Rooted in Resilience

Presqu'ile's Nursery & Tree Planting Program

Preserving our canopy, one seed at a time

Teacher's Guide

Resources

1. Google Drive with all files
2. Tree Nursery Video (YouTube)
3. Discussion Prompts
4. OSSLT Style Reading Passage and Literacy Questions Gr 6 to 10
5. Content and Media Literacy Questions for Grade 7 Science - with answer key
6. Content Questions for Grade 9 Science (1 page) - with answer key
7. Detailed Chapter Content and Literacy Questions for Grade 9 Science - with answer key
8. Content Questions for Grade 12 Biology - with answer key
9. Kahoot!
10. Quiz (Google Forms)
11. Video Transcript

Learning Goals

By the end of this video study, students will be able to:

- Explain how human activities and natural factors influence ecosystem sustainability.
- Describe interactions between species and how changes in population affect ecological balance.
- Analyze real-world conservation strategies used to restore biodiversity.
- Evaluate the role of climate change and invasive species in altering ecosystems.
- Propose actions individuals and communities can take to support healthy ecosystems.

Curriculum Connections

Cross-Curricular Connections (Grades 6–12)

Language

- Reading informational texts
- Media literacy (interpreting video purpose, audience, message)
- Writing persuasive or informational pieces on conservation

GRADE 6
Science — Biodiversity

- B2.1, B2.2: Identify threats to biodiversity (e.g., invasive species, habitat loss).
- B2.4: Explain how human activities (like nurseries) can help or harm ecosystems.
- B2.5: Describe ways to protect biodiversity.

Language

- Reading & Media Literacy: Interpreting informational videos, identifying purpose, extracting key ideas.
- Writing: Summaries, opinion paragraphs on stewardship.

GRADE 7
Science — Interactions in the Environment

- B1.1: Assess impacts of human activities on ecosystems.
- B2.2: Explain ecological relationships (predator–prey, parasite–host).
- B2.5: Describe factors affecting population growth (carrying capacity, limiting factors).
- B2.6: Explain natural and human-made changes in ecosystems.

Geography — Physical Patterns

- A1.2: Human responses to environmental challenges.
- A2.2: Natural processes shaping ecosystems.

GRADE 8
Geography — Global Settlement & Sustainability

- A3.4: Human activities affecting the environment.
- B3.3: Sustainable resource management.

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GRADE 9

Science (SNC1W) — Biology: Sustainable Ecosystems

- B1.1: Evaluate human interventions in ecosystems.
- B2.2: Explain biodiversity and its importance.
- B2.5: Describe impacts of invasive species.
- B2.6: Assess climate change effects on ecosystems.

Geography (CGC1W) — Exploring Canadian Geography

- B2.4 analyze environmental, economic, social, and/or political consequences for Canada of changes in some of the Earth's physical processes, including the impact of climate change, and assess local and regional mitigation and adaptation strategies

GRADE 10

Science (SNC2D/2P) — Climate Change & Sustainability

- D1.2: Analyze human actions that reduce climate impacts.
- D2.4: Explain how climate affects species distribution.

Civics (CHV2O)

- Civic responsibility: Stewardship, community involvement, environmental action.

GRADE 11

Biology (SBI3U/3C) — Diversity of Living Things / Ecology

- B1.2: Human impacts on biodiversity.
- B2.3: Classification and adaptation of species.
- D2.1: Population dynamics, carrying capacity, limiting factors.
- D2.4: Ecological restoration strategies.

Environmental Science (SVN3M/3E)

- Human impacts on ecosystems
- Sustainable forestry practices
- Invasive species management

GRADE 12

Biology (SBI4U) — Population Dynamics & Evolution

- D2.1: Factors affecting population growth.
- D3.3: Natural selection (e.g., viable acorns vs. weevil-damaged ones).
- D3.4: Genetic variation and adaptation.

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Environmental Science (SVN3M/3E & SVN4M)

- Ecosystem restoration
- Conservation biology
- Long-term monitoring and data collection
- Human stewardship and sustainability

Geography (CGW4U / CGR4M) — Environment & Resource Management

- Sustainable land use
- Forest management strategies
- Climate resilience planning

