial Park, Saskatchewan. June 14, 1973.

21 km (13 miles) northeast of Hudson Bay, Saskatchewan, along Highway 109 and 29 km (18 miles) west of the Manitoba border. June 15, 1973.

82 km (51 miles) northeast of Hudson Bay, Saskatchewan, along Highway 109 and 26 km (16 miles) west of the Manitoba boundary. June 16, 1973.

13 km (8 miles) south of Hudson Bay, Saskatchewan, along the Little Swan River Road and 26 km (16 miles) west of the Manitoba boundary. June 17, 1973.

This species ranges through temperate eastern America from southern Manitoba east to Quebec and Newfoundland, south to Nova Scotia and the New England States to upper Georgia. The variety macranthum ranges through much of the above range, but extends farther west to Pennsylvania, Ohio, Indiana and north to Wisconsin into Ontario and Manitoba. Both the typical species and the variety occur in eastern Saskatchewan as scattered populations.

Previous known Saskatchewan collections are as follows: D. Arnott, Runnymede, 86; B. Boivin and T. Mosquin, Hudson Bay, 37 km (23 miles) north, 10857, July 11, 1955; N. A. Skoglund, Duck Mountain Provincial Park near Madge Lake, 560, July 21, 1971. Voucher material was

examined by the author and is deposited in the Fraser Herbarium, University of Saskatchewan, Saskatoon.

Upon examining voucher material, the author suggests that the collection of Trillium cernuum var. macranthum by Boivin and Mosquin is possibly the record in which Scoggan (1959) notes it as reported from the Mackenzie. This collection is titularly labeled: "Plantes de la Saskatchewan, Canada, District de Mackenzie". Also the collection of Trillium cernuum by Arnott is in all probability the first record for Saskatchewan and referred to by A. J. Breitung in his 1957 Annotated Catalogue of the Vascular Flora of Saskatchewan (Harms, 1971, personal communication). This species has since been revised to the variety macranthum. However, on the basis of comparison with his own material and measurements given for corolla, anther and peduncle in the literature, the author prefers to retain it as variety cernuum.2 4

Although differences between variety cernuum and variety macranthum are apparent for corolla, they are less defined for anther and peduncle and more material is needed if distinct determination is to be obtained.

Measurements for corolla, anther and peduncle taken on 6978 and 6980 compare favourably on the average with those given in literature and examined voucher material of *Trillium cernuum* for corolla and anther, i.e., corolla 15-25 mm long, 5-9 mm wide, anthers 2.5-4.5 mm long. Measurements taken on 6978 for peduncle were somewhat larger (45 mm vs. 40 mm).

The collection 6981 indicates a northward extension of 45 km (28 miles) from the previous locality at Bois franc. The entire 1973 collection of *Trillium cernuum* including the variety *macranthum* could indicate a more widespread occurrence of this eastern deciduous forest species than formerly believed in eastern Saskatchewan, where it reaches its western and northern limits in the boreal-grassland transition zone.

A second species, Woodland Anemone (Anemone quinquefolia L. var. interior Fern.), was collected in an Aspen wood, 3 km (2 miles) west of the Manitoba boundary along Highway 3, 6983, June 15, 1973. The previous known Saskatchewan collection is in aspen woods at Somme by Ronald Hooper, undated. A voucher specimen is deposited with the Experimental Station, Canada Department of Agriculture, Swift Current, Saskatchewan. This collection is believed to be a first for Saskatchewan.³

The Woodland Anemone ranges through temperate eastern America, from central Manitoba to southern James Bay, south to Michigan, Iowa, Illinois, and Kentucky. It reaches its western limit in eastern Saskatchewan where it occurs sporadically in Aspengrassland margins.

