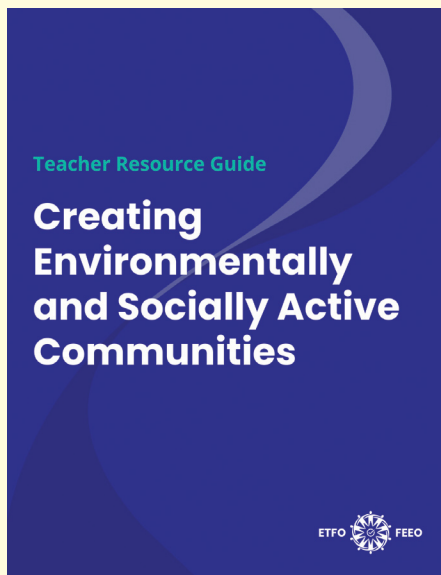


# GRADE 6: THE BIG PULL

## INVASIVE SPECIES REMOVAL

BY SARAH LOWES



*Climate change is a consequence of a colonial and capitalist system which has exploited people and the environment. The two struggles are inseparable. Many in the Global North may not be fully internalizing the impacts of the climate breakdown in this moment, however droughts, desertification and food insecurity as a result of climate change are happening now and disproportionately so to Black, Indigenous and people of colour. This resource invites students and educators to explore climate justice in intersectional ways. See the full resource at [etfo.ca](http://etfo.ca).*

### BIG IDEA

- Each species, no matter how small, has an important role to play in biodiversity.
- Diversity is strength, greater species diversity ensures greater stability and sustainability for all life forms.
- Humans can impact the environment in negative and positive ways.

### FUNDAMENTAL CONCEPTS

- Biodiversity, activism, interrelationships, community.

### CURRICULUM EXPECTATIONS

#### Exploring and Understanding Concepts

- Demonstrate an understanding of biodiversity, its contributions to the stability of natural systems, and its benefits to humans.

### OVERVIEW

Removing invasive species allows children to connect with nature and take action on climate change. As awareness grows in your community, children naturally become enthusiastic stewards, educators and activists learning how to use their voice, lead and connect with the community. Watch how Pilgrim Wood's event went here and join in every May 22nd, International Day of Biodiversity.

### BACKGROUND INFORMATION

(adult learning, references, data, etc.)

- Connect with the caretakers of the green space (e.g., city's environment branch, region's green organization may offer information) before removal.

- Depending on area size, you may need to connect with the city regarding extra garbage removal.
- Best time of year to identify garlic mustard is in spring.
- Garlic mustard is an invasive herb native to Europe.
- Brought to North America in the early 1800s for use as an edible herb (negative human impact).
- Each plant produces an average of 600 seeds, which are easily spread by people and animals.
- Seeds can remain in the soil for up to 30 years and still be able to sprout. Compost does not get hot enough to kill seeds and plants and they must be thrown out.
- You must remove the whole tap root to destroy the plant, otherwise it will regrow.

### MATERIALS

- Garbage bags

### ESSENTIAL GUIDING QUESTIONS

- What do you know about your local green spaces?



## CURRICULUM

### LESSON PLAN FRAMEWORK

#### Connect

- Connect with students and their interests and experiences
- Connect students with each other
- Connect students with community (experts, resources)

#### Steps:

1. **Community circle:** What is our relationship with the land? How does each of us use the land?
2. **Land acknowledgment:** What is the history of the land? Who are the original stewards of the land? What treaty and how did it change how the land was cared for?
3. **Current caretakers:** Identify a green space to learn more about, ideally one with garlic mustard, though you could examine other invasive species. Who currently takes care of this land? How can you involve them to form a partnership? What can they teach us about the space?
4. **Connect with the principal:** Get your principal on board with a Big Pull event. Start small with a group of classes and parents or go big and get high school volunteers and community involvement.

#### Explore and Empower

- Explore a variety of resources available to you.
- Empower students to make meaning of the big idea.
- Waken enthusiasm.

#### Steps:

1. **Explore, learn, notice and document the green space:** Create teams to explore different things (e.g., trees, plants, flowers, insects, animals). Which flora species are rare and will need extra precautions when navigating the space (e.g., trilliums)? Which species are in abundance (e.g., garlic mustard)? Use sketchbooks, cameras, magnifying glasses, trowels, etc.
2. **Web of life interrelationships:** Build a web of life with yarn and run through simulations as instructed (e.g., what would happen if all the producers died because of competition of garlic mustard?).



3. **How can we help?** Brainstorm what we can do to advocate for people impacted. \*Remember to honour the community voices you've learned about throughout actions. Ensure awareness of invasive species and removal of invasive species makes the brainstorm list if not mentioned.

#### Act and Advocate

- Create experiences in which students have engagement and agency.
- Take action in your local community.

#### Steps:

1. **Students build awareness campaigns in teams:** Different teams can have different focuses (e.g., poster design for school, newsletter/email for parents, slideshow for other classes, removal tutorials, community outreach to other schools or community members, etc.).
2. **The Big Pull:** Target the International Day of Biodiversity (May 22) for your event.
3. **Safety:** Recruit parents, teachers and community members and have them wear supervision vests to be visible.

Participants may need permission forms. Educate about ticks and do a tick check in buddies afterwards.

#### Reflect and Share

- Reflect on the big idea.
- Reflect on learning that has occurred.
- Share learning with others.

#### Steps:

1. **Community circle:** Why is biodiversity important? What do we know now about our local environment? How can humans impact the environment? How does it feel to help? How does it feel to see others helping?
2. **Share your results:** How many garbage bags did you remove? How much did they weigh? Make announcements and send newsletters to let everyone know about your success!

