

# What are invasive plants?



Invasive plants also known as weeds are all non-native plants that have the ability to be competitive and take over the native ecosystems.

## Invasive Common Tansy

Our area already has approximately twenty invasive plant species that are taking over rangeland, aquatic, and forested areas that the Municipality of Crowsnest Pass is in the process of controlling their spread.

# Why stop these plants?

The 9 invasive plant species targeted in this pamphlet are not in the Crowsnest Pass, yet and need to be kept out.



## Meadow Hawkweed Infestation

These plants have been identified as invasive in Montana and British Columbia, as well as other Alberta municipalities and U.S. jurisdictions.

The Crowsnest Pass has beautiful scenery. If these targeted plants were to invade, the native plants would have a hard time competing for habitat to grow, and food supply, nesting areas, and cover needed for our native wildlife species may therefore be severely diminished.

The early detection and identification of these plants will ensure that the number of non-native species are controlled, and preserve the habitat for our native plant species, which are relied on by native wildlife.

These invasive plants aren't in the Crowsnest Pass, yet, but we all need to work together to ensure they won't invade our riparian, forested, and agricultural areas and keep them out of our gardens.

# Protective Measures

If you are coming in from another region (such as BC or Montana), ensure that you are not bringing these pests with you! Invasive Plants are commonly brought into another region via animals, hay bales, garden plants or seed packages intentionally put in gardens, in soil or gravel infested with weed seeds, on construction equipment or other vehicles (including boats and ATV's), and by wind and water.

# Management

The best form of management for these invasive species is identifying and removing them right away. When removing them, ensure that you use the methods that would work best for the specific plant. Hand picking invasive plants is sometimes an effective way to manage the weed infestations—if you can remove the root systems! Herbicides may be an option, as long as label directions are followed. All invasive plant debris should be securely bagged and disposed of at the landfill. Community weed pull events are ways to remove larger infestations of weeds in certain areas.

# Further Information

[www.cowsandfish.org/index.html](http://www.cowsandfish.org/index.html)

Alberta Invasive Plant Council ([www.invasiveplants.ab.ca/](http://www.invasiveplants.ab.ca/))

[www.town.crowsnestpass.ab.ca/protective-a-community-services/weed-control](http://www.town.crowsnestpass.ab.ca/protective-a-community-services/weed-control)

## Pictures & weed identification information from:

[www.invasiveplantatlas.org/distribution.html](http://www.invasiveplantatlas.org/distribution.html)

[www.theequinest.com/care/toxic-plants/h/hoary-alyssum/](http://www.theequinest.com/care/toxic-plants/h/hoary-alyssum/)

*Invasive Plants of the Crown of the Continent*. 2011. Jami Belt

<http://flickrhivemind.net/Tags/hawkweed/Interesting>

# Contact Information

Agricultural Fieldman

P.O. Box 600

Crowsnest Pass, Alberta

T0K 0E0

Phone: 403-562-8833

Email: [agfieldman@crownsnestpass.com](mailto:agfieldman@crownsnestpass.com)



Brochure created by Heather McCubbin

# BE ON THE LOOKOUT FOR THESE INVASIVE PLANTS!

Help Protect the Crowsnest Pass  
from invading plant species



ORANGE  
HAWKWEED

<http://flickrhivemind.net/Tags/hawkweed/Interesting>

## Orange Hawkweed

*Hieracium aurantiacum*

**HABITAT:** Requires well drained soils, Orange Hawkweed can adapt to full sun, or partial shade.



**DESCRIPTION:** The 15-90 cm long stems are leafless, covered in hairs, and contain a milky sap. Leaves are long & narrow, and are covered in tiny hairs. The bright orange flowers make this species of Hawkweed distinct & clusters of 5-30 flower heads are localized at the end of the stems.

**CONTROL:** Mowing will prevent new seed production; hand pulling is very effective on small patches. It is unpalatable to livestock.

## Hoary Alyssum

*Berteroa incana*

**HABITAT:** Prefers dry, nutrient poor soils that have lots of light after seed germination.



**DESCRIPTION:** Growing 30-80 cm tall there are one to several stems per plant, stem leaves alternate with rounded tips. The white flowers are formed in clusters made up by 5 mm small petals.