A third species, Purple Clematis, (Clematis verticillaris DC.) was collected by S. Riome and S. J. Street in an Aspen wood. The specimen was brought to the author's attention and donated to the Fort Qu'Appelle Herbarium by Mrs. Mary Skinner. The location is as follows: 88 km (55 miles) north of Hudson Bay and 27 km (17 miles) west of the Manitoba boundary along Highway 109, 6984, June 16, 1973.

This species ranges from Ontario east to Quebec and south through the New England States to Maryland, west to Ohio, Michigan and Wisconsin. It has been reported from Manitoba by Jackson et al. and Lowe (in Scoggan, 1957), but no actual specimens have been seen. The Western Clematis, variety columbiana (Nutt.) A. Gray, occurs in the extreme southwest corner of Saskatchewan and through much of Alberta and British Columbia.

The unusually wide disjunction between Ontario and southwestern Saskatchewan warrants consideration. The occurrences of the variety *verticillaris* in eastern Canada and the United States are contiguous.

Although the collection of Purple Clematis was rather scanty, the author hypothesizes the specimen to be the

variety verticillaris on basis of comparison with voucher material and neasurements given by Boivin for epals, i.e. 2.0 - 4.5 mm long. This would indicate a westward extension and first record of this variety in Saskatchewan. Additional collections both in Manitoba and Saskatchewan are needed to substantiate the hypothesis. The area of transition between the varieties verticillaris and columbiana has yet to be located. ¹BOIVIN, B. 1968-1969. Flora of the Prairie Provinces, Part II. Phytologia, volume 16-18, pages 219-339, and 59-293.

²FERNALD, M. L. 1950. *Gray's Manual of Botany*. Eighth edition. New York, pages 1-1632.

³HOOPER, R. 1954. Blue Jay, 12 (2): 15. The Saskatchewan Natural History Society.

⁴SCOGGAN, H. J. 1957. Flora of Manitoba. National Museum of Canada Bulletin 140, p. 1-619, 15 plates, 1 fig.

CANADA PLUM In Southwestern Alberta

by W. J. CODY* and KEITH SHAW**

In the fourth (1949), fifth (1956) and sixth (1961) editions of Native Trees of Canada, the distribution of Canada Plum (*Prunus nigra* Ait.) is given as follows: ". . . from the valley of the St. John River in New Brunswick westward throughout southern Quebec and southern Ontario, in the egion on Lake Superior west of Port Arthur in western Ontario, and north o Riding Mountain in Manitoba. It is also reported at the fords of several livers in southern Alberta ...". The eventh edition of Native Trees of Canada (1969) by R. C. Hosie made no mention of the Alberta report. This, according to T. C. Brayshaw (in lit.), was deleted because no specimens ould be found to substantiate the

In the fall of 1971, a small population of this species reaching a neight of only 10 ft., was found near Cardston in southwestern Alberta. At that time only a minimum collection

was made in the hope of securing flowering material in the spring. Unfortunately, the fall and winter of 1971-72 were extremely severe and buds and small twigs were killed back. Sucker growth did appear but there were no flowers. Herbarium material of this sucker growth was gathered together with portions of the dead branches which bore the characteristic spinescent twigs. Data are as follows:

SW Alberta, in deep loam soil on east-facing bank of coulee leading into Lee Creek 1-1/2 miles south of Cardston, elev. 3800 ft. (SE 1/4, Sec 4, Twp 3, R 25, West of 4), R. K. Shaw 2170 (DAO); 1218 (BRY).

A second stand was found nearby after the leaves had dropped (NW 1/4, Sec 4, Twp 3, R 25, West of 4). During a spell of warm clear weather in November, 1972, another opportunity was taken to search the area for Canada Plum. On this search an uncounted number of plants with lower stems of various sizes from 1/2-inch diameter to 1 inch, 2 inches, 3 inches and a very few to 4 inches in diameter were found. Heights ranged from 3 ft. to 12 ft. Plants were also found along Lee Creek within a 1-mile radius of the original finds.

Contribution No. 955 from the Plant Research Institute, Central Experimental Farm, Ottawa.

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