

PLANTS

VASCULAR PLANT SURVEY OF MEADOW LAKE PROVINCIAL PARK, SK

KIRSTEN REMARCHUK and J. HUGO COTA-SÁNCHEZ, W. P. Fraser Herbarium and Department of Biology, University of Saskatchewan, Saskatoon, SK S7N 5E2

Meadow Lake Provincial Park (MLPP) is located in west-central Saskatchewan, approximately 45km northwest of the town of Meadow Lake, on the boundary of the Mid-Boreal Upland and the Boreal Transition Ecoregions. The park is one of the largest protected areas in Saskatchewan and covers approximately 1600 km² of land. The park encompasses a mosaic of ecosystems including forest, wetland, aquatic, and disturbed habitats.¹ The forested ecosystems are divided into several subcategories based on the dominant tree species and associated understory.¹ The wetland ecosystems include bogs, fens, swamps, and marshes, which are distributed throughout the park. Lakes, rivers and streams comprise the aquatic category. Naturally occurring fires and human activities cause disturbance within park ecosystems. MLPP is a popular tourist destination in Saskatchewan. As a consequence, campgrounds, roadsides and hiking trails have played a role in the structure and composition of MLPP flora and have generated additional pressure on the park's natural resources.

Basic ecological information regarding MLPP has been available since 1979, but this is the first detailed list of the vascular flora. Because of the

loss of natural habitats in Canada and the need to maintain local and regional diversity as well as preserve existing populations of threatened species, it is important to periodically conduct floristic inventories and to monitor changes in flora. Floristic inventories provide valuable information that can be used to target areas rich in biodiversity. Here we present a list of the vascular plants in MLPP based on a floristic survey designed to investigate species diversity and identify taxonomically rich areas. The survey was not meant to provide a complete list of the flora of Meadow Lake Provincial Park. Plants collected previously in MLPP and housed in the herbarium at the University of Saskatchewan (SASK) have not been included in this list due to the time consuming nature of searching the herbarium for specimens of these plants.

This floristic survey of MLPP was conducted from early June to late August in 2001 at 140 sites located throughout the park. Survey locations were chosen by applying a 1cm² grid to a 1:250 000 scale map of Meadow Lake Provincial Park. The grid was numbered from left to right and from top to bottom and the 140 locations were selected randomly using a random number table. Geographic

Positioning System (GPS) coordinates of known points on the map were used to determine the coordinates of each site. Some sites were inaccessible due to large water bodies or lack of trail or road. Where water bodies prevented access, a replacement site was situated as close as possible to the original randomly-chosen site. Where roads or trails were the limiting factor, a new site was chosen using the random number table. It should be noted that the survey area excluded the Bighead Indian Reserve and the Waterhen Indian Reserve because special permission is required to conduct research on reserve land. As a result, these areas have yet to be surveyed.

At each site, a temporary 10m x 10m quadrat was set up. Species composition was determined within each quadrat. Plants in flower were identified and whenever possible, vegetative material was used to identify the remaining plants. Unknown plants were taken to the herbarium for identification. Plant materials were collected, pressed, and preserved following standard protocols and voucher specimens were deposited in the W. P. Fraser Herbarium (SASK) at the University of Saskatchewan. Nomenclature for the majority of species listed was initially based on the Flora of Alberta, 2nd Edition, but has been updated to current nomenclature in Table 1.³ Previously used names are provided in square brackets in Table 1 for comparative purposes.

A previous floristic study by Blood and Anweiler (1979) reported that MLPP flora consisted of 188 vascular plant species, including 55 families and 137 genera. Our study shows a more diverse flora than previously reported: 271 species in 62 families and 173

genera (Table 1). MLPP flora represents approximately 17% of the provincial flora, which is estimated to be approximately 1,625 species (V. Harms, pers. comm.). Of the 271 species, 72 taxa are newly published records for MLPP flora, though several of these species have likely been previously collected in MLPP. Our data indicate that only eight species are listed as being at risk by the Saskatchewan Conservation Data Center.⁴ These species are Tall Larkspur (*Delphinium glaucum*), Rough Daisy Fleabane (*Erigeron strigosus*), Tall White Daisy Fleabane (*Trimorpha elata*), Dwarf Thistle (*Cirsium drummondii*), Cyperus-like Sedge (*Carex pseudocyperus*), Sparrow's Egg Lady's-slipper (*Cypripedium passerinum*), Slender Ladies'-tresses (*Spiranthes lacera*), and Leathery Grape Fern (*Botrychium multifidum*) (Table 2).

