



A LESSON PLAN TOOL KIT

The on-site activities in this tool kit apply the curriculum to lessons that can be taught in the stunning environment of Bruce Peninsula National Park. You may want to use some or all of the lessons provided, depending on the needs of your class.

SITEDESCRIPTION

In the heart of a World Biosphere Reserve, the 'Bruce' is place of global significance. The park is inhabited by thousand year old cedar trees overhanging the crystal clear waters of Georgian Bay.

LOCATION

Located near the town of Tobermory, Ontario, accessible from the south along Highway 6, or seasonally from the north via the Owen Sound Transportation Company Ferry M.S. Chi-Cheemaun.

Parks Canada has many useful maps of the area to get you started, which you can find on the Bruce Peninsula National Park <u>website</u>.

CURRICULUM UNITS

Ontario: Grade 7 Geography

Strand A. Physical Patterns in a Changing World

Strand B. Natural Resources around the World: Use and Sustainability

ENHANCEYOUR EXPERIENCE

- Interested in a personal guide to lead you through the activities? What about a half day exploring our gallery and theatre indoors?
- Try something completely new and stay in our yurt overnight!
- Options available by reservation only. Additional fees apply.

For more information call: 519-596-2233 ext. 225

BEFORE YOU GO...

- Visit http://www.pc.gc.ca/eng/pn-np/ on/bruce/visit/visit2.aspx for hours of operation and cost for entry.
- Student rates available.
- Wear comfortable walking shoes.
- Be sure to bring enough pencils and print attachments for each student.

ACCESSIBILITY

Bruce Peninsula National Park offers several accessible features.

Please contact the visitor centre:

Telephone: **519-596-2233** Email: **educamp.bff@pc.gc.ca**

LEAGUES

Bonus! The Visitor
Centre will be open by appointment during the spring and fall for school groups. The centre boasts a theatre, a gallery and a viewing tower.

Summer temperatures can be cool – pack a light jacket even on hot days.

On-site guided activities at the Cyprus Lake area with Parks Canada staff are available from May 2nd to the Thanksgiving weekend.





ACTIVITY 1 IN-CLASS ACTIVITY

PREPARING YOUR STUDENTS FOR YOUR VISIT TO BRUCE PENINSULA NATIONAL PARK

Please note: Print the map titled Worksheet 1 for each student.

Arrange the students into groups of four to look at the map and address the following questions:

- **1.** What kinds of information can you get from observing this map? List as many things as you can.
- **2.** What does this map tell a visitor about the types of activities they might experience at the park?
- 3. What will you need to pack for your visit to the park?
- 4. Decide as a group where you would most like to go.
- **5.** What does this map tell us about the geography of the park?
- **6.** Think about the names of places or geographical features on the map. What do you notice? Why do you think these names were chosen?

ACCULARIES.

Parks Canada uses symbols to show visitors what is available, from washrooms to lookout towers.

The Cyprus Lake area is a small portion of Bruce Peninsula National Park, however, it is the most heavily visited. Check for up-to-date information on hours of operation and events.

Erosion caused by water over time has created natural phenomena, such as Overhanging Point





ACTIVITY 2 ON-SITE ACTIVITY

MAP THE TRAIL

Please note: Students will need the map outline of the park titled Worksheet 2. Use the map in Worksheet 1 to guide your class to the Activity 2 location.

Students will make a map of a section of the Bruce Trail using Worksheet 2 as they hike together. Use the following questions and landmarks as students complete their map:

QUESTIONS	LANDMARKS
1. On the visitor's guide, this trail is labeled 'Difficult'. Is there a way to show this on the map?	 Cobble Beach Forest
 When mapping, consider showing the following: Elevation Evidence of escarpment erosion (ex: caves) Notable changes of direction of path (ex: large bend, lookout point) Human way-finding (ex: trail map, rock cairns) 	3. Rock cairn on Cobble Beach This rock cairn is a good place to turn around. This is not a loop trail. Interested in going further? Walk ten minutes further to the top of the escarpment for an elevated view of the trail. Return the way you came.

TEAGUES

Horse Lake Trail is 1.2 km of easy forest terrain that meanders through cedar trees to the Georgian Bay coastline.

Hike approximately 20 minutes along the trail. Follow the landmarks to the rock cairn.

