

Weeds are a big problem!

Weeds are usually non-native species that have been introduced, intentionally or unintentionally, from other countries or ecosystems and that threaten Alberta's ecosystems and biodiversity.

They are typically aggressive plants with a high ability to reproduce and survive outside their natural range. Without their natural enemies (diseases and pests) present to keep them in check, outbreaks of these invasive plants can occur.

Economic losses from weeds can include reduced crop and forage quality and yield, lower property values, and infrastructure damage. Aquatic weeds can obstruct waterways and affect water quality. Some species can grow into cracks and cause damage to asphalt and building foundations. Weeds can also create fire hazards or harbour pests and disease, and some weeds are poisonous to humans and animals.

The non-native species that are of high environmental and conservation concern are those that are able to outcompete native species, that will move into and alter ecosystems, and that reduce biodiversity. This can include displacement of rare and endangered species.

Invasive non-native plants are not all officially considered weeds by government or agriculture. Forage plants such as smooth brome, crested wheatgrass, timothy and sweet clovers, and ornamentals such as bachelor's button, goat's beard and Peking cotoneaster can be very invasive, outcompeting native plants in prairie, forest and wetland. The Alberta Native Plant Council considers invasive agronomic and horticultural species to be a significant ecological problem in some native landscapes.

The Alberta Weed Control Act

In Alberta, the Ministry of Agriculture and Rural Development is responsible for the *Weed Control Act* (2010). The first *Weed Act* passed in 1907 and was most recently revised in 2010. The Act aims to regulate weeds and their seeds in Alberta.

Weeds are classified into two categories: prohibited noxious and noxious. The *Weed Control Regulation* (2010) lists species in each category and is found here: http://www.qp.alberta.ca/1266.cfm?page=2010_019.cfm&leg_type=Regs&isbncln=9780779748150

Prohibited Noxious weeds are generally not yet found in Alberta or are found in low numbers. This means we can still get rid of them before they become a big problem. The landowner or land occupant (me, you, the farmer, the municipality, etc.) is required to destroy all prohibited noxious weeds and seeds. Destroy means to kill all growing parts or to render reproductive mechanisms non-viable.

Noxious weeds are typically too widely distributed to eradicate entirely. If small numbers are found, they can be controlled. However, these species can easily spread and become unmanageable. Landowners are required to control noxious weeds, which means to inhibit their growth or spread.

Municipalities may designate additional species as noxious weeds or may elevate noxious species to prohibited noxious within their jurisdictions.

The Alberta Weed Regulatory Advisory Committee comprises groups (including ANPC) and individuals interested in regulating weeds in Alberta. They provide recommendations to the Ministry on weed regulation issues. Information on plants being considered for the weed list is found here:

http://www1.agric.gov.ab.ca/\$Department/deptdocs.nsf/all/prm14073#wlist

What can you do?

Don't plant weeds

Did you know many weeds are planted as garden ornamentals?



Common baby's breath (*Gypsophila paniculata*) — Noxious. Commonly grown for floral arrangements, this weed outcompetes our native perennial grasses. One plant can produce 13,000 seeds and can have roots up to 4 m deep.



Yellow clematis (*Clematis* tangutica) — Noxious.

This climbing vine is commonly sold in garden centres and in seed mixes. It can spread by roots and by windblown seeds. It climbs over and smothers native plants (trees and shrubs in particular) and creates a fire hazard.



Dame's rocket (Hesperis matronalis) — Noxious.

This sweet-smelling plant is often found in non-native wildflower seed mixes. One plant can produce over 20,000 seeds. It invades and disrupts native plant communities.

The Alberta Invasive Species Council has developed *Weed Wise Gardening in Alberta*. This brochure gives useful tips on how to avoid planting weeds and provides suggestions for planting alternative species. https://www.abinvasives.ca/resources

The Alberta Native Plant Council has put together "Posey's Rogues: A Gallery of Exotic Invasive and Non-invasive Plants of Alberta." Check out this list before choosing your garden plants. http://www.anpc.ab.ca/wiki/index.php/Main_Page



For more information

Alberta Invasive Species Council — https://www.abinvasives.ca/fact-sheets Alberta Invasive Plant Identification Guide —

http://www.wheatlandcounty.ca/DocumentCenter/View/12

Alberta Environment and Sustainable Resource Development — http://esrd.alberta.ca/recreation-public-use/invasive-species/default.aspx *Weeds of the Prairies* by C. I. Bubar, S. I. McColl and L. M. Hall, 2000, All

Weeds of the Prairies by C. J. Bubar, S. J. McColl and L. M. Hall, 2000, Alberta Agriculture, Food and Rural Development, Edmonton, AB.

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Weed out weeds

Remove and dispose of weedy species correctly — remove all plant parts (roots, stems, seeds, and flower heads) and burn or bag them for landfill disposal. You may need to repeat this yearly until the seed bank is depleted. You can also help out by volunteering for weed pulls in your community.

Stop the spread

Clean off equipment, vehicles, and boats when moving from one location to another. Do the same for your pets and hiking boots.

Identify & report listed weeds

The Alberta Weed Spotter app is free (available on iTunes) and includes an easy to use, interactive key that allows users to identify the 75 weed species regulated in Alberta. Users can upload photographs and report weed sightings. The app aims to increase public awareness of weeds, provide data on weed occurrences, allow for faster response to new infestations, and aid in strategic planning for weed management.

The Alberta Invasive Species Council has launched the Early Detection & Distribution Mapping System (EDDMapS — http://www.eddmaps .org/alberta/index.cfm). Users can go online, report weed locations, upload photographs, and submit other information. Anyone can use the database to create weed distribution maps