Twenty-seven of the species previously recorded by Blood and Anweiler were not found in this study.¹ These are indicated by an asterisk in Table 1. Several explanations can be made regarding the presence or absence of species in the area under study. Our sampling method was more efficient in identifying a large number of species in the study area than the previous study. In addition, the previous report dates back 25 years, and some areas of MLPP have changed. It is not unreasonable to assume that some of the previously reported species had restricted or limited distribution or specific soil and nutrient requirements and may have been eliminated from the park. Another important factor regarding the discrepancy in species number lies in fundamental issue of synonymy. Since multiple names can be used for a single biological entity, this affects final estimates in a region or area. In

fact, disagreements in species number are often the result of studies underestimating synonymy rates⁵. Synonymy rates refer both to species cited under different names and to species for which the taxonomy is unclear and which may be considered two species by one authority and one species by another.

Among the 62 plant families recorded in MLPP, the aster (Asteraceae) and rose (Rosaceae) families are the most widely occurring of the dicotyledons, with 34 and 20 representative species respectively. The buttercup (Ranunculaceae), legume (Fabaceae), and willow (Salicaceae) families are the next most commonly encountered families in the park, with 12, 11, and 9 representative species respectively (Table 1). Among the monocotyledons, the dominant plant families include the grasses (Poaceae), with 15 species, and the sedges (Cyperaceae), with 13 species (Table 1).

Overall, plant diversity appears to be evenly distributed throughout MLPP. No particular species-rich areas were identified in this study. As expected, disturbed areas held the highest concentrations of invasive species. Some recent introductions of invasive species include Smooth Brome (*Bromus inermis*), Alfalfa (*Medicago sativa*), White Sweetclover (*Melilotus alba*), Yellow Sweetclover (*Melilotus officinalis*), and Alsike Clover (*Trifolium hybridum*), which are widely distributed as roadside vegetation. Because of their aggressive growth and successful reproductive strategies, these species have the potential to spread and displace native species. Native species at risk must compete for resources, such as nutrients, light, habitat, and pollinators. These

additional pressures may lead to the extirpation of species at risk from MLPP. Fortunately, park management is aimed at maintaining plant diversity and there are policies and practices to address conservation issues in MLPP such as encouraging the use of designated roads and trails, and restrictions against the removal of plants from the park.

Because changes in flora occur over time due to many factors, we suggest periodic floristic surveys be conducted to monitor species at risk for more effective management of plant resources. Additionally, periodic floristic surveys may provide new species records for MLPP as well as provide information on changes in distribution of invasive species. Most importantly, the eight species at risk identified in this survey should be monitored periodically to ensure that their populations are maintained in the wild.

1. BLOOD, D. A. and G. G. ANWEILER. 1979. Resource Inventory and Analysis: Greig-Kimball Lakes Development Area, Meadow Lake Provincial Park. Donald A. Blood and Associates.
2. HARMS, V. L. 2003. Checklist of the Vascular Plants of Saskatchewan and the Provincially and Nationally Rare Native Plants in Saskatchewan. University Extension Press, University of Saskatchewan, Saskatoon.
3. MOSS, E. H. 1996. Flora of Alberta, 2nd Edition. University of Toronto Press, Toronto.
4. SASKATCHEWAN CONSERVATION DATA CENTRE. 2005. Conservation Database. www.biodiversity.sk.ca/db.htm.
5. SCOTLAND, R. W. and A. H. WORTLEY. 2003. How many species of seed plants are there? *Taxon* 52: 101-104.

Table 1. List of Vascular Plants of The Meadow Lake Provincial Park.

