THE SILKY MILKWEED IN SASKATCHEWAN

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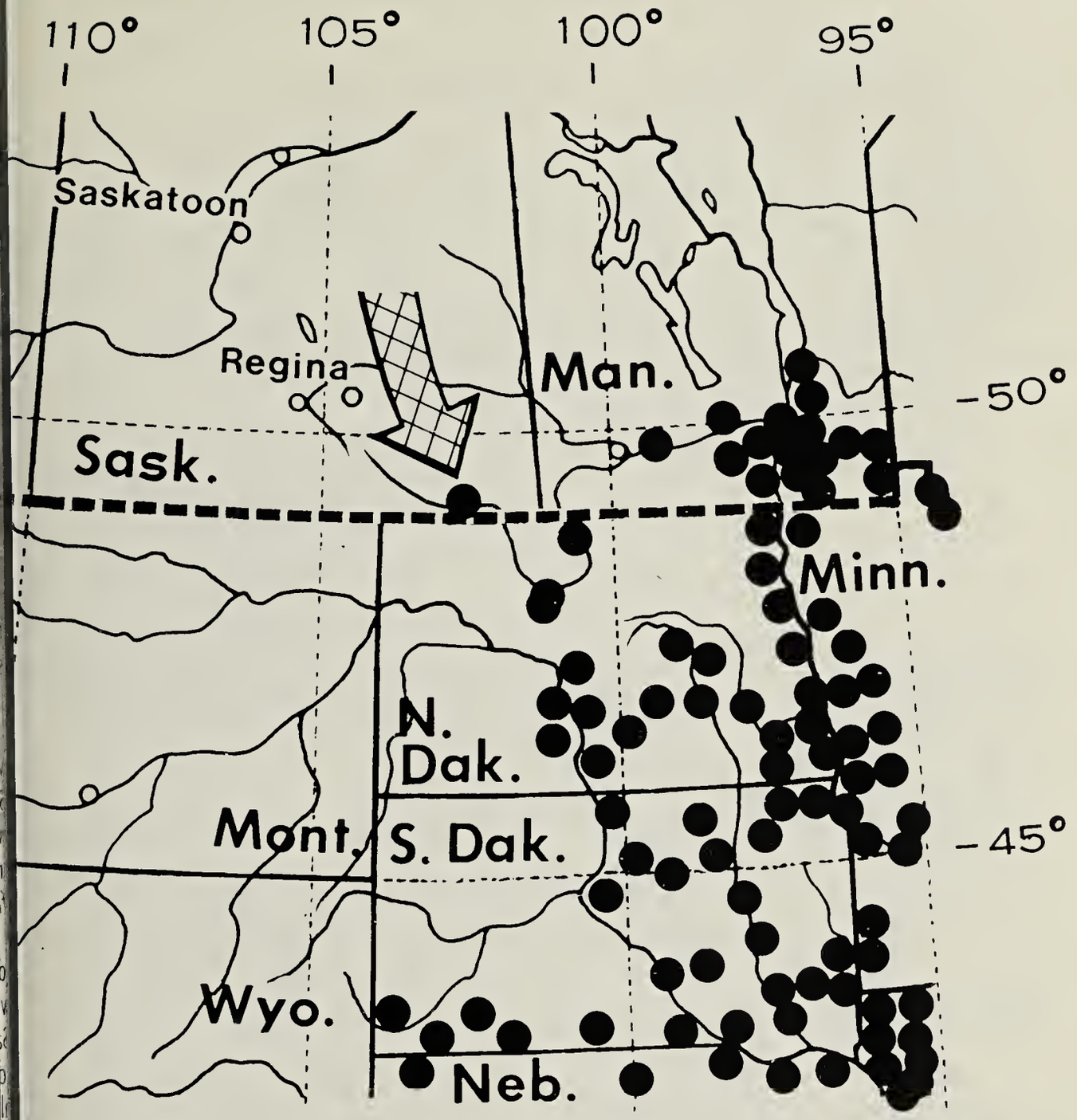
In 1954, a milkweed specimen was sent in for identification to the University of Saskatchewan, at Saskatoon, by Mr. Harold Longney, with information that it had been collected in the Souris River Valley near Roche Percee. Correctly determined as *Asclepias syriaca* L. by Dr. R.C. Russell in 1954, this single specimen, filed in the W.P. Fraser Herbarium (SASK), represented the only known collection of this species in Saskatchewan for 34 years. It was reported as a provincially rare species on this basis.[3] Subsequent to the 1954 Longney collection, the Silky Milkweed had never until now been reconfirmed from Roche Percee nor had it been found from anywhere else in the province.

