



Welcome!

Weed Inspector/ Land Manager Webinars 2022 Webinar #2

Weeds to Watch For and Common Look-alikes

The Saskatchewan *Weed Control Act*:

Prohibited Weeds



Noxious Weeds



Nuisance Weeds

Prohibited Weeds under the *Weed Control Act*

21 (3) In an order respecting prohibited weeds, the Weed Inspector may direct the owner or occupant of land to do either or both of the following:

- (a) To eradicate the prohibited weeds using any measures that the weed inspector considers necessary and appropriate;
- (b) To take immediate measures directed by the Weed Inspector in the order to prevent the movement of prohibited weeds out of any prohibited area

Prohibited Weeds to Watch for in Saskatchewan



Saltcedar (Tamarix spp.)



Photo: Inaturalist.com

Description

- Deciduous shrub or small tree
- Reddish brown or dark brown stems
- Small scaly leaves that turn yellow-orange in the fall
- White to pink flowers with 4 or 5 petals

Saltcedar: Why is it bad?

- Produces large numbers of small seeds
- Very tolerant of saline soil
- Brings up salts from the soil and increases salinity so that other plants around it cannot grow
- Displaces native vegetation
- **Has been located in a few areas of the province:**
Findlater gravel pit, Cadillac Gravel Pit, SE of Bethune, and in the City of Regina



Houndstongue (Cynoglossum officinale)



- Biennial tap-rooted weed growing 0.5 to 2 meters tall
- Soft, hairy leaves the first year growing from a rosette (look like a dog's tongue). Stem leaves are shorter and stalkless.
- Flowers are a deep reddish purple color, seeds are covered in hooked prickles (very sticky)

Houndstongue: Why is it bad?

- Contains toxic alkaloids that can cause liver damage in grazing animals
- Seeds are spread easily because they stick to clothing and animals
- Grows well in pasture, forested areas, roadsides, and meadows
- Can be difficult to kill
- **Found near Moosomin/Wapella, Grenfell**



Field Scabious (Knautia arvensis)



- Tap-rooted perennial
- Reproduces by seed and lateral buds
- Flowers are deep pink to pale blue and petals are tubular
- Dome of seeds that easily shatters
- ~ 2000 seeds per plant

Field Scabious: Why is it bad?

- Can be very invasive, choking out desirable vegetation
- Reduces feed value of hay and forage
- **Found in Birch Hills area, Whitebeech community pasture*, and south of Yorkton**



Flowering Rush (Butomus umbellatus)



- Aquatic perennial
- Reproduces by seeds and vegetative bulblets formed on the roots
- Stems are tall and triangular
- Flowers are in an umbel shape, with three showy white or pink petals per floret

Flowering Rush: Why is it bad?

- Chokes out wetland vegetation and destroys habitat
- Seeds can live for a long time
- Difficult to access and control due to location (near water)
- **Found west of Watrous, and along the South SK River northwest and northeast of Leader. Also near Esterhazy/Gerald**



Spotted Knapweed (*Centaurea maculosa*)



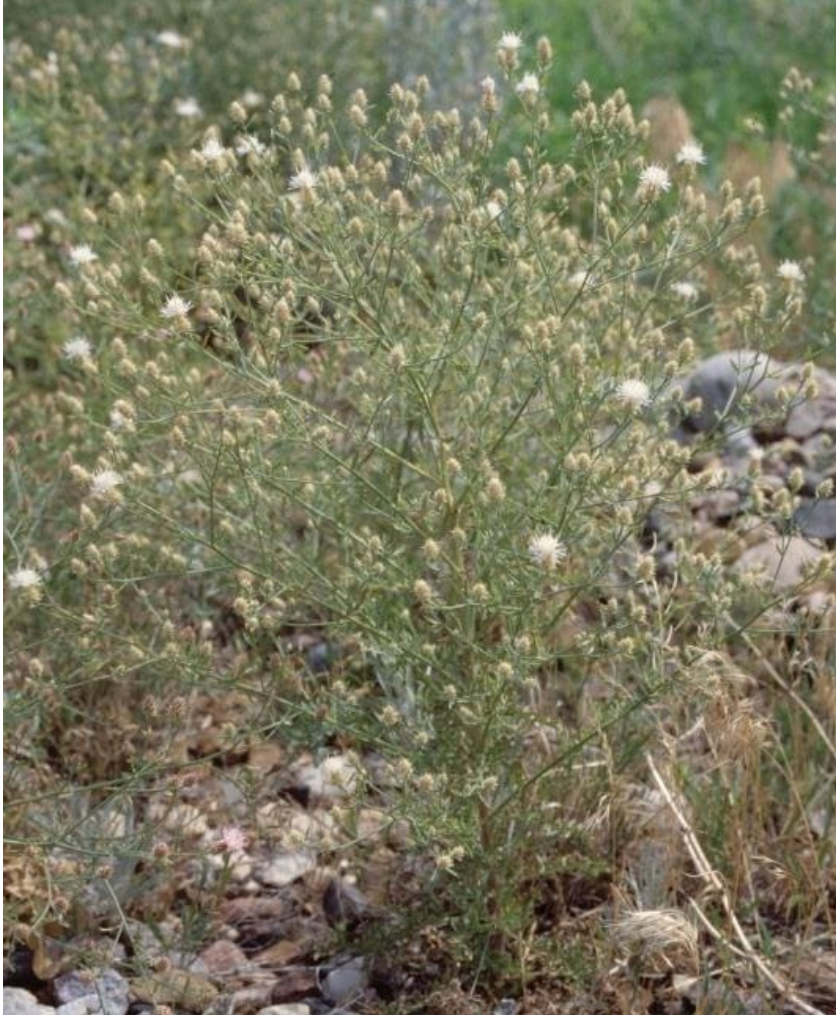
- Tap rooted perennial
- Many upright stems 30 to 100 cm tall
- Long, narrow lobed leaves that form a basal rosette
- Pink to purple, sometimes white flowers
- Egg shaped buds
- Bracts have dark fringed tips creating a spotted appearance

