

SPECIAL EDITION!

Welcome to this special edition of WN on the native plant rescue near Cochrane and the new highway interchange.

Rescue of Native plants from Ancient Grassland near Cochrane, Alberta by Judith Golub using material from Blake McNeil, Mathis Natvik and others. Photos by participants.



This photo shows the conditions of the collection area (looking SW towards intersection of Hwy. 1A & Hwy .22). Photo by M. Natvik, April 2022.

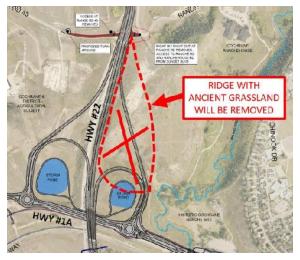
In early April, Mathis Natvik of the University of Calgary discovered that the prairie crocus and other wildflowers in this ancient grassland in Cochrane were soon to be destroyed. The entire hilltop beneath this grassland would be removed to construct a new northbound on-ramp at the intersections of HWY 1A and HWY 22 in Cochrane (just to west of the Historic Cochrane Ranch site). He says, "This small piece of ancient grassland still hosts the incredible diversity of the original vegetation characteristic of the Foothills Parkland. There are very few high-quality grasslands like this left in the Foothills Parklands around Cochrane. Most have been destroyed for housing developments in this area. Outside of Cochrane, most of the ancient grasslands have been sown into European grasses used for hay and pastures. This grassland has never been plowed. It will be sad to see this small piece of irreplaceable grassland go!"

In mid-April, Blake McNeill, a Calgary native plant enthusiast, had a meeting with one of the project engineers to talk about what needed to be done for a salvage project to happen. One would think it is simple, but there was a lot of contact tag and hoop jumping between a lot of people who wanted, and worked on, making this happen. For example the land is owned by the Province of Alberta, Transportation Ministry is running the construction project, but the plants fall under the jurisdiction of the Environmental Ministry. So lots of people were needed to sign off on this.

The other thing that was interesting was the number of people and groups (who contacted McNeil through a native plant Facebook page) as interested in being involved in the salvage; native plants and restoration projects are becoming a hot topic right now which is good news in and of itself.

McNeill said "The area that had been already scraped was previously disturbed land (i.e. a brick factory used to be there) and scraping of the native land that we want to salvage isn't going to happen right away, so they think they can get everything in place to make the rescue happen in time for us to get there before the scrapers. They have

planned the project to minimize the amount of native land to be disturbed. Concerned that we only salvage the land to be disturbed, they will mark out specific areas that we can salvage. It would be nice to standardize this process for future construction projects and native plant salvage in the province."



On May 8, the well-organised Salvage Group were given permission to go ahead with the rescue in the area marked in red on the map, left. Rescued plants will be used for public naturalization projects and in private gardens.

McNeill credits the Project Management team of ISL Engineering/ Hwy 1A/22 Project Team under the leadership of Managing Director, Chris Delanoy, the Town of Cochrane Capital Projects Engineer, Ray Predika, and the Province of Alberta for ultimately signing off before any salvage could begin.

Also integral to the success of the plant rescue were the number of experts who came out and helped people with identifications and how to do transplants etc. Steve Tannas of Tannas Conservation Services for one, and Mathis Natvik, Ass't Professor, Landscape Architecture, University of Calgary, in particular was outstanding as he pointed out

and identified truckloads of plants and answered a million questions. People came away from the event not just with native plants for their own gardens, but also with a lot of knowledge and appreciation about them.

Some of the plants to be rescued include:



Prairie crocus, *Pulsatilla nuttalliana*; buffalobean, goldenbean, *Thermopsis rhombifolia*; moss phlox, *Phlox hoodii;* fleabane sp., *Erigeron sp.*; northern gooseberry, *Ribes oxyacanthoides*. Photos B. McNeill. May 2022.