Scientific Name	Common Name
PTERIDOPHYTES	
EQUISETACEAE	
<i>Equisetum arvense</i> L.	Common Horsetail
<i>E. hyemale</i> L.	Scouring Rush
<i>E. scirpoides</i> Michx.	Dwarf Horsetail or Scouring-Rush
<i>E. sylvaticum</i> L.	Woodland Horsetail
LYCOPODIACEAE	
<i>Diphasiastrum complanatum</i> (L.) Holub. [= <i>L. complanatum</i> L.]	Ground Cedar
<i>Lycopodium annotinum</i> L.	Stiff Club-moss
<i>L. clavatum</i> L.	
<i>L. dendroideum</i> Michx. [= <i>L. obscurum</i> L.]	Tree Club-moss
OPHIOGLOSSACEAE	
<i>Botrychium multifidum</i> (Gmel.) Rupr. ●	Leathery Grape Fern
POLYPODIACEAE	
<i>Matteuccia struthiopteris</i> (L.) Todaro ■ var. <i>pensylvanica</i> (Willd.) Morton	Ostrich Fern
GYMNOSPERMS	
PINACEAE	
<i>Abies balsamea</i> (L.) Mill.	Balsam Fir
<i>Larix laricina</i> (Du Roi) K. Koch	Tamarack
<i>Picea glauca</i> (Moench) Voss	White Spruce
<i>P. mariana</i> (Mill.) B.S.P.	Black Spruce
<i>Pinus banksiana</i> Lamb.	Jack Pine
ANGIOSPERMS: DICOTYLEDON	
APIACEAE	
<i>Cicuta bulbifera</i> L.	Bulb-bearing Water-hemlock
<i>C. maculata</i> L.	Water-hemlock
<i>Heracleum maximum</i> Barton ■ [= <i>H. lanatum</i> Michx.]	Cow-parsnip
<i>Sanicula marilandica</i> L. ■	Snakeroot
<i>Sium suave</i> Walt	Water-parsnip
<i>Zizia aptera</i> (A. Gray) Fern. ■	Heart-leaved Alexanders
APOCYNACEAE	
<i>Apocynum androsaemifolium</i> L.	Spreading Dogbane
ARALIACEAE	
<i>Aralia nudicaulis</i> L.	Wild Sarsaparilla

ASTERACEAE	
<i>Achillea millefolium</i> L.	
<i>A. sibirica</i> Ledeb.	Yarrow
<i>Antennaria neglecta</i> Greene	Many-flowered Yarrow
<i>A. parviflora</i> Nutt. *	Field or Prairie Pussytoes
<i>Arnica chamissonis</i> Less. ■	Small-leaved Pussytoes
<i>A. fulgens</i> Pursh. *	Leafy Arnica
<i>Artemesia campestris</i> L.	Shining Arnica
<i>Bidens cernua</i> L.	Plains Wormwood
<i>Cirsium arvense</i> (L.) Scop.	Smooth Beggarticks
<i>C. drummondii</i> Torr. Gray ■●	Canada Thistle
<i>Crepis tectorum</i> L.	Dwarf Thistle
<i>Erigeron glabellus</i> Nutt.	Narrow-leaved Hawk's-beard
<i>E. philadelphicus</i> L. ■	Smooth Fleabane
<i>E. strigosus</i> Muhl. ■●	Philadelphia Fleabane
<i>Gaillardia aristata</i> Pursh ■	Rough Daisy Fleabane
<i>Helianthus nuttallii</i> T. & G.*	Great-flowered Gaillardia
<i>Hieracium umbellate</i> L. ■	Nuttall's Sunflower
<i>Liatris ligulistylis</i> (A. Nels.) K. Schum. ■	Canada Hawkweed
<i>Matricaria discoidea</i> DC. [= <i>M. matricarioides</i> (Less.) Porter]	Meadow Blazingstar
<i>Petasites palmatus</i> (Ait.) A. Gray	Pineappleweed
<i>P. sagittatus</i> (Pursh) A. Gray	
<i>Senecio congestus</i> (R.Br.) DC. ■	
<i>S. pauperulus</i> Michx.	
<i>Solidago canadensis</i> L. [s.lat.]	
<i>S. missouriensis</i> Nutt.	
<i>S. spathulata</i> DC.*	
<i>Sonchus arvensis</i> L.	
<i>Symphyotrichum ciliolatum</i> (Lindl.) A.&D.Löve [= <i>Aster ciliolatus</i> Lindl.]	
<i>S. laeve</i> (L.) A.&D.Löve var. <i>geyeri</i> (Gray) [= <i>A. laevis</i> L.]	Lindley's Aster
<i>S. puniceum</i> (L.) A.&D.Löve. ■	Nesom
[= <i>A. puniceus</i> L.]	Smooth Aster
<i>Tanacetum vulgare</i> L. ■	Purple-stemmed Aster
<i>Taraxacum officinale</i> Weber	
<i>Tragopogon pratensis</i> L. ■	
<i>Trimorpha elata</i> (Hook.) Nesom* ● [= <i>Erigeron elatus</i> (Hook.) Greene]	
BETULACEAE	
<i>Alnus viridis</i> (Vill.) Lam.& DC. ssp. <i>crispa</i> (Ait.) Turrill [= <i>A. crispa</i> (Ait.) Pursh]	Green Alder
<i>A. incana</i> (L.) Moench spp. <i>tenuifolia</i> (Nutt.)	Breit.
[= <i>A. rugosa</i> (Du Roi) Spreng.]	River Alder
<i>B. pumila</i> L. var. <i>glandulifera</i> Reg	Bog Birch
<i>B. papyrifera</i> Marsh.	White Birch
<i>Corylus cornuta</i> Marsh.	Beaked Hazelnut