Last summer Dunbar contacted Harold Longney, the original collector, and was shown the site of the original collection. The Silky Milkweed colony had multiplied from "only 12 stems found" in 1954 to about 200 plants in 1988. The former general designation of this collection locality as "Roche Percee" can now be given more precisely, about 5 mi. east and 0.25 mi. north of Roche Percee (about 0.5 mi. north of the former Pinto C.P.R. station) in SW 36-I-6-W2. The site is south of the river, and north of the valley road, on the upper floodplain of the Souris Valley. Another specimen was collected to document the continued survival of this species (1 July 1988, R. Dunbar *s.n.*, SASK). This is still the only known site of the Silky Milkweed in Saskatchewan. It should be looked for in southeastern Saskatchewan, especially along the lower Antler and the Souris River valleys.

The distribution map of S Milkweed shown in Fig. 1, plotting Saskatchewan site and the kn records of this species in Manitoba the neighboring United States derived from herbarium specimen SASK, UWPG, MMPN, and WIN, from various regional floras and lases.[7 4 5 6] The Saskatchewan colon Silky Milkweed is at the northwes limit of the species' natural range.

There are four other Milkw species that are known to occur in S atchewan. These are the Dv Milkweed (*Asclepias ovalifolia* Do the Green Milkweed (*A. viridifl* Raf.), the Whorled Milkweed (*A. ticillata* L.) and the Showy Milkweed *speciosa* Torr.). The Whorled Milkw is another very rare species in S atchewan known in the province from two sites in the Souris River val about 2 and 3.5 mi. west of Este respectively.[2]

Milkweed flowers are structur quite complex and unique. In addi to a calyx and corolla of five bas fused sepals and petals, respectiv (these reflexed at maturity in species) there is an elaborate upr corona (or crown). This consists of of five petal-like appendages ca hoods which are attached to stamens and corolla bases, alterna with the petal lobes. An incurved b called a horn, or crest, protrudes f within the hood of all of our milkw species except the Green Milkw The filaments of the five stamens closely coherent and the anthers



ure 1. *Recorded distribution of the Silky Milkweed on the Northern Great ains. (The arrow indicates the Saskatchewan record.).*

erent to the broad disk-like stigma. linating insects alight on the shiny matic surface; their legs slip off onto anthers, where they pick up "sad- bags" of pollen masses (called pol- a) to be carried to the stigmas of er flowers. The adherent anthers and ma together form a cone-like struc- called the gynostegium. Also un- al among flowering plants, in erse of the more usual situation, is fusing of the two carpels at the upper e and stigma while the ovaries remain separate. This situation occurs only in milkweeds and dogbanes. The ovaries mature into follicle-type fruits, eventually splitting open along a single upper seam to release numerous flattened seeds each bearing a terminal tuft of long silky hairs, the coma (see fig. 2).

The Showy Milkweed is the species most likely to be confused with the Silky Milkweed. These two species are our showiest milkweeds; both are tall stout perennials, producing showy clusters of

