

INVASIVE ALIEN SPECIES

WHAT IS AN INVASIVE ALIEN SPECIES?

An **invasive alien species (IAS)** is a species that spreads easily and is found, invited or not, in a location outside its natural range. It can be an animal, a plant or even a micro-organism—a bacterium, virus or fungus, for example. Its presence can have negative impacts on the environment, society and the economy.

HOW HAVE IAS ARRIVED IN QUEBEC?

Several causes can lead to an IAS gaining a foothold but humans almost always play a role. Horticulture is the main route of arrival of plants and insects. For several years, many invasive alien species were imported for their appearance by nurseries and gardening centres. As not much was known about these species at the time, their invasive potential was not appreciated. Shipping, the live animal trade and travellers are other possible causes.

WHICH PLANT IAS ARE FOUND IN QUEBEC?

In our province, several plants spread invasively and affect native biodiversity. You may even have some in your yard without knowing it.



GIANT HOGWEED

Not only does its ability to spread rapidly make it a problem, giant hogweed is also dangerous for humans. The toxins present in its sap activate when exposed to sunlight and can cause skin damage similar to burns.

CHARACTERISTICS:

- Can grow up to 5 metres high;
- White flowers clustered in flat, parasol-shaped heads during the summer. The main cluster may have 50 to 150 rays;
- Ranging from 4 to 10 centimetres in diameter, the stem is hollow. Coarse white hairs and reddish spots are scattered over its surface;
- Is found mainly alongside rivers and around pits but also in some gardens.

Before touching a giant hogweed, be sure to put on personal protective equipment. Every inch of skin needs to be protected. Clothes that have come into contact with the plant should be washed separately.

Don't confuse it with cow parsnip!

Often mistaken for cow parsnip (a non-toxic native species), giant hogweed differs from that plant in several ways. The cow parsnip's stem and the underside of its leaves are covered with



PURPLE LOOSESTRIFE

Although its spread has slowed since the 1900s, purple loosestrife is found throughout North America, to such an extent that it would practically be impossible to eradicate.

CHARACTERISTICS:

- Reddish purple flowers arranged in stems at the end of stalks;
- Flowers from June to September;
- Can grow up to 1 metre high;
- Smooth-edged verticillate leaves;
- Found mainly in wetlands but also in shallow waterways, irrigation canals and pits and on lake shores.

While purple loosestrife is beautiful to look at, you should resist the temptation to plant it in your garden because once in, it is very hard to remove. A single plant can produce 2.7 million seeds in a season!

soft white hairs that give it a downy appearance. In addition, its main flower cluster has many fewer rays, only 15 or 20. Cow parsnip is also shorter, never growing taller than 3 metres.



JAPANESE KNOTWEED

The Japanese knotweed is a very resistant plant that is hard to eradicate, which is why it is called one of the planet's 100 worst invasive species by the International Union for Conservation of Nature (IUCN).

CHARACTERISTICS:

- Numerous white flowers appear in late summer;
- Can grow as high as 2 to 3 metres;
- Stem resembles bamboo and is 1 or 2 centimetres in diameter;
- Is usually found in urban settings, alongside roads and waterways, in stressed environments and wetlands.

The roots of Japanese knotweed can spread up to 7 metres across and 2 metres deep. New plants can sprout from even tiny pieces of stem or root, making it extremely difficult to eradicate. Besides having no natural enemies, its roots produce toxins that prevent other plant species from growing nearby.



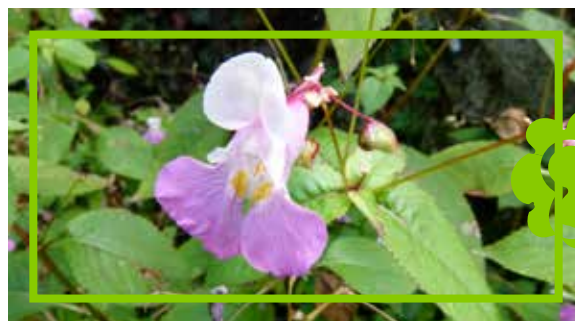
WILD PARSNIP

Like the giant hogweed, wild parsnip is an invasive alien plant whose sap can cause bodily harm. If the sap comes into contact with skin and is exposed to sunlight, rashes and even second-degree burns can result.

CHARACTERISTICS:

- 0.5 to 1.5 metres;
- Smooth, lightly hairy, lime green stem 2.5 inches in width;
- The yellow flowers are arranged in parasol-shaped clusters at stem ends;
- In late summer, the brown seeds change the flowers' appearance;
- Located alongside roads and bike paths but also in fallow fields, open meadows and pastures.

Wild parsnip is particularly common in southern Quebec.



ALDER BUCKTHORN

Voluntarily introduced as an ornamental plant in the late 1800s, the alder buckthorn is now a threat to Quebec's biodiversity. The regeneration of some wooded areas in southern Quebec may be adversely affected by this shrub. The small black fruit produced on the female plants help it spread quickly and extremely aggressively. Some birds eat the fruit and disperse the seeds in their droppings, which gives the seeds a germination rate estimated at 90%.

CHARACTERISTICS:

- Can grow nearly 8 metres tall;
- Very shiny leaves with parallel veins;
- Adapted to several types of soil, meaning it can be found in many locations, from deciduous forest and coniferous forests to urban gardens and even peat bogs.



COMMON WATER REED

The common water reed, also known as ditch reed, has spread across Quebec. Its ability to withstand a wide range of temperatures and water conditions make it very resistant.

CHARACTERISTICS:

- Grows up to 4 metres high;
- Very strong, beige, dull, rough stem;
- Long, flat leaves with rough, sharp edges
- Purple inflorescence turning to dark brown or red;
- Found mainly in wetlands.

It is one of the most difficult species to control, mainly due the speed at which it spreads. Its arrival is responsible for the sharp drop in the cattail population, by the way.

HIMALAYAN BALSAM

Not yet widely spread in Quebec, the Himalayan balsam, also known as policeman's helmet, has the potential to become so. It reproduces quickly, grows fast, has an effective seed-dispersal system and adapts readily to various types of soil and strong sunlight.

CHARACTERISTICS:

- Fleshy, red-veined green leaves;
- Waxy, reddish stem;
- Usually 1 to 2 metres in height but can grow up to 5 metres tall;
- Flowers in clusters in the summer;
- Pink, white, red or purple hood-shaped flowers.