

# FURTHER RECORDS OF THE RARE DRAGON'S MOUTH (SWAMP-PINK) ORCHID, IN SASKATCHEWAN

VERNON L. HARMS, Fraser Herbarium, University of Saskatchewan, Saskatoon S7N 0W0 CAROLYN A. KINDRACHUK and BOB C. GODWIN

One of the handsomest but rarest of our native orchid species in Saskatchewan is *Arethusa bulbosa* L., which is known by various common names including Swamp-pink, Dragon's-mouth, Bog-rose, and *Arethusa*. It is an eastern North American species, apparently reaching its western-most range limit here. This orchid was first reported for Saskatchewan by Argus<sup>1</sup> from a black spruce *Sphagnum* bog at "Little Gull Lake" east of the William River along the south shore of Lake Athabasca (G. A. Argus #327-62, 497-63). This first Saskatchewan report extended the species' then known range nearly 500 miles northwestward of its recorded occurrence at The Pas, Manitoba. Subsequently it was reported again for Saskatchewan by Erskine<sup>3</sup> from a "muskeg off the Dore Lake Road", south of Dore Lake, nearly 300 miles south of Argus' Lake Athabasca site.

Recently we have found this apparently rare orchid at the following four additional localities in boreal Saskatchewan: (1) Near Nikik Lake, south of Montreal Lake, about 54°N, 105°50'W; in bog habitat with pitcher plants; June 28, 1976; collected by Dorothy G. Bird, the specimen referred to C. A. Kindrachuk for identification. (2) 10 km north-northeast of Nipawin; about 1 km south of South Saskatchewan River, 53°27' N, 103°56'W; open bog with some tamarack, near treed bog portion; June 13, 1976; Bob C. Godwin. (3) Cluff Lake area, about 2½ km north-northeast of Island Lake, 58°23½'N, 109°42'W; in black spruce/tamarack sparsely treed bog; June 16, 1977; V. L. Harms #23985. (4) 1½-3 km south of South Arm of Lac Ile-A-La-Crosse, about 13½ km northwest of Beauval, near Miles 68-69 of Highway 155,