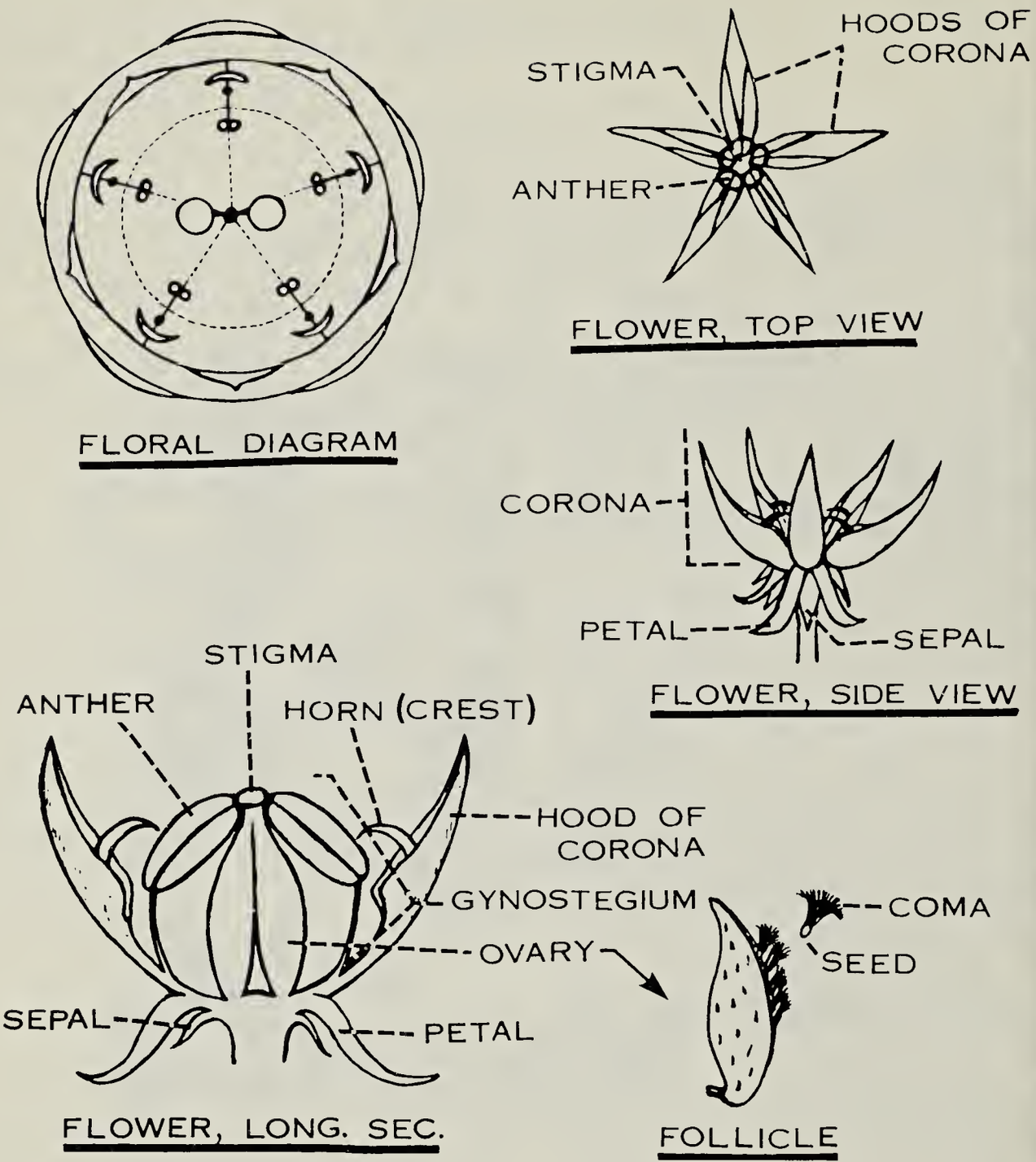


Figure 2. *Structures of a milkweed flower.*

rose to purplish-red flowers, with incurved horns from the corona hoods. Their leaves are broad, distinctly stalked, and densely soft hairy (tomentulose) beneath. The large pods (follicles) have tubercles (rough projections). The two species can be distinguished from each other by the characters given in Table 1. The shape of the corona-hoods, the most distinctive differentiating character, is depicted in Figure 3.

It is noteworthy that the Si
Milkweed is located within one mil
three other provincially very r
species, Indian Grass [*Sorghastr*
nutans (L.) Nash], White-flowe
Parsley (*Lomatium orientale* Coult.
Rose), and Climbing Bittersw
(*Celastrus scandens* L.), the latter kno
elsewhere in the province only fr
s-se of Estevan.[2] Also within the sa
section, but north of the Souris Ri
(NE 36-l-6-W2), have been found
other plant species that have been lis
as rare for Saskatchewan. These a

able 1. COMPARISON OF SHOWY AND SILKY MILKWEED

haracters	*Showy Milkweed (A. speciosa)*	*Silky Milkweed (A. syriaca)*
orona-hood length	10-13(-15) mm 2 x gynostegium length	(3-)4-7(-8) mm 2 X gynostegium length
orona-hood midrib	dark-colored throughout	not, or only partly, darkcolored
orona-hood terminus*	abruptly narrowed at/below mid-length to form a conspicuous, prolonged, lance-oblong, tongue-like, terminal appendage at least 5 mm long with apex acute	either not abruptly narrowed to a tongue-like terminal appendage, or less conspicuously, with narrowed terminal portion short, less than 3 mm long
ower diameter	15 mm	15 m
ower no./cluster	21	20, usually 25-30
tiole (leaf-stalk) ength	7 mm	sometimes longer to 10(-15) mm
bescence of pedicel, eduncles & upper stems	densely white-tomentulose, or velvety, the tomentum more minute, only about .3 mm thick on surfaces	densely white-tomentulose, tomentum to about 0.5 mm thick on surfaces
bescence of leaf ndersurfaces	densely tomentulose	densely to more thinly tomentulose
nt height	to 1 m	usually 1-2 m

Best (i.e. most distinctive and least subtle) distinguishing characters.

annyberry (*Viburnum lentago* L.), hite Milkwort (*Polygala alba* Nutt.), mbert's Locoweed (*Oxytropis lamrtii* Pursh), Tomentose Pussytoes (*Annnaria neodioica* Greene), American um (*Prunus americana* Marsh), estern False Gromwell [*Onosmodium olle* Michx. var. *occidentalis* (Mack.) nnson], Side-oats Grama [*Bouteloua rtipendula* (Michx.) Torr.], Switch ass (*Panicum virgatum* L.), Big Bluesm (*Andropogon gerardii* Vitman), and owfoot Violet (*Viola pedatifida* G. on).[3] In the suthor's present opinion, e latter two species (i.e. Big Bluestem d Crowfoot Violet) have now been und with greater frequency, and ould be removed from the ovincial list of rare plants.