Spotted Knapweed: Why is it bad?

- Individual plants can produce up to 140,000 seeds per sq m
- Seed is easily spread
- Allelopathic
- Chokes out desirable vegetation and increase soil erosion
- Can cause skin irritation
- **Located in S and SW SK near AB and US borders**



Diffuse Knapweed (Centaurea diffusa)



- Biennial, but can be annual or short lived perennial
- Deep taproot
- Leaves are more finely divided than Spotted Knapweed
- Flowers are typically white, can be pink
- Flower buds have rigid spines
- Can hybridize with Spotted Knapweed

Diffuse Knapweed: Why is it bad?

- Individual plants can produce up to 18,000 seeds per year
- Seed is easily spread
- Allelopathic
- Chokes out desirable vegetation and increase soil erosion
- Can cause skin irritation
- **Located in SW SK, and RM of Viscount, near Colonsay**



Potential New Additions/ Weeds of Concern





Tall Waterhemp and Palmer Amaranth

Redroot Pigweed



- Annuals
- Members of the pigweed/amaranth family
- Both are very prone to herbicide resistance
- Prolific seed producers (250,000 to over 1 million seeds per plant possible)
- Compete with crops, stealing water and nutrients
- **Found recently in Manitoba, and near Minot ND.**

Orange Hawkweed



- Perennial Broadleaf
- Leaves are in a rosette
- Whole plant is very hairy
- Milky Sap
- Flowers are bright orange
- Spreads by above ground stolons, creeping roots, and airborne seeds
- Creates dense mats that crowd out native plants
- Found near Moose Jaw and other southern areas

Phragmites australis (European common reed)

- Perennial grass
- Aggressive plant that competes with native species
- Allelopathic
- Can get up to 15 feet tall
- Beige stems with blue-green leaves and large, dense seedheads
- **Possible case in MB by Lake Winnipeg**



Photos: J.M Gilbert, NDMRF,
Ontario.ca/page/phragmites-fact-sheet

Blueweed/Viper's Bugloss

(*Echium vulgare*)

- Biennial/short lived perennial
- Bright blue funnel-shaped flowers
- Hairy, prickly stems
- Toxic to horses and cattle, invades pasture and rangeland
- Has been found in southern Saskatchewan and Manitoba



Himalayan Balsam

(*Impatiens glandulifera*)

- Summer annual
- Shallow, fibrous root system
- Stems 1 to 3 m tall
- Flowers mostly bright pink but can be purple or white
- Originate from ornamental plantings
- Seeds germinate in the spring and create dense stands that out compete all other vegetation



Resources for Weed inspectors in Saskatchewan:

<https://www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/agribusiness-farmers-and-ranchers/crops-and-irrigation/weeds/weed-inspectors-in-saskatchewan>

On this site:

- The most recent Weed Control Act
- The list of Prohibited, Noxious, and Nuisance weeds
- Agreement and order forms
- Most current map of RMs and urban municipalities with appointed Weed Inspectors
- Reporting templates

Thank You!