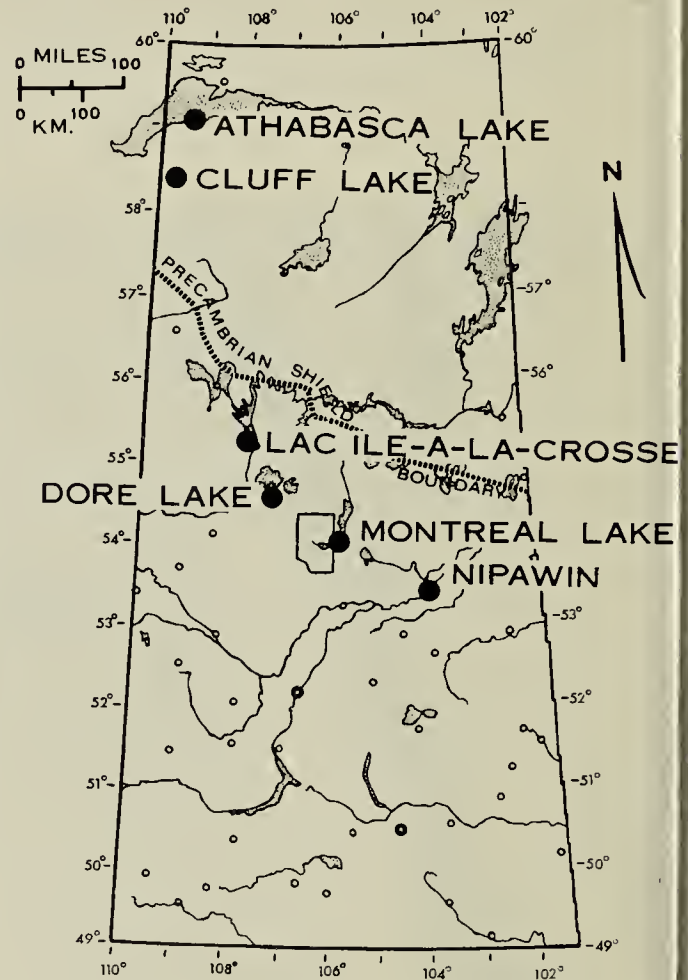
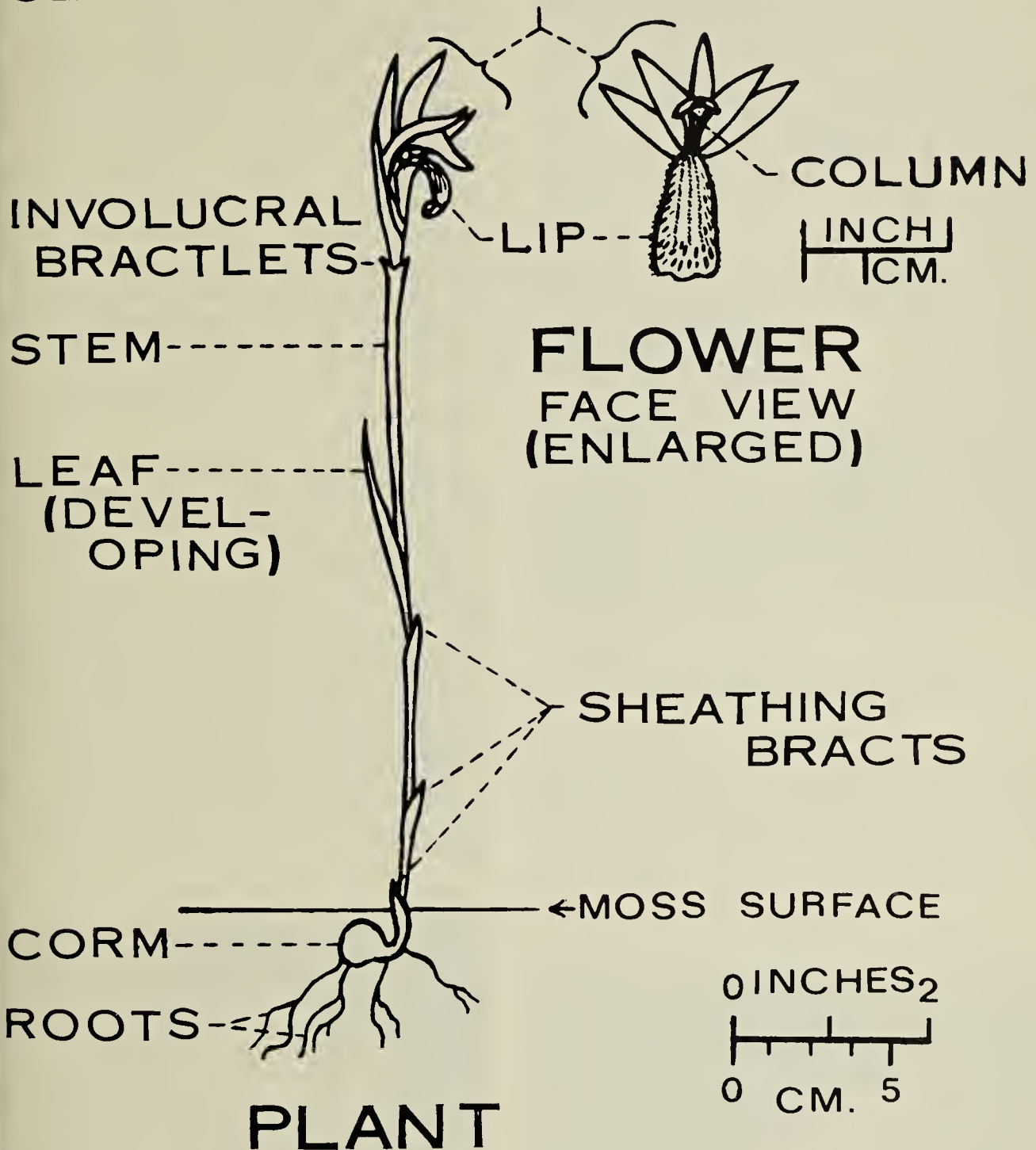


Fig. 1 Known Distribution of the Dragon's-mouth Orchid, *Arethusa bulbosa*, in Saskatchewan.

55°10'N, 107°66½'W; black spruce sparsely treed bog; June 23, 1977; V. L. Harms #23993. In each of the above localities, the *Arethusa* plants were at least several in number to sometimes locally numerous. Limited voucher specimens for each of the above localities are deposited in the Fraser Herbarium, University of Saskatchewan, Saskatoon, to document these records.

As shown in the distribution map of Fig. 1, the six presently known Saskatchewan localities for *Arethusa bulbosa* are quite widely spaced, suggesting the possible sporadic occurrence of this rare orchid species

# SEPALS & LATERAL PETALS



# PLANT

Fig. 2 Dragon's-mouth Orchid, *Arethusa bulbosa*.

elsewhere in suitable bog habitats perhaps throughout boreal Saskatchewan where it should be looked for during early summer (particularly in June). These newer records narrow the former great gap existing between the Manitoba reports and the very disjunct-appearing Lake Athabasca site. It may or may not be phytogeographically significant that, except for the much more northern Cluff Lake and Lake Athabasca localities which occur on the Precambrian Athabasca Sandstone Formation, all of the other

known Saskatchewan records for *Arethusa bulbosa* are from the more southern portion of the Boreal Forest Zone south of the Canadian Precambrian Shield boundary. It is also interesting that at least the presently known Manitoba and Saskatchewan records for the dragon's-mouth orchid, when taken together, tend more or less to form a diagonal line from southeastern Manitoba to northwestern Saskatchewan.

