Ornamentals Gone Wild - New Invaders in the Meewasin Valley

MEEWASIN

Meewasin is a conservation agency dedicated to conserving the cultural and natural resources of the South Saskatchewan River Valley. Meewasin's mandate is to ensure a healthy and vibrant river valley, with a balance between human use and conservation by:

- Providing leadership in the management of its resources:
- Promoting understanding, conservation and beneficial use of the Valley; and
- Undertaking programs and projects in river valley development and conservation,

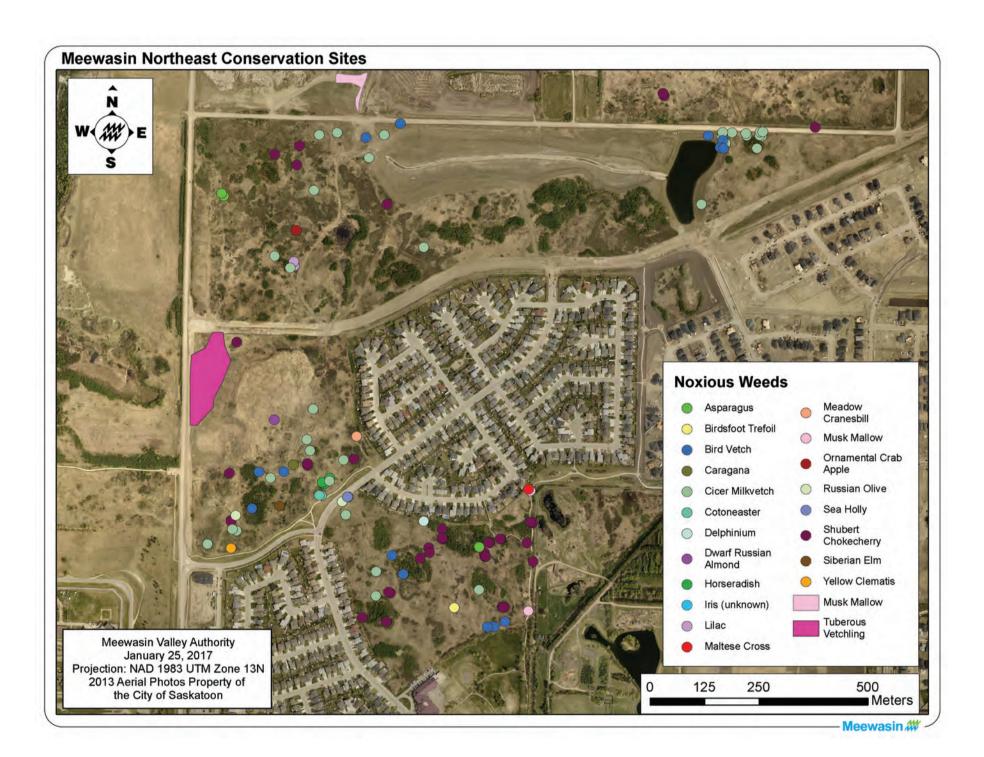
for the benefit of present and future generations.



Maltese Cross (Lychnis chalcedonica)



Creeping Bellflower (Campanula rapunculoides



YOUR FLOWERBED, SOMEONE'S NIGHTMARE?

What we plant in our yard does not always stay there. Some ornamental species have invasive characteristics that may allow them to escape or spread through roots, seed dispersal (birds, animals, humans and wind) or intentional plantings. Sometimes these ornamental plants are so invasive that they end up on the noxious weeds list. Meewasin's sites are often in proximity to urban areas and this



Common Tansy (Tanacetum vulgare) Photo courtesy of Debbie Nordstrom

increases the risk of invasion by ornamental escapees. During routine site visits and monitoring, Meewasin often finds and takes GPS location data of these occurrences to help determine if the plant was intentionally planted, a new potential invasive, or part of a greater problem in the region. This data also allows us to return to the site for management and monitoring. Meewasin submits invasive data to the Saskatchewan species Conservation Data Centre's iMap Invasives.

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Dame's Rocket (*Hesperis* matronalis) Photo courtesy of Glen Lee (www.saskwildflower.ca)





Tuberous Vetchling (Laythyrus tuberosus



Himalavan Balsam (Impatiens glandulifera)

