Managing Invasive Species
GRADE 12

LESSON DESCRIPTION
Invasive species can reduce biodiversity or ecosystem function by crowding out native species. Riparian ecosystems (shorelines, riverbanks) are particularly at risk as many invasive plants, such as purple loosestrife, have very shallow root systems which increase erosion. This activity provides resources for learning about the issue of invasives in Manitoba and includes a way to practice outdoor field monitoring techniques.

LESSON
Get your students thinking like field ecologists by practicing counting density and frequency of plant species within quadrats.

If a lawn is not available, this website provides an online assignment for measuring abundance through random sampling.

• Students will go outside and use a hula hoop or circle of rope as a plot and count both density (how many per plot), and estimate percent cover (how much of the plot is covered by that species) in their backyard. Have them repeat for 10 quadrats and take an average of these to create graphs of species frequency on the lawn. Identify any invasive species in your backyard samples.

• Learn more about the invasive species visiting the Invasive Species Council of Manitoba. Under “Terrestrial Species,” some of the more common Winnipeg invasive plants include Creeping Bellflower and Dame’s Rocket.

• Nature Conservancy of Canada’s Invasive Species resource.

• Using the resources available, have students create a “Not Wanted” advertisement in the style of the Wild West, about a Manitoba invasive species that was discovered in their backyard or another of choice. They should include the name of the species, a photograph, where it originated, where it is now found, how it spreads, how it is impacting the ecosystem, and recommendations for removal.

SUGGESTED CURRICULUM LINKS
Conservation of Biodiversity - B12-5-03, B12-5-04

OTHER RESOURCES
FortWhyte Plant and Tree ID Sheet