We'd love to see you at our next webinar-

Biocontrol of Invasive weeds with
Dr. Rosemarie DeClerck-Floate (AAFC)
&
SK Biocontrol Update from Joanne Kwasnicki,
SARM PHO Division 2
March 23rd, 2022

Invasive Plant Look-alikes

Side by side comparisons of commonly
confused plants

Yellow Toadflax

Linaria vulgaris



Teton County Weed and Pest

- **Noxious in SK**
- About 60 cm in height
- Unbranched stems
- Leaves are very narrow and tapered on both ends

Dalmation Toadflax

Linaria dalmatica



- **Prohibited in SK**
- Up to 90 cm in height
- Branched stems
- Leaves are heart-shaped and clasp the stem

Yellow Toadflax

Linaria vulgaris



- Snapdragon-like flowers with a long spur.
- Flowers have pale yellow petals with an orange throat.

Dalmation Toadflax

Linaria dalmatica



Source: Salt Spring Island Conservancy

- Snapdragon-like flowers with a long spur.
- Flowers have bright yellow petals.

Bird's-Foot Trefoil

Lotus corniculatus



- Introduced (can be invasive)
- Yellow pea-type flowers with red stripes
- Grow in whorls with up to 6 flowers
- Leaves are pinnate with 5 leaflets. 3 leaflets at the tip and a pair at the base

Golden Bean

Thermopsis rhombifolia



- Native
- AKA Buffalo Bean
- Yellow pea-type flower
- Flowers grow in a dense raceme
- Leaves are trifoliate (divided into 3 leaflets)

Ox-eye Daisy

Leucanthemum vulgare



Encyclopedia Britannica



Wild Flower Finder

- **Noxious in SK**
- Stem leaves are elongated with coarsely toothed to shallowly lobed edges
- Creeping roots

Shasta Daisy

Leucanthemum X superbum



Source: Garden Design



Source: Dave's Garden

- **Ornamental (can be invasive)**
- Stem leaves have serrated edges with no lobing
- Grows in clumps
- Grows taller and bushier than ox-eye daisy

Scentless Chamomile

Tripleurospermum inodorum



Source: Lynne Roszell

Source: Province of Manitoba

- **Noxious in SK**
- Yellow centre of flower is rounded
- No scent
- Flowers are smaller than ox-eye and shasta daisy

Pineapple Weed

Matricaria discoidea



Source: Awkward Botany

- **Introduced**
- Flowers lack outer white ray florets
- Sweet, pineapple scent

Both species have finely divided leaves that look feathery/fernlike

Also similar: Wild Chamomile

Purple Loosestrife

Lythrum salicaria



Go Botany – Native Plant Trust

Source: Invasive Species Centre

- **Noxious in SK**
- Flowers are purple-pink with 5 to 7 petals
- Spike inflorescence

Fireweed

Chamerion angustifolium



Door County Pulse

Source: Treehugger

- **Native**
- Flowers are pink to magenta with 4 petals and a deeply cleft stigma
- Raceme inflorescence

Purple Loosestrife

Lythrum salicaria



Source: Landscape Restoration Inc

- Leaves are lanceolate and have no leaf stalk
- Several stems with 4 edges
- Grow in wetlands

Fireweed

Chamerion angustifolium



Source: Wild Foods and Medicine

- Leaves are linear to lanceolate and pale green on the undersides
- Single stem
- Grow on edges of woods, roadsides, disturbed soil

Carrot Family Look-alikes

Apiaceae



- Umbel (umbrella) shaped inflorescence
- Hollow stems
- Alternate leaves
- Usually aromatic



Giant Hogweed

Heracleum mantegazzianum



Source: Vancouver Island Free Daily

- Prohibited in SK (not present in SK)
- Height is 4 to 6 m
- White flower clusters 30-80 cm across
- Leaves up to 1.5 m long

Cow Parsnip

Heracleum sphondylium
ssp. *montanum*



Source: The Adirondack Almanack

- Native
- Height is 1 to 2.5 m
- White flower clusters 10-30 cm across
- Leaves up to 0.5 m long

Giant Hogweed

Heracleum mantegazzianum



Source: Maine.gov

Source: King County

- Upper leaves have more pointed lobes
- Stem has rigid bristles and purple blotches

Both contain a sap that causes severe photosensitivity

Cow Parsnip

Heracleum sphondylium
ssp. montanum



Source: Matthaei Botanical Gardens

- Leaves have more rounded lobes with fuzzy undersides
- Stem has soft, fuzzy hairs and is mostly green with few purple spots

Another similar plant:

Poison Hemlock

Conium maculatum L.