The showy, magenta to rose-colored flowers of the dragon's-





C. A. Kindrachuk

Fig. 3 Side View of Flower of Dragon's-mouth Orchid, *Arethusa bulbosa*.

mouth orchid are 2.5-5.0 cm long and solitary on slender, smooth, apparently leafless flowering stems about 10-25 cm high, arising from ovoid bulb-like corms, which are usually rather loosely rooted in the *Sphagnum* moss (Figs. 2, 3 & 4). A single, narrow, grass-like leaf, about as long as the flowering stem, and folded to less than 5 mm in width, develops only after flowering. The three sepals and two lateral petals of the flowers are somewhat basally fused, all similar, magenta-colored, arched-erect, narrow, to about 8 mm wide, and 2-5 cm long. As in all orchids, the lower of the three petals is specialized as a "lip", which here is oblong-shaped, 20-35 mm long, widened upward to 10-17 mm at the notched to shallowly 3-lobed summit, basally erect and then curved outward with terminal portion abruptly bent downward, rose-purplish, mostly with pinkish-white spots or striations, strongly veined, marginally minutely fringed, and with 3 to 5 somewhat yellowish to dark purple bearded crests. The central column (fused style and stamen filament) erect, basally fused to the lip, flattened, petal-like, widened and toothed

at summit, with the protruding stigma down-turned. The mature fruits are dry, many-seeded capsules, 2-3 cm long, long-beaked, and capped by dried, papery, persistent perianth parts. Probably Correll<sup>2</sup> gives us the most vivid, although fanciful description of this rare dragon's-mouth orchid by imparting to it the appearance of a "little beast, with ears distended, and lolling tongue, straining to recognize the intruder of its peaceful haunts", an apt description earlier quoted in the first report of this species for Saskatchewan by Argus.

The bog flora throughout northern Saskatchewan needs more investigation. Professional botanists and amateur naturalists, alike will find the discomfort from insects and difficulties of movement in bogs more than compensated for by a discovery of interesting and sometimes rare bog wildflowers, such as various orchids, butterworts, louseworts, sundews, cranberries, false asphodels, pitcher plants, three-leaved Solomon's seal, bog rosemary, bog laurel, buckbear



B. C. Godwin

Fig. 4 Face View of Flower of Dragon's-mouth Orchid, *Arethusa bulbosa*



MARGUS, GEORGE W. 1962. *Arethusa bulbosa*, an addition to the flora of Saskatchewan. Blue Jay 20(4): 162-163.

CORRELL, DONOVAN. 1950. Native Orchids of North America, North of

Mexico. Chronica Botanica Co., Waltham, Mass.

BERSKINE, ANTHONY J. 1974. Off into the wet green yonder: birds and plants of a boreal bog. Blue Jay 32(1): 33-37.

## FIRST SASKATCHEWAN RECORD OF SHOWY LADY'S SLIPPER

FENTON R. VANCE, 208 — 1610 College Avenue, Regina, Saskatchewan

A telephone call from an active junior naturalist, Eric Lang of Regina, led me to check out what appears to be the first Saskatchewan record of the Showy Lady's Slipper, *Cypripedium reginae* Walter. Eric had just returned from a family vacation at Madge Lake, where he had enjoyed looking for plants and using his newly-acquired camera. He was eager to talk about his experiences, and my interest in them reached a peak when he mentioned that he had been shown a Showy Lady's Slipper. Two specimens of this plant had been brought to Brenda Cholin, the park naturalist at Duck Mountain Provincial Park, one of which was pressed for the herbarium at Madge Lake while the second was kept alive in a container.

A few days later my wife and I travelled to Madge Lake to obtain as much data as possible on the discovery and to photograph any plants remaining in the wild. Brenda Cholin showed us the herbarium specimen, which had its bloom intact and was in good condition, and the live plant, now without its blossom. The two plants had been collected by Cathy Mollard and Les Schmidt, recreational assistants in the Park, who had found them on July 7, 1977, while working with a group of children. They brought the flowers to Brenda for identification, without realizing how rare they were in the province. Taken with Cathy Mollard to the site, we found three stems from which the blooms had apparently dropped, arising from a single root stock. We

photographed the plant for the record, but were unable to find any others in a search of the area. To protect the plant, we are not giving the exact location of this observation.

It is planned to donate the specimen from the Madge Lake herbarium to the Fraser Herbarium at the University of Saskatchewan in Saskatoon, and the live plant has been brought to Regina where Elizabeth Parkin, horticulturist with the Wascana Centre Authority, has it in her care.



Fenton R. Vance  
Showy Lady's Slipper near Mafeking,  
Manitoba