Acknowledgements

We gratefully acknowledge the cooperation and kind assistance of Mr. Harold Longney, North Portal, and the respective curators of the afore-cited herbaria.

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[2] HUDSON, J.H. 1958. New plant records for Saskatchewan, 1957. *Blue Jay* 16:20-21.

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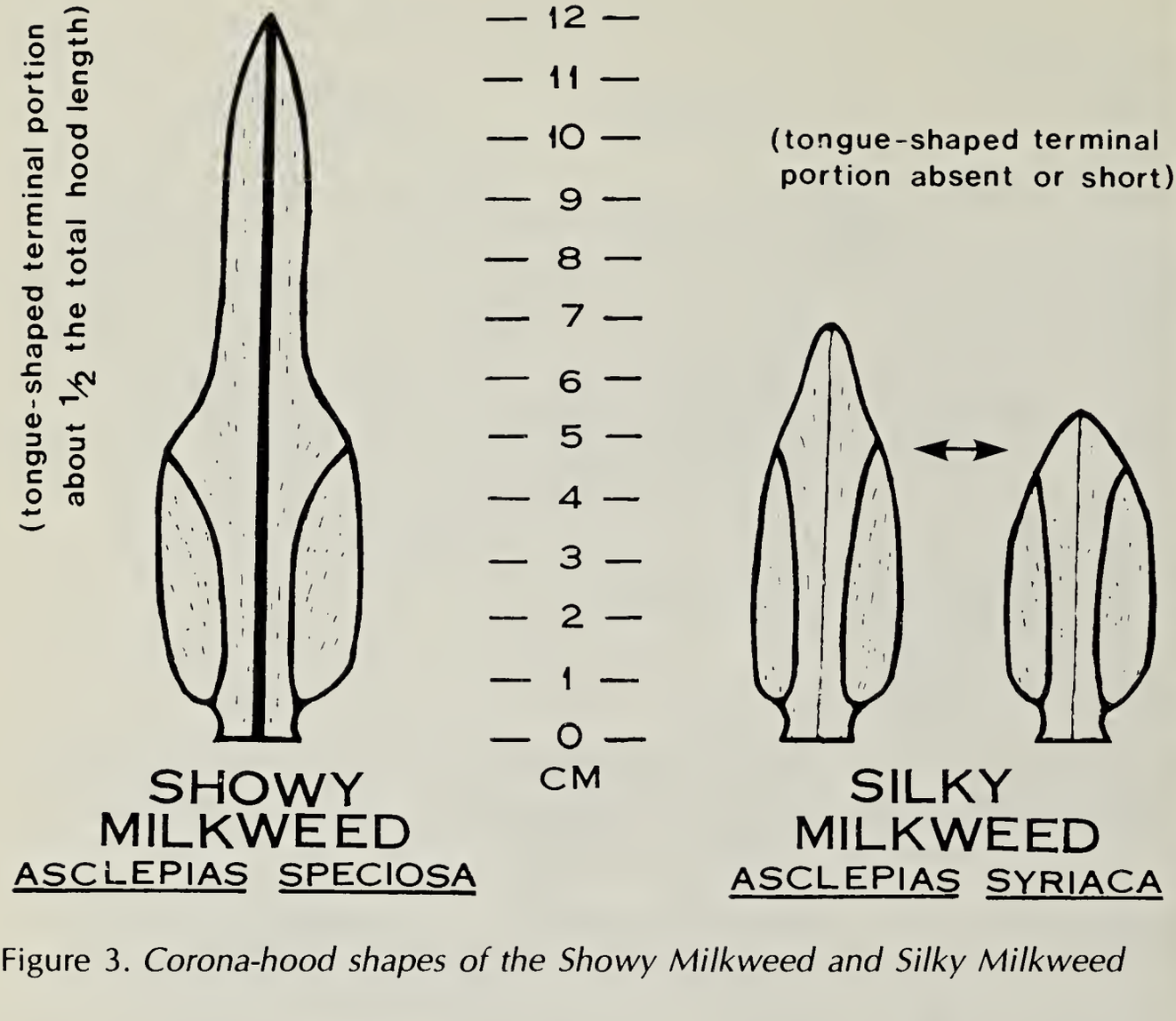

Figure 3. *Corona-hood shapes of the Showy Milkweed and Silky Milkweed*

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EDITOR'S NOTE:

The Crowfoot Violet was cited in Ran Plants of Saskatchewan because of seriou decreases due to habitat destruction. may since have been found at "too many locations, but how many of those loca tions still exist? The same may apply to Bi Bluestem.