BORAGINACEAE

Mertensia paniculata (Ait.) G. Don

BRASSICACEAE

Arabis divaricarpa A. Nels.*
Arabis divaricarpa A. Nels.*
A. lyrata L.
Capsella bursa-pastoris (L.) Medic ■
Descurainia sophia (L.) Webb ■
Erysimum cheiranthoides L. ■
Lepidium densiflorum Schrad ■
Rorippa palustris (L.) Besser ■
Thlaspi arvense L. ■

CAMPANULACEAE

Campanula rotundifolia L.

CAPRIFOLIACEAE

Linnæa borealis L.
Lonicera dioica L.
L. involucrata (Richards.) Banks
Symporicarpus albus (L.) Blake
S. occidentalis Hook.
Viburnum edule (Michx.) Raf.
V. opulus L. var. *americanum* Ait.
 [=V. *trilobum* Marsh.]

CARYOPHYLLACEAE

Minuartia dawsonensis (Britt.) House*
 [=Arenaria dawsoniensis Brill.*]
Moehringia lateriflora (L.) Fenzl. ■
Stellaria crassifolia Ehrh. ■
S. longifolia Muhl. ■
S. media (L.) Cyrill. ■

CERATOPHYLLACEAE

Ceratophyllum demersum L.*

CHENOPodiACEAE

Chenopodium album L.
C. capitatum (L.) Aschers. ■

CORNACEAE

Cornus canadensis L.
C. sericea L. ssp. *stolonifera* (Michx.) Fosb.
 [=C. *stolonifera* Michx.]

DROSERACEAE

Drosera rotundifolia L.

Tall Lungwort

Purple Rock Cress
Purple Rock Cress
Lyre-leaved Rock Cress
Shepherd's-purse
Flixweed
Wormseed Mustard
Common Pepper-grass
Yellow Cress
Stinkweed

Harebell

Twinflower
Twining Honeysuckle
Involucrate Honeysuckle
Snowberry
Western Snowberry
Low Bush-cranberry
High Bush-cranberry

Rock Sandwort

Grove Sandwort
Fleshy Stitchwort
Long-leaved Stitchwort
Common Chickweed

Coontail

Lamb's-quarters
Strawberry Blite

Bunchberry

Red-osier Dogwood

Round-leaved Sundew

ELAEAGNACEAE

Shepherdia canadensis (L.) Nutt.

Canadian Buffaloberry

ERICACEAE

Andromeda polifolia L.
Arctostaphylos uva-ursi (L.) Spreng
Chamaedaphne calyculata (L.) Moench.
Kalmia polifolia Wangenh.*
Ledum groenlandicum Oeder
Vaccinium caespitosum Michx.*
V. myrtilloides Michx.
V. oxycoccus L.*
V. vitis-idaea L.

FABACEAE

Astragalus agrestis Dougl.
Caragana arborescens Lam.*
Hedysarum alpinum L.
 ssp. *americanum* (Michx.) Fedsch.
Lathyrus ochroleucus Hook.
L. venosus Muhl. ■
Medicago sativa L.
Melilotus alba Medic.
M. officinalis (L.) Lam.
Oxytropis deflexa (Pall.) DC.
Trifolium hybridum L.
Vicia americana Muhl.

FUMARIACEAE

Corydalis aurea Willd. ■
C. sempervirens (L.) Pers.

GENTIANACEAE

Gentianella amarella (L.) Börner
Halenia deflexa (Sm.) Griseb.

GERANIACEAE

Geranium bicknellii Britt.

Golden Corydalis
 Pink Corydalis

Northern Gentian
 Spurred-Gentian

Bicknell's Geranium

GROSSULARIACEAE

Ribes americanum Mill. ■
R. hudsonianum Richards.
R. oxyacanthoides L.
R. triste Pall.

