

# Knapweed

## Diffuse

*Centaurea diffusa*

## Spotted

*Centaurea stoebe*



*Spotted Knapweed*

### Identification

Diffuse and spotted knapweed are tap-rooted biennial to short-lived perennials that grow to 3' tall. Diffuse knapweed has a single, upright stem with numerous branches while spotted knapweed may have multiple stems. Diffuse knapweed typically has white flowers surrounded by brown spiny bracts, while spotted knapweed flowers tend to be larger and purple, with darkly fringed bracts. Both species spread by seed which can remain dormant in the soil for many years.

### Impact

Knapweeds invade grasslands forming dense monocultures that displace desirable species, reducing forage for livestock and wildlife.

### Control

Hand pulling, mowing or herbicide can be effective. This should be followed by competitive seeding. Bio-control insects that attack the seed head and root are available.



*Root Agent*

### TYPE

BIENNIAL to  
SHORT-LIVED PERENNIAL  
FLOWERS

JULY to SEPTEMBER



*Spotted Knapweed*



*L. SCOTT*



*L. SCOTT*



*Diffuse Knapweed*

**Spotted knapweed is a Class B Designate in Ferry County and seed production must be stopped. Both species are classified as provincially noxious in BC.**



## Scotch Thistle

*Onopordum acanthium*

### Identification

Scotch Thistle is a biennial that can grow to a height of 10'. The entire plant is covered in fine to woolly hairs, giving it a silvery green appearance. The base of the large purple flowers is covered in spines. The leaves are long and wide with the basal leaves reaching 2' long and about 1' wide.

Scotch Thistle reproduces by seed only. A single plant can produce up to 40,000 seeds which can stay viable in the soil for up to 20 years.

### Impact

Scotch Thistle can grow into dense stands that are inedible and impassable to wildlife and livestock.

### Control

Digging or cutting the base of the plant prior to seed production can effectively control this plant. Broadleaf herbicides can also provide control. There are no effective bio-controls available at this time.



TYPE  
BIENNIAL  
FLOWERS  
JUNE to AUGUST



New Growth



**Scotch Thistle is a Class B Designate in Ferry and Okanogan counties. Seed production must be stopped!**



# TOADFLAX

Dalmatian

*Linaria dalmatica*

Yellow

*Linaria vulgaris*

## Identification

Dalmatian Toadflax is a showy perennial with heart shaped light green waxy leaves and yellow snapdragon-like flowers. It is an ornamental species that has escaped from gardens.



*O. WESTBY*  
Yellow Toadflax (left) & Dalmatian Toadflax

Yellow (or common) toadflax has narrow, lance-shaped leaves and the yellow flowers commonly have orange colouration.

## Impact

Toadflax has the ability to spread rapidly due to its extensive root system and distribution of seed by wildlife.

## Control

Selective herbicides can be effective when applied in the spring or fall. Vigorous and repetitive hand pulling provides good results when the commitment is made and carried through. There are several effective bio-controls available.

TYPE  
PERENNIAL  
FLOWERS  
MAY to FIRST FROST



*L. SCOTT*

Yellow Toadflax



*L. SCOTT*

Dalmatian Toadflax



*L. SCOTT*

Dalmatian Toadflax

New Growth

**Dalmatian and Yellow toadflax no longer require control in Okanogan and Ferry counties due to prolific bio-controls! In BC, these species are both classified as provincially noxious.**