- Prohibited in SK
- Found in small populations in Southern SK
- Height is 1 to 3 m
- White flower clusters are up to 7 cm wide
- Leaves are shiny and divided into fernlike segments
- Stems are ridged with purple spots
- Highly poisonous



Washington State Noxious Weed Control Board

Wild Parsnip

Pastinaca Sativa L.



Source: The Western Producer

- **Noxious in SK**
- Height is 30 to 150 cm
- Yellow flower clusters are 10 to 20 cm wide

Heart-leaved Alexanders

Zizia aptera



Source: Minnesota Wildflowers

- **Native**
- Height is 30 to 60 cm
- Yellow flower clusters are 5 to 8 cm wide

Wild Parsnip

Pastinaca Sativa L.



Source: CBC

- Leaves are pinnately compound
 - Leaflets are oblong to oval (mitten-shaped) and 5 to 10 cm long
 - Serrated leaf margins
- *Contains a sap that causes severe photosensitivity***

Heart-leaved Alexanders

Zizia aptera



Tennessee Smart Yards Native Plants

Go Botany – Native Plant Trust

- Stem leaves have 3 ovate lobes
- Basal leaves are heart-shaped (cordate)
- Leaves are 8 to 15 cm long
- Finely serrated leaf margins

Look-alikes from a distance



Goldenrod

Source: CBC



Leafy
Spurge



Common
Tansy

Lynne Roszell



Source: Calscape

Marsh ragwort

Leafy Spurge

Euphorbia esula



- Noxious in SK
- Distinctive yellow-green colour
- Flowers clusters are umbrella shaped
- Leaves are thin and lance-shaped
- Milky-white sap in leaves and stem

Low Goldenrod

Solidago missouriensis



- Native
- Very small yellow flowers that grow in dense panicle
- Leaves are thin and lance shaped
- Leaves are smaller higher up on the stem

Common Tansy

Tanacetum vulgare



Source: Lynne Roszell

- **Noxious in SK**
- Grows in clumps with many woody stems
- Yellow, button-like flowers that grow in dense flat topped clusters

Marsh Ragwort

Tephrosieris palustris



Minnesota Wildflowers

- **Native**
- Large, hollow, and hairy stems
- Yellow flowers in dense flat to rounded clusters
- Found on the edges of sloughs, lakes, and streams

Common Tansy

Tanacetum vulgare



- Fernlike leaves, deeply divided
- Leaflets are narrow with toothed edges

Marsh Ragwort

Tephrosieris palustris



- Lower leaves are lance shaped with wavy margins
- Upper leaves are lance shaped, stalkless, and have large teeth

Resources

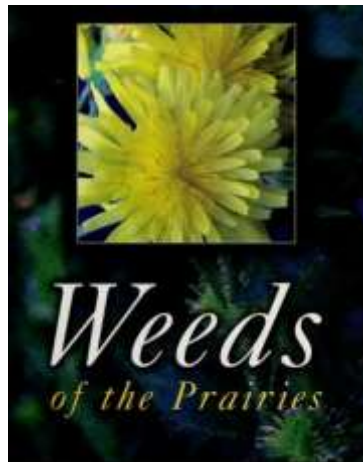
Books

Weeds of North America

Available at <https://www.amazon.ca/Weeds-North-America-Richard-Dickinson/dp/022607644X>



Weeds of the Prairies

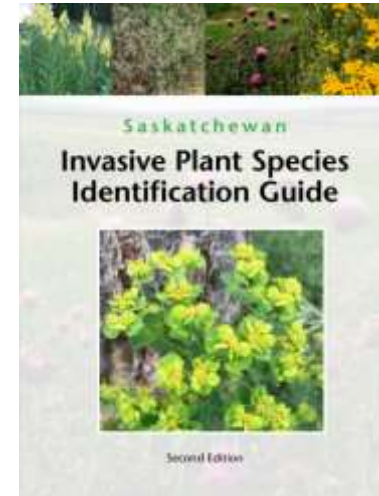


Resources

Online

Saskatchewan Invasive Plant Species Identification Guide

Available here: https://www.saskinvasives.ca/_files/ugd/045093_0634b1eacaca46c3a06184184f918297.pdf



Saskatchewan Invasive Species Council Fact Sheets

Available here: <https://www.saskinvasives.ca/fact-sheets>

Saskatchewan Wildflowers

Available here: <https://www.saskwildflower.ca/native-plant-photos.html>

Resources

Appointed Weed Inspectors get complimentary weed identification through the Crop Protection Lab

Crop Protection Laboratory
1610 Park Street, Regina, SK,
S4N 2G1

Questions?