

Assessing Schoolyard Biodiversity in Peterborough

Background:

Peterborough's elementary and intermediate schools would benefit from an increase in environmental education. Schoolyard greening increases biodiversity in schools, positively impacting on the environment and children's development. The creation of a framework to encourage nature-based education aligns with the aims of the Ontario Curriculum to improve environmental education across all subjects.

Purpose:

The purpose of the study is to create a framework to measure and encourage biodiversity in schoolyards. A successful framework will:

- ✓ Assess and increase biodiversity in schoolyards
- ✓ Maintain biodiversity and link it with the school curriculum
- ✓ Promote environmental stewardship in younger audiences
- ✓ Be adapted across other schools

Methods:



➤ Field visits to observe schoolyard biodiversity

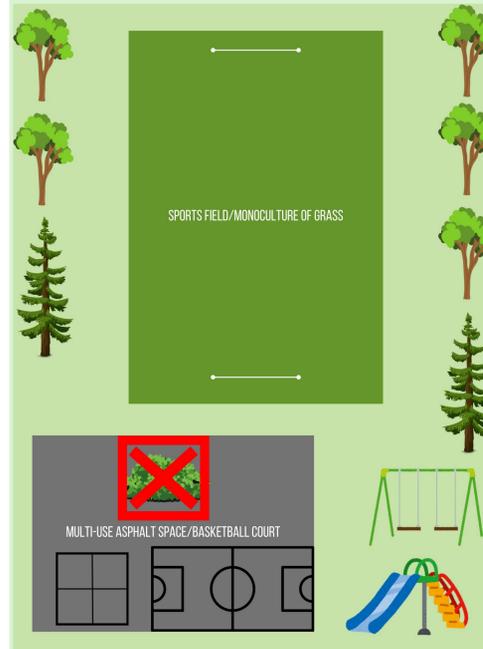


➤ Research ways to improve biodiversity and environmental education



➤ Introduce the framework to schools

Findings:



Visits to local schoolyards saw:

- Overall limited biodiversity
- Trees primarily around the outer boundaries
- Mostly asphalt grounds
- Large, open lawn fields

Literature relating to schoolyard biodiversity state that greenspaces improved student's relationship to the environment and created necessary connections since access to the environment can be limited for some students.

- Increasing biodiversity in schools allows equal opportunities for nature-based learning while improving local ecosystems.

School type	Estimate % Cover of Vegetation
Elementary #1	< 5%
Elementary #2	~ 5%
Intermediate #3	~5%

Recommendations:

Implementing a framework educators can use can help spark curiosity in the classroom while improving schoolyards with more greenspace. Suggestions include:

- Creating a science unit solely based on local biodiversity that
 - Educates on importance and threats to biodiversity and the local ecosystem.
 - Incorporates traditional ecological knowledge based on the Anishinaabeg people (e.g. planting native White Sage).
 - Includes experiential learning like planting Peterborough native plants such as Bunchberry, or trees like Sugar Maple.
- Ensuring the prevention of invasive species such as the emerald ash borer, which is aggressive in Peterborough, through clubs and committees.

Scan me!

View photographs of the field observations, as well as brief descriptions associated with each schoolyard:



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