## INTEGRATED PLANT MANAGEMENT

The Northwest Invasive Plant Council is comprised of contributing partners and volunteer members representing government, private & public agencies and other organizations. Members of the Council are dedicated to increasing awareness of invasive plants and associated losses caused to the natural & domestic resources of our region. The goals of the Council are:

EDUCATE – landowners and managers about invasive plants' impacts on the natural diversity of

the environment

PROMOTE – Integrated Plant Management for the prevention, control, containment and eradication of invasive plant species

ENCOURAGE – expanded support for local invasive plant control programs and initiatives /

ASSIST – with management efforts of invasive plants on public, private and First Nation land

INVENTORY – invasive plants on private & public lands in the North Central Region of BC

## INVASIVE PLANTS (WEEDS)

Invasive plants are non-native plant species that are difficult to control. In the absence of their natural predators and diseases, these weeds aggressively compete with native plants for sunlight, water & nutrients.

#### To prevent weeds from establishing:

PULL – isolated plants

CLIP - seed heads, placing them in a sealed bag

BURY - or burn the plants & seed heads

REPORT – invasive plant locations to the NWIPC by calling 1-866-44-WEEDS

## **ECONOMIC IMPACTS**

Invasive plants threaten the health of our resources as well as the viability of the industries they support. Invasive plant infestations can negatively affect the agriculture, forestry and recreation & tourism industries because they:

- Reduce forage quality & yield
- Are expensive to control
- Reduce tree seedling vigour
- Reduce property & aesthetic value
- Restrict recreation opportunities when poisonous and thorny weed infestations are present

Integrated Plant Management focuses on environmentally sound and sustainable management of our resources. One of the most important components of IPM includes control of undesirable plants through improved management practices. Basic principles include:

- 1] Preventing invasion
- 2] Identification & knowledge of invasive plant species
- 3] Inventory, mapping & monitoring of invasive plant populations and damage caused
- 4] Choosing from mechanical, cultural, chemical, and biological control methods
- 5] Using a combination of control methods to reduce infestation
- 6] Evaluating the effectiveness & results of your management decisions

Education, prevention & early identification of invasive plants is the first step to controlling them.

More details about IPM strategies are available through the Weed Hotline.

#### **ECOLOGICAL THREATS**

Invasive plants aggressively compete with native plants for nutrients, light, water and growing space. Competition from invasive plants can result in:

- Suppressed native plant and seedling growth
- Reduced forage for livestock and wildlife
- Less palatable and sometimes poisonous plant species within the plant community
- Increased fire hazard as unpalatable plant material builds up
- Future plant communities being threatened by invasive plant seeds that remain viable in the soil for decades

#### WEBSITES

www.nwipc.org
www.agf.gov.bc.ca/cropprot/weeds.htm
www.weedsbc.ca
www.invasiveplantcouncilbc.ca
http://www.env.gov.bc.ca/epd/ipmp
http://www.agf.gov.bc.ca/cropprot/weedguid/weedguid.htm

## HOW TO GET INVOLVED

Learn to recognize invasive plants

Remove weeds from equipment, pets & clothing

Dispose of plants & seeds in a sealed plastic bag

Share this information with friends & neighbours

Adopt an area for volunteers to control invasive plants

Educate children about invasive plants

Be conscious of your actions when travelling

# FOR MORE INFORMATION AND TO REPORT INVASIVE PLANTS

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Northwest Invasive Plant Council Hotline 1-866-44-WEEDS (1-866-449-3337)



Printed in partnership with the Province of British Columbia

# A GUIDE TO **INVASIVE PLANTS NORTHWEST INVASIVE PLANT** COUNCIL Protecting the

diverse habitats of
North Central BC
from invasive plant
spread is the
responsibility of
all resource users.

"BE WISE ABOUT WEEDS"

PRINTED BY WAYSIDE PRINTERS

# **INVASIVE PLANT OR WEED?**

The terms "invasive plant" and "noxious weed" mean the same thing and can be used interchangeably. However, the term invasive plant is considered to better describe the plants in question and the problems they cause.

