



FACTSHEET APRIL 2019

Adopt-a-Highway

Invasive Plants and their Impacts

Often mistaken for wildflowers, invasive plants are spreading through British Columbia at an alarming rate. These alien plant species can damage human health, ecosystems and the economy. They have arrived in British Columbia without their natural pests, which is one of the reasons they can spread quickly and out-compete desirable plants. Roadside invasive plant management, through programs such as Adopt-A-Highway, can help reduce the rate of spread and impacts of invasive plants in BC. Invasive plants can take root along roadsides and then quickly spread to surrounding areas. They move to new places by "hitchhiking" on vehicles, animals, and people; or seeds can be distributed during roadside maintenance activities like mowing, or when new roads are constructed. Unfortunately, even people collecting roadside "wildflowers" could be helping invasive plants to spread.

As they spread, invasive plants can do serious harm. For example, people exposed to the toxic sap of giant hogweed can develop second-degree burns and severe scarring. Also, as native plants are replaced by invasive plants, biodiversity declines and food and habitat for fish and wildlife can disappear. These non-native invaders can cost industries like farming, ranching and forestry millions of dollars each year. All citizens, regions and industries in BC can be affected.

"Invasive alien species are the second most significant threat to biodiversity after habitat destruction. They are considered responsible for almost half of all extinctions during the last 400 years."

— International Union for Conservation of Nature





Management Strategies

Preventing the spread of invasive plants is key! Once areas are invaded by invasive plants, they can be difficult, if not impossible to return to their natural state. As a result, many organizations, like the Ministry of Transportation and Infrastructure, have created best practices to limit the spread of invasive plants: steps that show workers how to prevent spreading seeds and how to limit invasive plant establishment. Unfortunately, it is impossible to prevent all invasive plants from arriving on roadsides, which is why Early Detection Rapid Response - EDRR is critical. Trained Adopt-A-Highway groups can spot new invasions, report them, and sometimes even control them! Removing invasive plants before they become large infestations can make treatment more effective, and costs a lot less.





New Invaders

New invasive plants are constantly threatening BC's borders, and it is essential that they are spotted and reported before they have a chance to spread! With quick identification, reporting, and aggressive treatment, invasive plant managers aim to prevent these plants from becoming established. Trained Adopt-A-Highway groups are ideal "spotters" because of their on-theground presence and knowledge of invasive plants. If you see an unfamiliar plant with weedy characteristics, record what you see and report it immediately!

Yellow starthistle is one species on the 'watch list' in BC. It is currently present in Alberta, Montana, Idaho, and Washington, and is known as California's worst roadside weed. This invader can grow up to 1m in height and has yellow flowers with a halo of spines up to 2cm long. It can be toxic to horses.

Safety Concerns

Toxic Plants: Some invasive plants, such as **giant hogweed**, are highly toxic. Ask your Regional Invasive Species Organization which plants you can remove, and which plants you should not touch! Toxic plants like giant hogweed must never be removed by Adopt-A-Highway volunteers due to the severe threat of injury. Instead, avoid the area where this plant is growing, eave all litter near any toxic plants, and report the location to one of the contacts listed in this booklet.

Herbicide Treatment: Some invasive plant species require herbicide treatments for control. Do not work on a roadside that has been treated with herbicide within the past fourteen days. Herbicide signs indicate when the treatment took place.

Environmental Safety: Please ensure that Adopt-A-Highway volunteers are careful to prevent debris from entering watercourses while hand-pulling invasive plants. Plant removal activities should take lace at least 2m from any water-body. Report large patches of exposed soil to your Regional Invasive Species Organization for grass seeding.



Avoid giant hogweed infestations and report them immediately.



Please watch out for yellow starthistle and, if sighted, report it immediately.



You can help prevent a new invasive plant species from becoming established in BC.

You Can Make a Difference...

Learn, Identify, Report, Remove

Join a training session in your region to learn how to identify, remove, and report invasive plants.

Learn

Learn to identify invasive plants in your region!

Attend a free training session with your Regional Invasive Species

Organization: https://bcinvasives.ca/about/partners/invasivespecies-contacts-bc/

Report

Report all suspicious plants to 1-888-WEEDSBC, your Regional Invasive Species Organization, or online at Report-A-Weed: http://www.reportaweedbc.ca

Remove

Remove non-toxic invasive plants as well as litter on your section of adopted highway! Before you begin, please ask your Regional Invasive Species Organization for specific instruction on which plants to target, how to remove them, and for any safety tips when working with the plants. In all cases you should:

- » Carefully place all plant parts into designated "Invasive Plant" garbage bags, removing as much of the root as possible.
- » Securely close garbage bags to prevent plant material from escaping during transport, and ensure that plant parts have not punctured the bags. Double bagging may be required.
- » Leave the "Invasive Plant" designated garbage bags on the shoulder of the road next to your AAH litter bags.

Spread the Word!

Share your knowledge of invasive plants with others! With more people identifying and reporting, there will be a decrease in the spread of invasive plants!







Trained crews remove the invasive plant, Japanese knotweed (Fallopia japonica) from stretches of highway in the Courtenay

— Comox area of J. Leekie Vancouver Island.

REPORT A WEED / 1-800-WEEDSBC



Common tansy (*Tanacetum vulgare*) infests stream banks, pastures, and disturbed sites such as roadsides. Infestations can be toxic to livestock and people if large quantities are consumed.



Himalayan balsam/Policeman's helmet (*Impatiens landulifera*) is extremely invasive to moist, natural areas, spreading quickly through watercourses. Bare riverbanks are exposed in the fall, causing erosion during high winter flows.

References/Links

Invasive Species Council of BC:

http://www.bcinvasives.ca

BC Ministry of Transportation and Infrastructure, Invasive Plant Program:

https://www2.gov.bc.ca/gov/content/transportation/transportation-environment/invasive-species-roadside

Adopt-A-Highway Program:

https://www2.gov.bc.ca/gov/content/transportation/transportation-environment/adopt-a-highway



Thank you to the BC Ministry of Environment, the BC Ministry of Transportation and Infrastructure (MoTI) and the ISCBC Weeds and Roads Advisory Committee for providing project funding, and to those who advised the development of these management recommendations.



Invasive yellow flag-iris (*Iris pseudacorus*) takes over ditches, irrigation canals, marshes, stream and lake shorelines, and shallow ponds. Dense stands exclude native wetland species, threatening plant and animal diversity.



Common burdock (*Arctium minus*) is found at low to mid elevations in grasslands and forests, along roadsides, ditches, stream banks, pastures, and disturbed habitats. Burrs become entangled in the fur of livestock, especially sheep. This damages the quality of wool and reduces its value. Large leaves harvested with forage crops can result in mouldy hay.

Regional Invasive Species Organizations:

https://bcinvasives.ca/about/partners/invasive-species-contacts-bc/

Field Guide to Noxious Weeds and Other Selected Invasive Plants of BC. Invasive Species Council of BC and BC Inter-Ministry Invasive Species Working Group: https://bcinvasives.ca/documents/Field_Guide_to_Noxious_Weeds_Final_WEB_09-25-2014.pdf

BC Ministry of Forests, Lands and Natural Resource Operations and Rural Development, Report-A-Weed website, Invasive Alien Plant Program (IAPP):

http://www.reportaweedbc.ca/

Additional Contact info