

Invasive Plants in Alberta



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Riparian areas

Land owners and occupiers are responsible for controlling noxious weeds and destroying prohibited noxious weeds under the *Alberta Weed Control Act*. Listed plants in the Act cause problems for the environment, health or economy. Know your responsibilities under the Act. Regardless of where plants are located, prevention is always the most effective approach in dealing with invasive plants.

What You Need to Know

What is the problem?

Riparian areas are the lands adjacent to streams, rivers, lakes and wetlands.

Managing invasive plants in riparian areas can be a challenge both because permissible herbicide use is limited and because access to these areas is usually difficult.

Invasive plants in riparian areas cause the following problems:

- can reduce forage quality and quantity for wildlife
- displace native species, reducing biodiversity
- often have shallower root systems than native plants and can cause instability of banks, increasing erosion
- spread downstream with water flows to infest new areas

Species to watch out for

Common invasive plants found in riparian areas in Alberta, listed in the *Alberta Weed Control Act*, are as follows:

- Canada thistle (*Cirsium arvense*)
- perennial sow-thistle (*Sonchus arvensis*)
- tall buttercup (*Ranunculus acris*)
- ox-eye daisy (*Leucanthemum vulgare*)
- scentless chamomile (*Tripleurospermum inodorum*)
- common tansy (*Tanacetum vulgare*)
- yellow toadflax (*Linaria vulgaris*)
- leafy spurge (*Euphorbia esula*)
- knapweeds (*Centaurea* species)
- hound's-tongue (*Cynoglossum officinale*)
- burdock (*Arctium* species)
- Himalayan balsam (*Impatiens glandulifera*)

All these species are easily spread with water and soil movement in riparian areas.

Salt cedar (*Tamarix* species) is a serious tree invader in the United States and has been found in Alberta urban settings as ornamental plantings. Salt cedars pose a serious threat to riparian areas if they are allowed to escape, either intentionally or accidentally. As a high consumer of water, salt cedar can drastically deplete water tables. The cedar then accumulates salt in its leaves, which fall in the autumn, decimating native vegetation.



Canada thistle (*Cirsium arvense*)



Perennial sow-thistle (*Sonchus arvensis*)

What you can do

Maintaining riparian areas in good condition will reduce the opportunities for invasive plants to establish:

- Manage invasive plants in adjoining upland areas to prevent spread into the riparian zone.
- Scout riparian areas and take action promptly when new infestations of invasive plants are found.
- Distribute livestock evenly to avoid overgrazing riparian areas. Use rotational grazing to keep grazing pressure in balance with the productivity of forage.

If invasive species are found:

- Hand pulling can be used to control some invasive species with shallow roots and non-vegetative reproduction. Pulled invasive plants should be incinerated or bagged and sent to the landfill, never composted.



Tall buttercup (*Ranuncularis acris*)

- Participate in events organized by local watershed stewardship groups.
- Herbicides can be used judiciously for controlling invasive plants in riparian areas, but note there are restrictions on herbicide use within 30 metres of any open body of water. Herbicide applications in undisturbed riparian vegetation must also be conducted by a certified pesticide applicator.
- Biological control insects are available for some plant species such as leafy spurge, scentless chamomile and hound's-tongue. Consult Alberta Agriculture and Rural Development for information on whether your location is suitable for this control method.

Learn More

Find out more on this topic and access these additional resources at the following web page:
www.agriculture.alberta.ca/invasive-weeds

Riparian Health Assessment

A Field Guide to Common Riparian Plants of Alberta

Caring for the Green Zone: Riparian Areas and Grazing Management - Third Edition.
Lethbridge, Alberta: Cows and Fish Program.

Alberta Watershed Planning and Advisory Councils

Pesticide Use in or Near Water

General principles and resources

- Land owners and occupiers are responsible for controlling noxious weeds and destroying prohibited noxious weeds. Know your responsibilities under the *Alberta Weed Control Act*.
- Learn to identify invasive plants.
- Be alert for invasive plants and respond early when they are found.
- Reduce the introduction of invasive plants, their reproduction and the movement of their seeds and plant parts.
- Reduce soil disturbance, which makes openings where invasive plants can establish.
- Use effective, appropriate methods to control invasive plants. Alberta Agriculture and Rural Development, Environment and Sustainable Resource Development, municipal Agricultural Fieldmen and urban park departments can provide advice on control methods. Always follow label instructions when applying any herbicide.

Alberta Invasive Plant Identification Guide (from Wheatland County)

www.wheatlandcounty.ca/DocumentCenter/View/12

Alberta Invasive Species Council factsheets

www.abinvasives.ca

Alberta *Weed Control Act* and Regulations

www.agriculture.alberta.ca/weedcontrol-act

Alberta Weed Monitoring Network

www.agriculture.alberta.ca/weeds



Scentless chamomile (*Tripleurospermum inodorum*)



Common tansy (*Tanacetum vulgare*)



Leafy spurge (*Euphorbia esula*)



Spotted knapweed (*Centaurea stoebe ssp. micranthos*)



Hound's-tongue (*Cynoglossum officinale*)



Burdock (*Arctium* species)



Diffuse Knapweed (*Centaurea diffusa*)



Field scabious (*Knautia arvensis*)



Salt cedar (*Tamarix ramosissima*)