



## Exotic Plant Invaders



A field overtaken by reed canary grass, WI DNR

Did you know Voyageurs National Park has been invaded by exotic plants? The park is home to a diverse group of plants but not all are found here naturally. Some plants were brought to this area from another part of the world and are quickly becoming established in the park. Many exotics can cause problems to the park's native plants and animals and must be removed to protect the natural landscape.

Many visitors come to Voyageurs to experience the diverse natural ecosystem. As more exotic plant species move into the area, they compete with native plants for sunlight, water, soil, and space – everything needed to survive. This competition can limit the diversity of native flora in the park.

Native plants are not the only living things affected by exotic invaders. Wildlife rely on native plants for food and shelter and may not adapt to feeding on exotic plants. This could force wildlife to leave the area in search of a better home, reducing a visitor's chance of spotting wildlife in the park.



# Why are some exotic species considered invasive?

Not all exotic species are harmful to the park's natural landscape. However, exotics can be difficult to control if they become *invasive* (plants that spread quickly through an area and take over the native species). Exotics successfully invade new places...

- If they lack natural predators
- If they produce a large number of seeds each year
- If they disperse seeds well
- If they produce toxins, spines, or prickles

The exotic plants of major concern within Voyageurs National Park are:

## Wild Parsnip

(*Pastinaca sativa*)

A tall (six inches to four feet) perennial herbaceous plant. It spends the first year as a small rosette (six inches tall) and can grow up to four feet in its flowering stage. Wild parsnip has broad, flat-topped yellow flowers which bloom throughout the summer months.



Top: flowers, Christopher Noll  
Bottom: leaves, Gary Fewless

### How did it get here?

This plant is native to Europe and Asia. Because the roots are edible, it was brought to the United States and planted as a food source. Wild parsnip escaped farm fields and is now a widespread exotic plant across the United States.

### Harmful to humans

This plant, when cut or disturbed, produces a toxic juice. If the juice contacts the skin and reacts with sunlight, it can cause severe rashes and burns. This condition is known as phytophotodermatitis (phy-to-pho-to-der-ma-ti-tis).

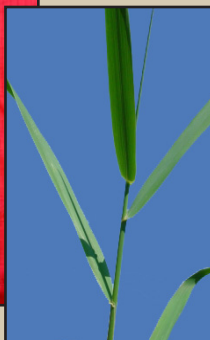
# Reed Canary Grass

(*Phalaris arundinacea*)

A tall (up to six feet), cool season grass. It has wide leaves (up to one-third of an inch) which can grow to ten inches long. Flowers are greenish purple and bloom in spring through early summer. Seed heads are light brown and mature in July.



Mature seed head,  
Tom Heutte



Leaves and stem,  
Richard Old



Flowers,  
Gary Fewless

## How did it get here?

This plant has a similar species native to North America. However, it has been crossed with a European strain to create a highly invasive plant. This “hybrid” has been planted as “marsh hay” in wet areas to provide food for livestock. Because of its invasive nature, reed canary grass is often planted along roadsides and at construction sites to prevent erosion. This plant’s aggressiveness and early growing season allows it to outcompete native grasses.

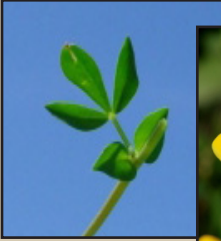


A field of reed canary grass near the Rainy Lake Visitor Center was restored to native plants with the help of park staff and volunteers.

# Birdsfoot Trefoil

(*Lotus corniculatus*)

A low-lying perennial herbaceous plant. Individual plants spread horizontally, forming large, dense mats across the ground. Yellow flowers form in groups of 3 to 12 and bloom continuously through most of the summer. Mature seed pods



are one-inch long; clusters of pods together remind people of a “bird’s foot”.



Photos clockwise from top left: Birdsfoot trefoil leaf, Richard Old; yellow flowers in full bloom, David Cappaert; mature seed pods which resembles a bird’s foot, Richard Old

## How did it get here?

This plant is native to Eurasia and North Africa and was introduced to the United States for its main benefit - an excellent forage for cattle because it produces acres of dense, edible vegetation.

In the past, park staff used this plant for erosion prevention along roadsides and at construction sites. Because of its ability to spread quickly, birdsfoot trefoil is being treated with herbicide and replaced by native plants.



Birdsfoot trefoil grows in thick mats producing a dense ground cover, Katy Chayka

# Canada Thistle

(*Cirsium arvense*)

A tall (two to four feet) perennial herbaceous plant. Leaves are large with sharp, spiny edges. Flowers are bright or deep purple, have bristly clusters, and bloom continuously throughout the summer. Mature flower heads produce thousands of small, feathery seeds and are easily dispersed by wind. Plants tend to grow in dense clumps.



Top: flower heads, Paul Drobot  
Bottom: rosette of leaves,  
Christopher Noll

# Bull Thistle

(*Cirsium vulgare*)

A tall (three to six feet) biennial herbaceous plant. Large, alternate leaves have sharp spines at the tip. The tall, thick stems are also sharp and covered in prickles. Round, robust flower heads are pinkish purple and bloom mid to late summer. Mature seed heads produce thousands of small, feathery



Bull thistle

seeds which are easily dispersed by wind and wildlife. Bull thistle grows as a solitary plant.



Bull thistle flower,  
Loke T. Kok

## How did it get here?

Both species of thistle are native to Eurasia. In the 1800s they were introduced in the United States colonial areas, most likely by accident, in a seed or crop mixture. These plants easily establish themselves in disturbed areas with exposed soil: old building sites, gravel pits, roadsides, and beaver ponds.

# What is Voyageurs National Park doing to prevent the spread of exotic plants?

Visitors may witness park staff conducting one of these removal methods depending on the type of plant:

- **Mechanical:** mowing, cutting, or using any type of equipment to remove a plant from an area.
- **Chemical:** applying herbicide to kill a certain plant and prevent it from flowering and producing more seeds.
- **Biological:** using insects or other living things to feed on exotic plants.

## How you can help

- Become familiar with exotic plants and inform a park naturalist if you find exotics growing in the park.
- Use a boot brush station to clean off seeds from your shoes and clothing before and after a hike. This prevents exotic plants from spreading to new areas.
- Only hike, drive, or camp in permitted areas to prevent spreading exotic plants from place to place.



Boot brush stations are located throughout the park.

We appreciate your help in preventing the spread of exotic plants. Together we can keep the park natural and beautiful.

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