Wild Black Currant
 Northern or Wild Black Currant
 Wild Gooseberry
 Wild Red Currant

HALORAGACEAE

Myriophyllum sibiricum Komar.*
 [=M. *excalbescens* Fernald]

Water Milfoil

HIPPURIDACEAE

Hippuris vulgaris L.

HYDROPHYLACEAE

Phacelia franklinii (R. Br.) A. Gray

LAMIACEAE

Agastache foeniculum (Pursh) Ktze.
Dracocephalum parviflorum Nutt. *
[=*Moldavica parviflora* (Nutt.) Britt.]*Galeopsis tetrahit* L. ■*Lycopus asper* Greene ■*L. uniflorus* Michx. ■*Mentha arvensis* L.*Scutellaria galericulata* L.*Stachys palustris* L.

LENTIBULARIACEAE

Urticularia macrorhiza Le Conte.[=*U. vulgaris* L.]*U. intermedia* Hayne

MENYANTHACEAE

Menyanthes trifoliata L.

MONOTROPACEAE

Monotropa uniflora L.*

NYMPHACEAE

Nuphar variegatum Dur.

ONAGRACEAE

Circaeaa alpina L. ■*Epilobium ciliatum* Raf.*Oenothera biennis* L.

PLANTAGINACEAE

Plantago major L.

POLEMONIACEAE

Collomia linearis Nutt.

POLYGALACEAE

Polygala senega L.

POLYGONACEAE

Polygonum amphibium L.*P. aviculare* L. ■*P. lapathifolium* L. ■

Mare's-tail

Franklin's Scorpionweed

Giant-Hyssop

American Dragonhead

Hemp-nettle

Western Water-horehound

Northern Water-horehound

Field Mint

Marsh Skullcap

Marsh Hedge-nettle

Common Bladderwort

Flat-leaved Bladderwort

Buck-bean

Indian-Pipe

Yellow Pond-Lily

Small Enchanter's-Nightshade

Northern Willowherb

Yellow Evening-Primrose

Common Plantain

Collomia

Seneca Snakeroot

Swamp Persicaria

Doorweed

Pale Persicaria

Rumex maritimus L. ■*R. occidentalis* S. Wats. ■

PRIMULACEAE

Lysimachia thyrsiflora L.*Trientalis borealis* Raf.

PYROLACEAE

Moneses uniflora (L.) Gray**Orthilia secunda* (L.) House*Pyrola asarifolia* Michx.*P. chlorantha* Sw.*P. elliptica* Nutt.

RANUNCULACEAE

Actaea rubra (Ait.) Willd.*Anemone canadensis* L.*A. multifida* Poir. ■*A. patens* L.*A. virginiana* L. ■[=*A.. riparia* Fern.]*Aquilegia brevistyla* Hook.*Caltha palustris* L.*Delphinium glaucum* S. Wats. ●*R. aquatilis* L. var. *diffusus* Withering **Ranunculus macounii* Britt.*R. sceleratus* L.*Thalictrum venulosum* Trel.

ROSACEAE

Amelanchier alnifolia Nutt.*Dasiphora fruticosa* (L.) Rydb. ssp. *floribunda* (Pursh) Kartesz ■[=*Potentilla fruticosa* L.]*Fragaria vesca* L.*F. virginiana* Duchesne*Geum macrophyllum* Willd.*var. *perincisum* (Rydb.) Raup*G. rivale* L.*G. triflorum* Pursh*Potentilla anserina* L.*P. arguta* Pursh ■*P. norvegica* L. ■*P. palustris* (L.) Scop.*Prunus pensylvanica* L. ■*P. virginiana* L.*Rosa acicularis* Lindl.*R. woodsii* Lindl.**Rubus arcticus* L. ■var. *acaulis* (Michx.) Focke