According to Natvik, a total of 52 species were rescued: 32 wildflowers, 12 grasses and sedges, and 8 shrubs. *(See species list at end.)* Little bluestem (*Schizachyrium scoparium*) was the most significant species collected, as it is an S3 (vulnerable) species in Alberta. The Bow Valley is the most northerly range of this grass in Alberta and the plant rescue site is the most northerly known population of little bluestem in Alberta.



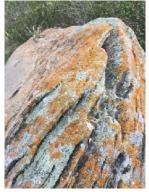


Little bluestem*, Schizachyrium scoparium* Photo: M. Natvik Most of plants that Mathis rescued will be planted in Swann Plaza at the University of Calgary, which includes a two acre grassland planting. The remainder were given to Calgary Parks to be planted in various naturalization projects in the City of Calgary.

An excellent concerted effort by many people working together to save as many plants as possible resulted in a very successful rescue and a great example of citizens in action! McNeill summed it up by saying "letting

companies know that these plants are worth saving and letting the public know that these plants are desirable is good and also lets the government know that people do care about native plants and areas."

Further plans include getting a second shot at that site, or at least part of it, this fall for seed collection and perhaps even another go at another plant rescue next spring before they completely strip it. There also might be a rather different sort of rescue regarding the lichen-covered rocks. These rocks, about to get removed and thrown into a fill pit, are covered in various lichens that have been exposed on the ridge for thousands of years. Also, once the rescue plants are reestablished in their new locations, it's hoped to be able to collect some seeds from them and donate those seeds back to the construction site for restoration purposes.



Ancient lichen-covered rock. Photo B. McNeil

McNeill just recently posted photos of how some of his 'Cochrane Rescue Clump' are adjusting really well. "There are a couple of *Pulsatilla nuttalliana* (prairie crocuses) which seem to be really liking their new home as are the other plants which I'm really happy about. Hopefully they will continue to do well. I can hardly wait for next spring to see if they flower; if they do, I'll be over the moon with them. I won't have to tell my grandchildren what prairie crocuses looked like, I'll be able to show them as nature intended."



Pulsatilla nuttalliana, prairie-crocus, seed head; Dasiphora fruticosa, shrubby cinquefoil; Artemisia campestris, field sagewort; Symphyotrichum ericoides, tufted white prairie aster; Thalictrum venulosum, veiny meadow-rue.

More photos from some participants of their rescued native plants:

<u>From Helene:</u> A HUGE THANK YOU to the people who organized the rescue. It was a special experience and so great to see three generations of enthusiastic gardeners. I definitely have new friends now.







From left: Fleabane sp., *Erigeron* sp.; pasture sage, *Artemisia frigida*; and early cinquefoil, *Potentilla concinna.*



From left: another fleabane sp. with yellow umbrella-plant, *Eriogonum flavum* in the foreground; smooth aster, Symphyotrichum laeve; and woolly groundsel, *Packera cana.*

<u>From Jen Love</u>: Such an incredible experience of learning and connecting with the land. Such joy to see so many people wanting to give these plants new homes, and deep sadness that this beautiful and important area will be destroyed.



Rescuers and salvagers at work!

...passionate people who care about the conservation/preservation of our native plant heritage.



From left: prairie parsley, *Musineon divaricatum*, an *Artemisia* sp.,and a *Thalictrum* sp.; northern gooseberry, *Ribes oxyacanthoides* with *Artemisia frigida* in rear; more *Musineon divaricatum*, with prairie onion, *Allium textile*; prairie crocus, *Pulsatilla nuttalliana*.

From Jane Kluk:

The forbs and grasses rescued from the Cochrane Salvage are destined for the University of Alberta's south campus native prairie garden.



Wild beebalm (wild bergamot), *Monarda fistulosa*, and blue grama grass, *Bouteloua gracilis*.



Rough fescue, Festuca campestris



L. One bonus of moving the plants is the stress has encouraged them to flower. The seed heads are gorgeous, glossy big florets. C. In their new home. R. This grass is so well adapted to life on the prairies, you can see the persistent sheaths at the base that protect it so well during grass fires...but not so much from land development.

<u>From Tina East:</u> A selection of rescue plants in the rock garden.