#### WHAT YOU CAN DO

- Learn to recognize & identify invasive plants
- Prevent infestation of new areas
- Pull isolated or new patches of weeds
- Removing weeds from vehicle undercarriage reduces spread to uninfested areas
- Check yourself, pets, horses and livestock hair & feet for weed seeds prior to leaving an infested area
- Report sightings to the Northwest Invasive Plant Council at 1-866-44-WEEDS

#### **AGRICULTURE**

- Plant "certified" seed because it contains no noxious weed
- Check hav bales for invasive plants before purchasing & transporting
- Practice sound range and pasture management to maintain a healthy plant community that is more resistant to weed invasion
- Keep areas around cattleguards, gates, irrigation ditches and livestock facilities free of weeds to reduce the spread to new areas

#### **HORTICULTURE**

- Do not grow invasive plants
- Do not plant "wild flower" seed mixes that contain invasive plant seeds (most do)
- Dried flower arrangements containing weeds can spread seeds to new areas

#### RECREATION

- Obey posted signs
- Vehicle & bicycle tires can disturb soil providing an ideal seedbed for weeds to grow. Keep to established roads &
- Keep recreation equipment clean & weed free

#### **INDUSTRY**

- Wash soil & plant material from heavy machinery before transporting to new locations to reduce the spread of weeds
- Reseed all sites disturbed by machinery & industrial equipment to prevent the establishment of new invasive plants
- Vacant or undeveloped land should be actively managed to prevent weeds from establishing

# INVASIVE PLANTS IN CENTRAL BRITISH COLUMBIA

#### WEEDS THREATEN OUR RESOURCES. LEARN TO IDENTIFY THEM.

#### **DALMATIAN TOADFLAX**

- · Perennial introduced from southeastern Europe
- Spreads by seeds and creeping roots
- Waxy leaves are pale green & clasp stem
- Yellow snapdragon-like flowers

SPOTTED KNAPWEED

• Perennial introduced

from Eurasia

Purple flowers

flowerhead are

easy to "spot"

Prolific seed

producer

Black tipped

bracts on



#### **ORANGE HAWKWEED**

- Perennial introduced from Europe
- Orange/red flowers
- Basal rosette of leaves
- Bristly-hairy stems that exude a milky juice when broken



#### FIELD SCABIOUS

- Taprooted perennial from Eurasia & North Africa
- Violet-blue flowers
- · Leaves reduced near tip of stem
- Hairy stems & leaves
- Very similar to many ornamental species

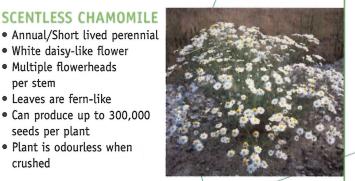


#### MARSH PLUME THISTLE

- Introduced from Europe. Biennial that germinates in the first year. Up to 2m tall
- Typically in a single, slender unbranched stem with a cluster of purple flowers at the top
- The upright stem is evenly covered in spiny wings



- Annual/Short lived perennial
- White daisy-like flower Multiple flowerheads
- per stem
- Leaves are fern-like
- Can produce up to 300,000 seeds per plant
- Plant is odourless when crushed



## OXEYE DAISY

- Short-lived perennial. Introduced from Eurasia. Mature plants are 20-80cm in height
- Often confused with the ornamental Shasta Daisy
- White daisy-like flowers on stem ends and narrow, divided, upper leaves clasping the stem
- Spreads by seed and creeping underground stems



#### COMMON TANSY

- Perennial, spread by seeds and roots
- Numerous small, vellow buttonshaped flowers in flat-topped clusters at the tops of the plants
- Leaves are deeply divided, almost fern-like
- Mature plants grow 0.4 1.5m tall with upright stems that are often purplish red
- May be toxic 54

#### **DIFFUSE KNAPWEED**

- Biennial to perennial introduced from the Mediterranean
- White flowers (often pink)
  - Short, sharp spines on flower head bracts
  - Seeds spread from tumbling plants



## HOUND'S-TONGUE

- Biennial introduced from Europe
- Soft & hairy basal leaves

LEAFY SPURGE

from Europe

Perennial introduced

Reproduces by seeds &

Yellow-green flower clusters

with heart shaped bracts

Exudes a white latex juice

deep vigorous roots

that irritates skin

- Red-purple flowers
- Teardrop seed burrs Toxic to livestock
- Seed attach to people
- & animals

Photographs provided by the Ministry of Agriculture and Lands and Robert Needham