Golden Dock

Western Dock

Tufted Loosestrife

Northern Starflower

One-Flowered Wintergreen

One-sided Wintergreen

Pink Wintergreen

Greenish-flowered Wintergreen

Common Shinleaf

Red Baneberry

Canada Anemone

Cut-leaved Anemone

Crocus Anemone

Riverbank Anemone

Small-flowered Columbine

Marsh-marigold

Tall Larkspur

White Water Crowfoot

Macoun's Buttercup

Celery-leaved buttercup

Veiny Meadow-Rue

Saskatoon

Shrubby Cinquefoil

American Wild Strawberry

Smooth Wild Strawberry

Yellow Cut-leaf Avens

Purple Avens

Three-flowered Avens

Silverweed

White Cinquefoil

Rough Cinquefoil

Marsh Cinquefoil

Pin Cherry

Red-fruited Choke Cherry

Prickly Rose

Wood's Rose

Dwarf Raspberry

<i>R. ideaus</i> L.	Wild Red Raspberry
ssp. <i>strigosus</i> (Michx.) Focke	
<i>R. pubescens</i> Raf.	Dewberry
<i>Sibbaldia</i> <i>tridentata</i> (Ait.) Rydb. [= <i>Potentilla tridentata</i> Ait.]	Three-toothed Cinquefoil
<i>Spiraea alba</i> Du Roi	Narrow-leaved Meadowsweet
 RUBIACEAE	
<i>Galium boreale</i> L.	Northern Bedstraw
<i>G. labradoricum</i> Wieg. ■	Labrador Bedstraw
<i>G. trifidum</i> L. ■	Small Bedstraw
<i>G. triflorum</i> Michx.	Sweet-scented Bedstraw
 SALICACEAE	
<i>Populus balsamifera</i> L.	Balsam Poplar
<i>P. tremuloides</i> Michx.	Aspen Poplar
<i>Salix bebbiana</i> Sarg.	Beaked Willow
<i>S. candida</i> Fluegge ■	Hoary Willow
<i>S. discolor</i> Muhl. ■	Pussy Willow
<i>S. exigua</i> Nutt. subsp. <i>interior</i> (Rowlee) Cronq.	Sandbar Willow
<i>S. lucida</i> Muhl. ssp. <i>lasiandra</i> (Benth.) Murr. ■ [= <i>S. lasiandra</i> Benth.]	Western Shining Willow
<i>S. pedicellaris</i> Pursh	Bog Willow
<i>S. petiolaris</i> Sm. ■	Basket Willow
 SANTALACEAE	
<i>Comandra umbellata</i> (L.) Nutt.	Bastard Toadflax
<i>Geocaulon lividum</i> (Richards.) Fern.	Northern Comandra
 SAXIFRAGACEAE	
<i>Heuchera richardsonii</i> R. Br.	Alumroot
<i>Mitella nuda</i> L.	Bishop's-cap
<i>Parnassia palustris</i> L.	Meadow Grass-of-Parnassus
 SCROPHULARIACEAE	
<i>Castilleja miniata</i> Dougl.	Red Indian Paintbrush
<i>Melampyrum lineare</i> Desr.*	Cow Wheat
<i>Penstemon procerus</i> Douglas ex R. Grah.*	Slender Blue Beardtongue
<i>Veronica americana</i> (Raf.) Schw. ■	American Speedwell
 URTICACEAE	
<i>Urtica dioica</i> L.	Stinging Nettle
 VIOLACEAE	
<i>Viola adunca</i> J.E. Smith	Early Blue Violet
<i>V. canadensis</i> L. var. <i>rugulosa</i> (Greene) C.L. Hitchc.	Western Canada Violet
<i>V. nephrophylla</i> Greene	Northern Bog Violet

ANGIOSPERMS: MONOCOTYLEDON	
ALISMATACEAE	
<i>Alisma triviale</i> Pursh n [= <i>A. plantago-aquatica</i> L.]	Common Water-plantain
<i>Sagittaria cuneata</i> Sheld.	Arum-leaved Arrowhead
 ARACEAE	
<i>Calla palustris</i> L.	Water Calla
 CYPERACEAE	
<i>C. aquatilis</i> Wahl. ■	Water Sedge
<i>C. aurea</i> Nutt. ■	Golden Sedge
<i>C. bebbii</i> Olney ■	Bebb's Sedge
<i>Carex foenea</i> Willd. ■ [= <i>C. aena</i> Fern.]	Hay Sedge
<i>C. pseudocyperus</i> L. ■●	Cyperus-like Sedge
<i>C. utriculata</i> Boott. ■	Beaked Sedge
<i>C. viridula</i> Michx. ■	Green Sedge
<i>Eleocharis palustris</i> (L.) R. & S. ■	Creeping Spike-rush
<i>Eriophorum angustifolium</i> Honck * [= <i>E. polystachion</i> L.]	Narrow-Leaved Cottongrass
<i>E. gracile</i> Koch n	Slender Cotton-grass
<i>Schoenoplectus tabernaemontani</i> (Gmel.) [= <i>Scirpus validus</i> Vahl]	Palla
<i>Scirpus microcarpus</i> Pers. ■	Great Bulrush
<i>Trichophorum alpinum</i> (L.) Pers. ■ [= <i>Scirpus hudsonianus</i> (Michx.) Fern.]	Small-fruited Bulrush
 IRIDACEAE	
<i>Sisyrinchium montanum</i> Greene	Alpine Cotton-grass
 JUNCACEAE	
<i>Juncus alpinoarticulatus</i> Chaix	Alpine Rush
[= <i>J. alpinus</i> Vill.]	
<i>J. arcticus</i> Willd. var. <i>balticus</i> (Willd.) Traut. [= <i>J. balticus</i> Willd.]	Baltic Rush
<i>J. nodosus</i> L.	Knotted Rush
 JUNCAGINACEAE	
<i>Triglochin maritima</i> L.	Seaside Arrow-grass
<i>T. palustris</i> L. ■	Marsh Arrow-grass
 LEMNACEAE	
<i>Lemna minor</i> L.	Lesser Duckweed
<i>Spirodela polyrhiza</i> (L.) Scheid.*	Larger Duckweed
 LILIACEAE	
<i>Lilium philadelphicum</i> L.	Wood Lily
<i>Maianthemum canadense</i> Desf.	Two-leaved Solomon's-seal