**CONTROL:** Livestock won't graze Hoary Alyssum, yet no toxicity cases are known. Best control is hand removal if root crown can be removed to ensure it won't re-grow.

## Garlic Mustard

*Alliaria petiolata*

**HABITAT:** Prefer rich moist soils of the riparian forest; shade tolerant but plant becoming more common in full sun.



**DESCRIPTION:** growing 30-90 cm tall, usually with 2 stems per plant. Leaves are heart shaped with scalloped edges; the 4 white flower petals form a small group at the top of the stem. Flowers flake off when held, and foliage smells like garlic if crushed.

**CONTROL:** Hand pulling is most effective, but must remove most of root to prevent re-sprouting; mowing must be continuous through the growing season.

## Meadow/ Mouse-eared Hawkweed

*Hieracium caespitosum*

**HABITAT:** Adapted to grow in well drained coarse soils in full sun, but have also adapted to partial shade.



**DESCRIPTION:** Hairy stems are 20-70 cm tall & contain milky juice within. Leaves can be narrow to broadly oval shaped with fuzzy long hairs; yellow flowers can sometimes have a red strip, occur in clusters of a few to many.

**CONTROL:** Mowing increases growth; hand pulling only effective in small patches to retrieve entire root system.

## Himalayan Balsam

*Impatiens glandulifera*

**HABITAT:** Requiring moist, nutrient rich soils; adapted well to areas of disturbed riparian & moist wetlands. Very sensitive to frost and drought.



**DESCRIPTION:** Hollow stems grow 1-3m tall, the simple egg shaped leaves are 6-15 cm long, and decrease farther up the stem. The flowers come in shades of pink to purple in clusters of 5-10 flowers.

**CONTROL:** Hand pulling & mowing is effective, but will have to be repeated, as cut plants can re-sprout new flowers

## Japanese Knotweed

*Fallopia japonica*

**HABITAT:** In need of moisture, will grow in riparian areas & wet grasslands; prefer open areas but can tolerate shade with silt, loam & sandy soil types.



**DESCRIPTION:** Stems are plentiful and grow 1-2 m tall with red/purple spots. Leaves are broadly heart shaped with straight edges. The flowers have numerous small white flowers that form clusters. Japanese Knotweed has an aggressive root system that can grow up through concrete.

**CONTROL:** Mowing, pulling and cutting can be effective, but only with repetition over many years.

## Purple Loosestrife

*Lythrum salicaria*

**HABITAT:** Prefer moist soil; can tolerate flooding & partial shade. Found in wet riparian areas yet can tolerate a wide range of growing conditions.

**DESCRIPTION:** Stems are 1.5 to 3 m tall square to octagon in shape, opposite narrow shaped leaves; flowers are reddish-purple with 5-7 pedals that are in vertical clusters.

**CONTROL:** Unpalatable to livestock. Mowing isn't effective, yet hand pulling young plants can easily kill small infestations. Cutting shoots of mature plants can be done late in the season to reduce re-sprouting. Only herbicides registered for use near water may be used.



## Sulphur Cinquefoil

*Potentilla recta*

**HABITAT:** Tolerant of many soil types and climates. Though usually intolerant of complete shade, it will grow under an open forest canopy.

**DESCRIPTION:** One or more stems grow 30-70 cm tall per plant, horizontal hairs cover plant. Leaves are alternate and numerous; the light yellow flowers are made up of 5 heart shaped petals.

**CONTROL:** Unpalatable to livestock & wildlife due to tannin content. Hand pulling is effective on small infestations; getting the whole root is important. Mowing isn't effective, herbicides with picloram or glyphosate have been effective.



## Yellow Starthistle

*Centaurea solstitialis*

**HABITAT:** Prefers dry, full sun; intolerant of shade. Native to North Africa. In western North America, dense infestations found on rocky shallow soils.

**DESCRIPTION:** Stems up to 1 m tall covered with fine white cottony hairs. Leaves deeply lobed; become smaller toward top of stem. Small yellow flowers clustered to resemble 1 flower in a head.

**CONTROL:** Grazing reduces plants as livestock eat this species before the spines develop. Mowing is effective when plants are tall, controlled burns effective over 3 consecutive seasons. The U.S. uses biocontrol insects to limit seeds.

