

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 chalconica*)



Tuberous Vetchling (*Lathyrus tuberosus*)



Himalayan Balsam (*Impatiens glandulifera*)



Schubert Chokecherry (*Prunus virginiana* 'Schubert')



Creeping Bellflower (*Campanula rapunculoides*)

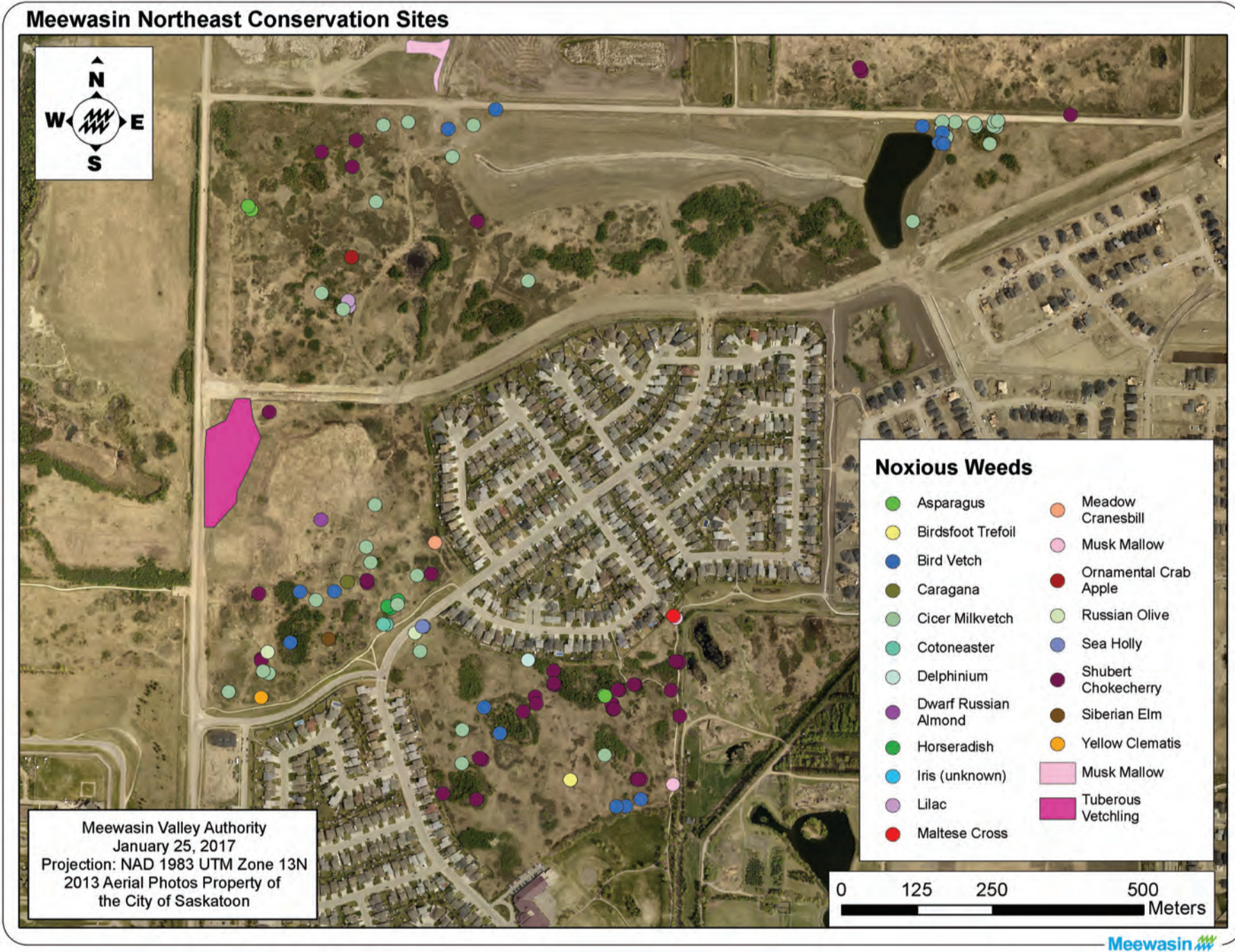
ORNAMENTAL SPECIES FOUND IN THE MEEWASIN VALLEY*

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

*2015 - 2016

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.