<i>M. stellatum</i> (L.) Link [= <i>Smilacina stellata</i> (L.) Desf.]	Star-flowered Solomon's-Seal
<i>M. trifolium</i> (L.) Sloboda [= <i>Smilacina trifolia</i> (L.) Desf.]	Three-leaved Solomon's-Seal
<i>Prosartes trachycarpum</i> S.Wats. [= <i>Disporum trachycarpum</i> (S. Wats.) B. & H.]	Fairybells
<i>Zygadenus elegans</i> Pursh ■	Smooth Camas

ORCHIDACEAE

<i>Coeloglossum viride</i> (L.) Hartm. var. <i>virescens</i> (Muhl. ex Willd.) Luer [= <i>H. viridis</i> (L.) R.Br.]	Long-bracted Orchid
<i>Corallorrhiza maculata</i> Raf. ■	Large Coralroot
<i>Cypripedium passerinum</i> Richards.*	Sparrow's Egg Lady's-slipper
<i>Goodyera repens</i> (L.) R.Br.	Lesser Rattlesnake-plantain
<i>Platanthera aquilonis</i> Shew. [= <i>Habenaria hyperborea</i> (L.) R. Br.]	Green-flowered Bog Orchid
<i>P. obtusata</i> (Banks ex Pursh) Lindl. ■ [= <i>Habenaria obtusata</i> (Pursh) Richards.]	Small Northern Bog Orchid
<i>Spiranthes lacera</i> (Raf.) Raf. *● [= <i>S. gracilis</i> (Bigelow) Beck]	Slender Ladies'-tresses
<i>S. romanzoffiana</i> Cham. & Schlecht.	Hooded Ladies'-tresses

POACEAE

<i>Agrostis scabra</i> Willd. ■	Rough Hair Grass
<i>Alopecurus aequalis</i> Sobol. ■	Short-awned Foxtail
<i>Avena sativa</i> L. ■	Oat
<i>Beckmannia syzigachne</i> (Steud.) Fern. ■	Slough Grass
<i>Bromus inermis</i> Leyss. ■	Smooth Brome
<i>Calamagrostis canadensis</i> (Michx.) Beauv.	Marsh Reed Grass
<i>Calamovilfa longifolia</i> (Hook.) Scribn.*	Sand Grass
<i>Elymus trachycaulus</i> (Link) Gould & Shin. [= <i>Agropyron trachycaulum</i> (Link) Malte]	Slender Wheatgrass
<i>Festuca ovina</i> L.*	Wild Barley
<i>Hordeum jubatum</i> L.	Hairy Wild Rye
<i>Leymus innovatus</i> (Beal) Pilger [= <i>Elymus innovatus</i> Beal.]	
<i>Phalaris arundinacea</i> L.	Reed Canary Grass
<i>Phragmites australis</i> (Cav.) Trin.	Common Reed Grass
<i>Piptatherum pungens</i> (Torr. ex Spreng.) Barkworth *	Northern Rice Grass
[= <i>Oryzopsis pungens</i> (Torr.) Hitchc.]	Kentucky Blue Grass
<i>Poa pratensis</i> L.	

