

# Dig Deeper

# INVASIVE PLANTS



## How do invasive plants affect our urban forest?

Invasive plants come from another part of the world and can have serious negative impacts on their new environment. They may seem like good choices for gardens because they often grow quickly and can look beautiful but if not properly managed, can do more harm than good.

Which invasive plants are growing in your local park?

### Guiding Questions

- + How are invasive plants harmful to our ecosystems?
- + Why are invasive plants so successful?
- + What are some unique ways that invasive plants spread or reproduce?
- + Are there invasive plants in your backyard or schoolyard? Which ones?
- + Are all introduced species invasive?
- + What are the most common invasive plants in Surrey?
- + How do invasive plants end up in parks?
- + How are invasive plants changing parks?
- + How might invasive plants impact erosion or flooding processes?
- + How can we prevent them from spreading?
- + How are different invasive plants removed?
- + What tools/machines can be used to safely remove invasive plants? (Hint: they will be different for different species.)

# Background

We describe plants as being either native or introduced. Introduced species can also be invasive. Invasive plants grow aggressively and can have serious environmental impacts for urban forests.

- They can easily spread through seed dispersal, illegal dumping of yard waste, and ornamental gardening.
- They contribute to a loss of biodiversity by shading out other plants, competing for water and nutrients, weakening trees, and increasing soil erosion and flooding. With no natural controls, they often grow unchecked.

Many invasive plants have unique adaptations to survive and thrive in their new environment; some grow faster with disturbance, produce photo-toxic chemicals harmful to humans, re-establish easily, and/or have explosive seed dispersal.

Invasive plants also have economic and social impacts. Restoring affected parks is costly for the City of Surrey and can take many years. They also affect the beauty of our forests as they decrease the variety of plants and animals, often creating a monoculture.

**native species** – a species that naturally lives and thrives in a particular ecosystem

**introduced species** – a species that is not native to the place or area, and instead has been accidentally or deliberately transported to the new location by human activity

**invasive species** – an introduced species that causes ecological, economic or social harm in its new environment

## Additional Resources

Invasive Species Council of BC [bcinvasives.ca](http://bcinvasives.ca)

Invasive Species Council of Metro Vancouver [iscmv.ca](http://iscmv.ca)

# Curricular Connections

## Content for students to explore:

**Grade 1:** features of living things in the local environment, names of local plants and animals

**Grade 3:** local biodiversity

**Grade 4:** sensing and responding (plants), biomes

**Grade 5:** machines and tools

**Grade 6:** urbanization

**Grade 7:** organisms and evolution, survival needs, natural selection

**Secondary:** mechanisms for biodiversity, ecosystems, stewardship, restoration, volunteering

## Curricular competencies for students to develop:

- Experience and interpret the local environment
- Identify questions to answer or problems to solve through scientific inquiry
- Identify some of the social, ethical, and environmental implications
- Generate and introduce new or refined ideas when problem solving
- Communicate ideas, explanations, and processes in a variety of ways
- Social responsibility to the environment



**Surrey Parks works together with the community to celebrate nature and protect the environment.**

Visit us online to plan your park visits, connect with nearby nature and help your students become stewards of our urban forest.