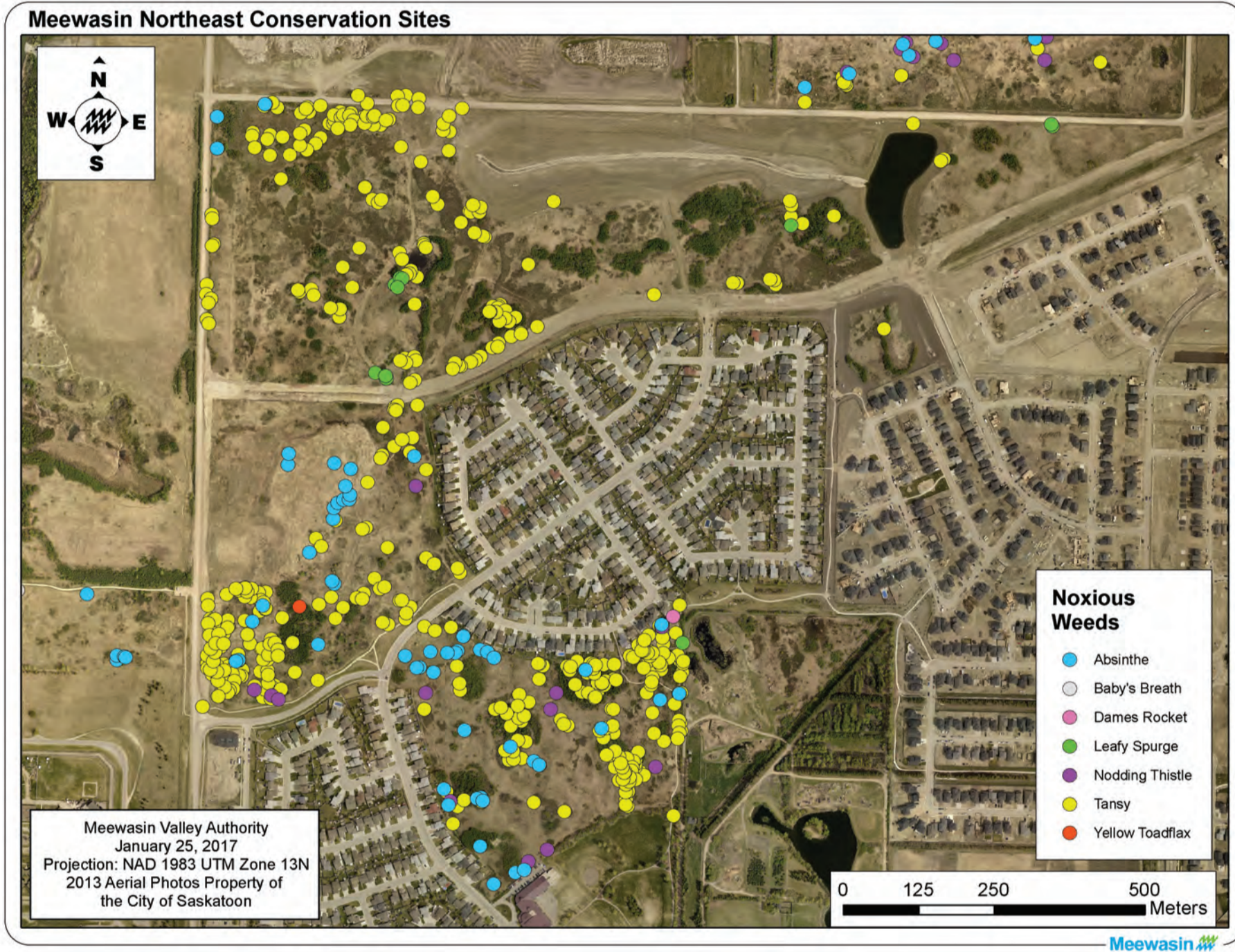
WHAT'S THE PROBLEM?



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



Baby's Breath (*Gypsophila paniculata*)



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

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 species data to the Saskatchewan Conservation Data Centre’s iMap Invasives.



Common Tansy (*Tanacetum vulgare*)
Photo courtesy of Debbie Nordstrom



Dwarf Russian Almond (*Prunus tenella*)



Musk Mallow (*Malva moschata*)



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



Asparagus (*Asparagus officinalis*)



Meadow Cranesbill (*Geranium pratense*)

INTEGRATED RESOURCE MANAGEMENT

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 management techniques 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/ee-ias/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.

