

Invasive Species

Is it a *native*, *exotic*, or *invasive* species?

Native = indigenous. These are species that are found in their historical range due to only natural processes (i.e. present without human intervention). Every species has a native area. However, outside this range the same species may be considered *non-native*. For example *Acer asaccharum*, better known as Sugar Maples, are native to North America because they have been found here without human intervention.

Exotic = alien = non-indigenous = non-native = introduced. These are species that are found outside their native range, brought there deliberately or accidentally. For example *Acer platanoides*, or Norway Maple, is a European species of maple that was purposely introduced to North America for its high tolerance of poor quality soils and urban pollution that Sugar Maples cannot tolerate.

Invasive = nuisance. These are those *exotic* species that threaten or have a negative effect on the existence, abundance, or diversity of native species or environments. These species spread widely across an area and can quickly outcompete native species and alter native environments. For example, in southern Ontario Norway Maple is considered an invasive species since it is both *exotic* and outcompetes native maples leading to negative consequences for ecosystems.

Therefore, not all *exotic* species are *invasive*. Some exotic species may have a positive impact on an environment. For example even though *Aesculus hippocastanum* also called Horsechestnut originated in South East Europe, it is not considered *invasive* because it can co-exist peacefully with native species.

Invasive species are **particularly troublesome in riparian areas** due to frequent habitat destruction and how rivers are effective corridors for species dispersal. Replacing *invasive* species with native vegetation will slow the flow of water allowing for increased infiltration and less erosion, stabilize riverbanks, provide fish and wildlife habitat, and reduce water temperatures thus improving the overall health of the ecosystem.

References:

1. Ontario's Invasive Species Awareness Program. (n.d.a.). *Invaders: Terrestrial invasive plants*. Retrieved 2014 from Ontario's Invasive Species Awareness Program: <http://www.invadingspecies.com/invaders/plants-terrestrial/>

Invasive Species

Dog-strangling Vine (*Cynanchum rossicum* & *C. nigrum*) – High priority

Native to: Eurasia

Introduced by: Dog-strangling vine became popular in the mid-1800s for use in gardens.

Range: It prefers sunny, open areas, but can easily invade disturbed sites such as riverbanks, fence lines, and roadsides. It has become common in Ontario, southern Quebec, and into the United States.

Impacts: This aggressive grower climbs its way up trees or other plant life to form dense patches that choke or strangle nearby vegetation, outcompetes native species, and prevents forest regeneration. It also produces a larger number of seeds that are very easily carried by the wind. Since parts of the dog-strangling vine are toxic to some wildlife, this increases grazing pressure on other forms of vegetation. Monarch butterflies, a species at risk in Ontario, also lay their eggs on the vine however they cannot survive.

Identification: Dog-strangling vine can be easily identified by its bean-shaped seedpods that release feathery white seeds during the late summer. It can grow 1 – 2 metres tall, wrapping around nearby plants or structures. Its leaves are oval, often on opposite sides of the vine with pink to dark purple star-like flowers.

Removal process: The key is early detection, as only a few plants can overtake a field very quickly. Dog-strangling vine can be difficult to destroy therefore it is critical to remove the entire plant with the whole root system, since any roots left behind can spark a re-sprouting, and being careful not to further distribute any seeds. Once removed, place in the garbage bags provided.



References:

1. Ontario's Invasive Species Awareness Program. (n.d.c.). *Terrestrial invasive plants: Dog-strangling vine*. Retrieved 2014 from Ontario's Invasive Species Awareness Program: <http://www.invadingspecies.com/invaders/plants-terrestrial/dog-strangling-vine>