ORNAMENTAL SPECIES FOUND IN THE MEEWASIN VALLEY*

Common Name	Scientific Name	Noxious	Known Invasive	Not Reported	
Asparagus	Asparagus officinalis		Х		
Baby's Breath	Gypsophila paniculata	SK			
Bird Vetch	Vicia cracca	AK			
Bouncing Bet	Saponaria officinalis	MB, CO			
Caragana	Caragana arborescens		Х		
Common Burdock	Arctium minus	SK, AB			
Common Mullein	Verbascum thapsus	AB	Х		
Common Tansy	Tanacetum vulgare	SK, MN			
Cotoneaster	Cotoneaster sp		X		
Creeping Bellflower	Campanula rapunculoides	AB, MB			
Dame's Rocket	Hesperis matronalis	SK			
Dwarf Russian Almond	Prunus tenella			Х	
Himalayan Balsam	Impatiens glandulifera	AB			
Horseradish	Armoracia rusticana		X		
Iris species	Iris sp			Х	
Lamium	Lamium sp		Х		
Lilac	Syringa vulgaris		Х		
Maltese Cross	Lychnis chalcedonica		Х		
Meadow Cranesbill	Geranium pratense			Х	
Musk Mallow	Malva moschata			Х	
Ornamental Crab Apple	Malus sargentii			Х	
Oxeye Daisy	Leucanthemum vulgare	SK, MN			
Purple Loosestrife	Lythrum salicaria	SK, AB, MN, BC, ND, MN			
Rhubarb	Rheum rhabarbarum		X		
Russian Olive	Eleagnus angustifolia	CO, WY	regulated in MN		
Scentless Chamomile	Matricaria perforata	SK, AB, MB, BC			
Sea Buckthorn	Hippophae rhamnoides		x		
Sea Holly	Eryngium sp			Х	
Shubert Chokecherry	Prunus virginiana 'Schubert'			Х	
Siberian Elm	Ulmus pumilla	NM			
Tartarian Honeysuckle	Lonicera tatartica		X		
Tuberous Vetchling	Lathyrus tuberosus		X		
Yellow Clematis	Clematis tangutica	AB			
Yellow Toadflax	Linaria vulgaris	SK, ND, MN, BC			



Dwarf Russian Almond (Prunus tenella)



Musk Mallow (Malva moschata)

*2015 - 2016



Bird Vetch (*Vicia cracca*) Photo courtesy of Glen Lee (www.saskwildflower.ca)

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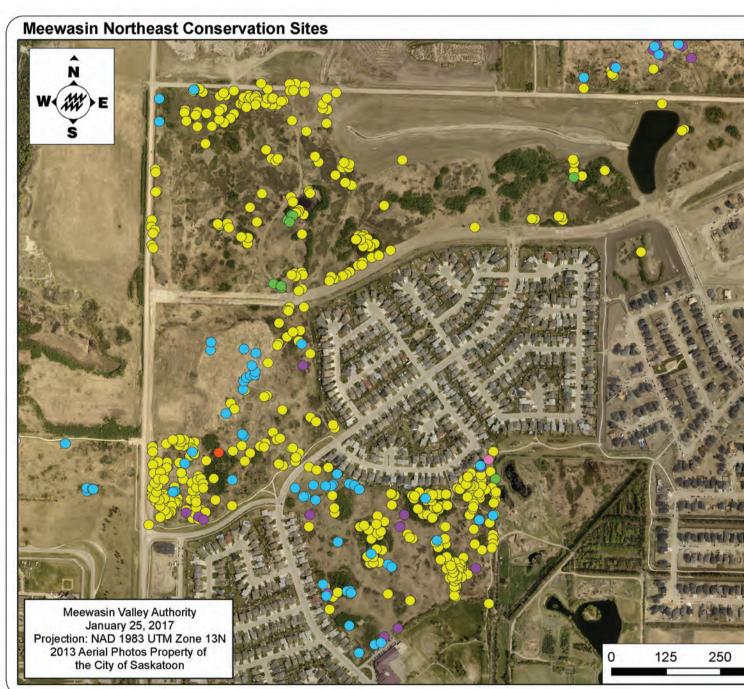
Schubert Chokecherry (Prunus virginiana 'Schubert'

WHAT'S THE PROBLEM?

Invasive species have been identified in the Meewasin Valley-wide Resource Management Plan as the single largest threat to the Meewasin Valley (Meewasin, forthcoming). The International Union for the Conservation of Nature ranks invasive species as the second largest threat to biodiversity globally, after habitat loss and fragmentation (IUCN, n.d.). Invasive species can outcompete native species for resources and change the ecology of an ecosystem, such as reducing habitat for grassland birds. Invasive species can have detrimental effects on society, the economy and the environment through: negative impacts on biodiversity; species decline and extinction; soil degradation and erosion; alteration of fire cycles; disease; human or animal suffering; reduction of land and water recreational opportunities; significant control and management costs incurred; reduced productivity in forestry, agricultural, and fishing sectors; export and import trade restrictions; and reduction of property values (Environment and Climate Change Canada, 2016). In Saskatchewan, the Ministry of Agriculture's Weed Control Act and the Ministry of Environment's Fisheries Act and their associated regulations identify and list invasive species that are prohibited from entering the province, species identified for eradication and control, and requirements of municipalities and landowners to deal with noxious weeds.



Baby's Breath (Gypsophila paniculata)



INTEGRATED RESOURCE MANAGEMENT



Asparagus (Asparagus officinalis)

Meewasin uses an integrated resource management approach to manage ornamental plants naturalizing in conservation sites throughout the Meewasin Valley. One approach is to mimic natural disturbance through conservation grazing or prescribed burning. Conservation grazing uses a multi-species approach to mimic the natural disturbance

that herbivores such as the Plains Bison would have had on the land. Prescribed burning is used to reduce litter, invigorate native species, decrease invasive species and create a mosaic of disturbance patches. Other techniques management include hand-pulling and digging mechanized removal, biocontrols and herbicides.



References

Environment and Climate

Change Canada (ECCC). (2016). Why are invasive species a problem? Retrieved July 2016 from https://www.ec.gc.ca/eeeias/default.asp?lang=En&n=4612AC81-1 International Union for Conservation of Nature (n.d.) Invasive Species. Retrieved June 14, 2016 from http://www.iucn.org/theme/species/our-

work/invasive-species

Meewasin (2017). Meewasin Valley-wide Resource Management Plan. Unpublished.





Meadow Cranesbill (Geranium pratense)