There are still good things worth fighting for and good people ready to step up when needed. Thank you Blake for your work behind the scenes to negotiate a plant rescue! So many of us are grateful that you stepped up and took on the enormous task of organising the salvage. This was also an awesome and heartening commitment by enthusiastic rescuers who gave their time, expertise and muscle to make this happen. Thank you.

LIST OF PLANT SPECIES COLLECTED (52 SPECIES IN TOTAL):

WILDFLOWERS (32 SPECIES):

BINOMIAL	COMMON NAMES
Allium cernuum	Nodding Wild Onion
Allium textile	Textile Onion
Achillea borealis	Northern Yarrow
Anemone multifida	Cutleaf Anemone
Antennaria parvifolia	Small-leaf Pussytoes
Artemisia campestris	Field Sagewort
Artemisia frigida	Fringed Sagewort
Artemisia ludoviciana	Prairie Sagewort
Campanula alaskana	Alaskan Harebell
Dalea purpurea	Purple Prairie Clover
Erigeron caespitosus	Tufted Fleabane
Eriogonum flavum	Alpine Golden Buckwheat
Fragaria virginiana	Wild Strawberry
Gaillardia aristata	Common Gaillardia
Galium boreale	Northern Bedstraw
Geum triflorum	Prairie Smoke, Three-flower Avens
Helianthus pauciflorus	Stiff Sunflower
Linum lewisii	Wild Blue Flax
Lithospermum ruderale	Western Stoneseed
Maianthemum stellatum	Starry False Solomon's-Seal
Monarda fistulosa	Wild Bergamot
Oxytropis sericea	White Point-Vetch
Packera cana	Woolly Groundsel
Phlox hoodii	Spiny Phlox
Potentilla concinna	Alpine Cinquefoil
Potentilla hippiana	Wooly Cinquefoil
Pulsatilla nuttalliana	Prairie-crocus
Solidago missurica	Missouri Goldenrod
Solidago simplex	Sticky Goldenrod
Symphyotrichum ericoides	Heath Aster
Symphyotrichum laeve	Smooth Blue Aster
Thermopsis rhombifolia	Goldenbean (Buffalo Bean)

GRASSES & SEDGES (12 SPECIES):

BINOMIAL	COMMON NAMES
Bouteloua gracilis	Blue Grama
Carex filifolia	Threadleaf Sedge
Carex inops ssp. heliophila (formally Carex pensylvanica)	Sun Sedge
Danthonia parryi	Parry's Oatgrass
Elymus lanceolatus	Northern Wheatgrass
Festuca campestris	Foothills Rough Fescue
Festuca saximontana	Mountain Fescue
Koeleria macrantha	Prairie Junegrass
Muhlenbergia cuspidata	Plains Muhlenbergia
Nassella viridula	Green Needlegrass
Schizachyrium scoparium	Little Bluestem
Sporobolus rigidus	Sand Reedgrass

SHRUBS (8 SPECIES):

BINOMIAL	COMMON NAMES
Amelanchier alnifolia	Saskatoon
Arctostaphylos uva-ursi	Kinnickinnick
Dasiphora fruticosa	Shrubby Cinquefoil
Elaeagnus commutata	Wolf-willow, Silverberry
Ribes oxyacanthoides	Canadian Gooseberry
Rosa acicularis	Prickly Wild Rose
Rosa arkansana	Prairie Rose
Symphoricarpos occidentalis	Western Snowberry

Aims of the Edmonton Native Plant Society:

- Promote knowledge of the Edmonton area native plants.
- Conserve our native plant species and their habitats.
- Preserve native plant species and habitat for the enjoyment of present and future generations.
- Educate individuals, business and local governments about native plants.

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Early yellow locoweed, *Oxytropis sericea*; prairie parsley, *Musineon divaricatum*; prairie crocus, *Pulsatilla nuttalliana*; woolly groundsel, *Packera cana*; early cinquefoil, *Potentilla concinna*. Photos by B. McNeill. April 2022.