

Subject:

Residential schools, Truth and Reconciliation, Canadian history, nature, environment

Time:

60 minutes

Grades:

7-12

What to know before getting started:

In 2015, the Truth and Reconciliation Commission released a report with 94 Calls to Action in an effort to assist with healing across Canada in remembrance of the more than 150,000 First Nations, Métis and Inuit children that were placed in federallysponsored residential schools. The National Healing Forest initiative represents one of those calls to action, bringing attention to the legacy of residential schools in Canada and acknowledging victims of residential schools, as well as survivors and their families. Additional goals of the National Healing Forest initiative include building a sense of community, connecting people to nature, sharing the healing power of natural spaces, and increasing the abundance of native plant species throughout Canada. Use this activity to learn more about the National Healing Forest and the healing power of natural spaces.

Activity time!

In 2015, Patricia Stirbys and Peter Croal went on a healing walk in Ottawa, Ont., around the time of the release of the Truth and Reconciliation report. It was at this time that they imagined the idea of working together to develop the concept of a forested healing space. Connecting to nature is important for our overall health and well being, and it reminds us of the importance of finding peace and calm in our lives. Stirbys and Croal realized that natural spaces have the power to help heal the emotional wounds caused by the legacy of residential schools in Canada. Canadian Geographic Education wants to help spread the word and encourage parents, students and teachers across Canada to create a green space to honour residential school survivors and their families and harness the restorative power of natural spaces.

What could a healing forest mean to you? We invite you to create and build on the ideas around the National Healing Forest to become involved in the reconciliation and healing journey. This could look like a green space inside or outside of your home where you learn to grow and care for plants, this could be a class/school-wide initiative where you build a designated Healing Forest area in your school yard, or this activity may inspire a community outreach program where a designated area within your city is used to create and learn. This style of project is a great opportunity to learn about the history or racialized groups in Canada, about local plants and native species, and about the connection between humans and the land.

Read this first...

As we encourage you to create a healing forest or a space with a similar function, we want to ensure that you have the right tools to assess the health of your forest. Forests are an integral part of ecosystems and we can often tell the health of an ecosystem by the state of its biodiversity (e.g., the number of different plants and animal species we can identify). A healthy forest has a wide variety of animals and a mix of different plant types, sizes and ages. These characteristics create forest layers that provide habitats for many species.

...then follow these instructions

With a teacher or guardian, visit a nearby forested area. Measure a sample plot with a 25-metre radius to identify different plant and tree species by considering leaves, bark, seed pods and flowers. Using the observation table below, record your data. Using a plant identification book or iNaturalist, attempt to identify the tree and plant species in your plot.

Count or estimate the number of each tree or plant species in the sample plot and record the number. You may want to use chalk or ribbons to identify trees or plants you have already counted.



Materials you will need:

- Paper
- Writing materials
- Tape measure
- Chalk
- Plant identification guide/access to the Internet and iNaturalist via a portable electronic device

PLANT AND TREE SPECIES DIVERSITY

	Name/description	Number of species in sample plot
Species 1		
Species 2		
Species 3		
Species 4		

To measure or estimate the diameter of all of the trees in the sample plot, use your tape measure to measure the width of the tree at about four feet off the ground.

SIZE DIVERSITY

Tree/plant size	Diameter	Number found in sample plot
Saplings	0-24 cm	
Small	25-37 cm	
Medium	38-49 cm	
Large	50-75 cm	
X-Large	>75 cm	



Now that we've identified some of the trees and plants we've observed in the forest, it's important to consider and analyze the different tree layers. Some trees create a canopy, blocking sunlight from penetrating to the forest floor. As a result, not all plants will survive as there is no direct sun exposure. Using the following table, identify the presence of different plant and tree species that fit the following descriptions:

FOREST LAYER DIVERSITY

Tree layer	Description	Present in sample plot (Yes/No)
Overstory	Trees whose canopies are fully exposed to the sun	
Understory	Trees growing in the shade of other trees	
Tall shrub	Shrubs (woody plants with many stems coming from the base) that are more than 2 metres in height	
Short shrub	Shrubs that are less than2 metres in height	
Forb	Non-woody plants, such as wild grasses, ferns and flowers	
Leaf litter	Dead/decaying leaves and other matter on the forest floor	



Follow the following point system to rate the diversity of the forest as either good, fair or poor.

TREE SPECIES DIVERSITY

3 or more tree species: 3 points

2 tree species: 2 points 1 tree species: 1 point

SIZE DIVERSITY

3 or more size classes present: 3 points

2 size classes present: 2 points 1 size class present: 1 point

FOREST LAYER DIVERSITY

5 or 6 layers present: 3 points 3 or 4 layers present: 2 points 1 or 2 layers present: 1 point

To find the overall forest diversity, add up the points for tree species diversity, size diversity and forest layer diversity; then divide the total by 3. Round to the nearest whole number.

OVERALL FOREST DIVERSITY:	
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Good: Avg points 3 Fair: Avg points 2 Poor: Avg point 1

Stop and think: What conclusions can you draw from this data? What can we do to improve the health and diversity of our forests? How do invasive species relate to the overall health and diversity of a forest? Were any of the plants you surveyed considered invasive species? How can the strength and diversity of a forest be like a metaphor for the strength and diversity of a community or a nation?

Share your learning adventure with us!

We want to see your amazing work and photos! Tag @CanGeoEdu on Facebook, Twitter or Instagram and use the hashtags #OnlineClassroom!

Other ways to complete this activity:

- Check out Riverside School in Nova Scotia as they are building a twokilometer interactive path in the school's backyard where students are encouraged to explore, play music and learn.
- The National Healing Forest can provide ideas, comments, and contacts for individuals and groups interested in creating their own healing forests. A logo and plaque that can be used are available via their website.