POTAMOGETONACEAE

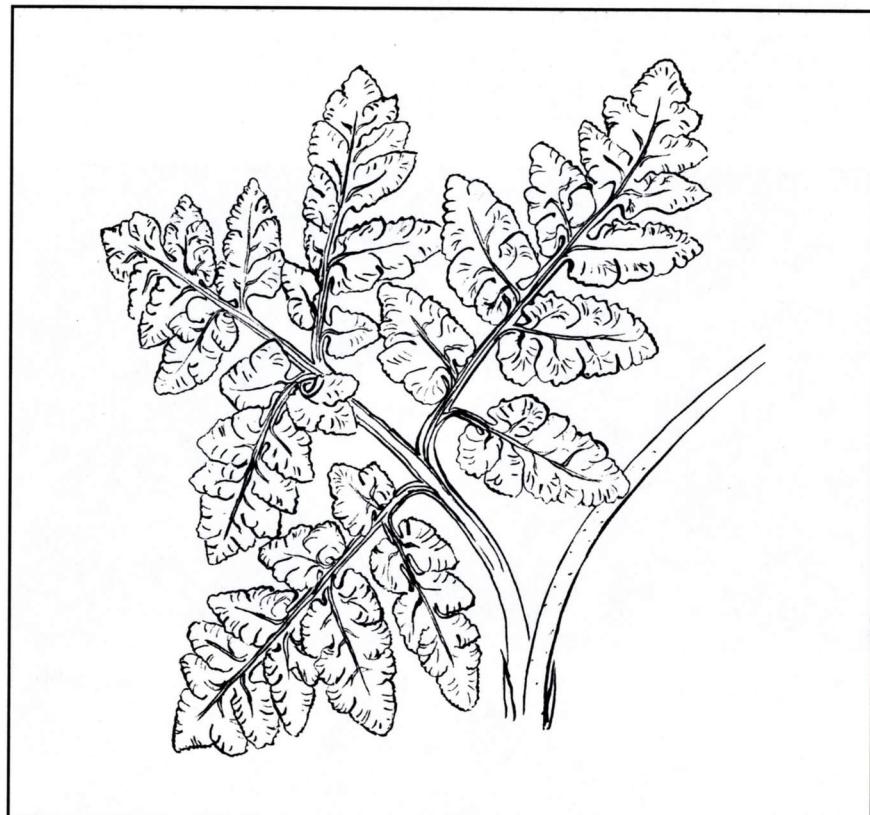
<i>Potamogeton natans</i> L.	Floating Pondweed
<i>P. richardsonii</i> (Benn.) Rydb.	Clasping-leaf Pondweed
<i>Stuckenia pectinata</i> (L.) Boerner [= <i>Potamogeton pectinatus</i> L.]	Sago Pondweed

TYPHACEAE

Typha latifolia L.

Common or Broad-leaved Cattail

- Indicates that the species is being tracked by the W. P. Fraser Herbarium but is not currently listed as rare or endangered.
- Indicates a new record of the species for the MLPP
- * Indicated that the species was recorded in a previous floristic survey but not located in this survey.
- ** Probably *Festuca saximontana*; *Festuca ovina* has not been confirmed in Saskatchewan.



Leathery Grape Fern leaf

Elizabeth Reimer

Table 2. List of species provincially at risk in the Meadow Lake Provincial Park². Status assigned by the Saskatchewan Conservation Data Center: S1 (Extremely rare) = 5 or fewer occurrences in Saskatchewan, or very few remaining individuals; S2 (Rare) = 6 to 20 occurrences in Saskatchewan or few remaining individuals; S3 (Rare-Uncommon) = 21 to 100 occurrences in Saskatchewan, may be rare and local throughout the province or may occur in a restricted provincial range⁴.

Scientific Name	SK CDC Rarity Status	Harms (2003) Status
Leathery Grape Fern	Rare-uncommon (S3)	Uncommon
Cyperus-like Sedge	Rare to rare-uncommon (S2S3)	Uncommon
Sparrow's Egg Lady's-slipper	Rare (S2)	Uncommon
Slender Ladies'-tresses	Rare to rare-uncommon (S2S3)	Vulnerable
Tall Larkspur	Rare to extremely rare (S1S2)	Threatened
Rough Daisy Fleabane	Rare to rare-uncommon (S2S3)	Uncommon
Tall White daisy Fleabane	Rare (S2)	Vulnerable
Dwarf Thistle	Rare-uncommon (S3)	Uncommon



Sparrow's Egg Lady's-slipper

Michael Williams