Parks Canada





ACTIVITY 3 ON-SITE ACTIVITY

HUMAN USE AND THE PARK AT INDIAN HEAD COVE AND OVERHANGING POINT

Please note: Students will need the attached chart titled Worksheet 3 and a pencil. Use the map in Worksheet 1 to guide your class to the trail between Indian Head Cove and Overhanging Point titled Activity 3.

Walk and stop at both Indian Head Cove and Overhanging Point. While there, ask the students to record evidence of the multiple uses of the park, with a primary focus on the impact of human use.

For example: The students should notice trails, benches and washrooms as evidence of high or low human impact.

- 1. What did you notice about Indian Head Cove and Overhanging Point? How were they different?
- 2. Overhanging Point receives very few visitors while Indian Head Cove receives many. What evidence can you see of how the park manages these areas?
- **3.** What evidence shows that other living creatures are present in the park besides humans?

EXAMPLE:

INTERRELATIONSHIPS IN GEOGRAPHY OBSERVATION CHART

WHAT I SAW	WHAT IT REVEALS	HUMAN IMPACT (LOW TO HIGH)
Benches along trail	People are encouraged to use the trail and rest along the way if they want	High

Indian Head Cove is a popular spot for 1000s of visitors on summer weekends.

The park manages the human use of this site by directing visitors to other areas on the peninsula when the parking lot fills up.





ACTIVITY 4 ON-SITE ACTIVITY

MIND MAP OF LAND USE AND RESOURCES

Please note: The students will need a pencil and the attachment titled Worksheet 4. Use the map in Worksheet 1 to guide your class to this activity located on the map. This map will be used for the in class Activity 6.

Have the students engage in "geographic thinking" and fill in the mind map by considering the park in the following ways:

- Environmentally
- Historically
- Economically
- Geographically (comment on landforms, erosion, etc.)

Each aspect should have two examples drawn from the visit to the park.

Students will use the mind map in Worksheet 4 to record their observations in terms of land use and natural resources in the area. Using the four themes and the image in the centre of the mind map, students can note observations, ideas and the changes that have occurred.

ACTIVITY 5 IN-CLASS ACTIVITY

THE "GEOGRAPHIC PERSPECTIVE" PROBLEM SOLVING: BRUCE PENINSULA NATIONAL PARK

Students will use the elements of "geographic thinking". Use the following questions as part of a class discussion or as individual questions for students to provide written answers.

Another possibility is to have students discuss in groups of two, then snowball to four, eight and finally, discuss as a whole class.

- 1. If the park were to set up an educational panel to promote conservation to visitors to the park, where would be the best place to put it, in your opinion?
- **2.** How would you describe the interrelationships that currently exist between the natural environment in Bruce Peninsula National Park and the public who use it?

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Environmentally: Trails keep visitors from going through the forest, minimal infrastructure

Historically: Wood extraction; horse drawn sleigh as mode of transportation (no roads). Large timbers were once present (removed in logging era).

Economically: Mainly used for tourism area, park offers employment opportunities.

Geographically: Located in the Niagara Escarpment, on a peninsula, surrounded by fresh water.

A few facts for students to consider when writing the panel: over 250 000 visitors to Bruce Peninsula National Park a year, 86% of visitors coming from Ontario.





ACTIVITY 6 IN-CLASS ACTIVITY: REFLECTION

Please note: Students will need the maps they created from on-site Activity 4.

Students can annotate their map (Worksheet 4) to explain details from their on-site observations. Each feature they include on the map should be annotated to include what the feature's connection is to the park. For example, is it a natural feature or a human feature?

WRITING ACTIVITY

A personal reflection: Did your view of the importance of having national parks change? How has your view of sustainability changed? Consider why parks like this are important to maintain (e.g. stewardship).

EXTENDED RESEARCH

Use your map to create a welcome panel or webpage for the park's website.

Think about your visit and what you saw to create a panel or webpage for the park's website.

Students can use geographical and historical anecdotes or images. Ask them to consider what they would have liked to have known in preparation for their visit.

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Parks Canada Mandate:
On behalf of the people
of Canada, we protect
and present nationally
significant examples of
Canada's natural and cultural
heritage, and foster public
understanding, appreciation
and enjoyment in ways that
ensure the ecological and
commemorative integrity of
these places for present and
future generations.

See what other experiences
The Bruce Peninsula National
Park has to offer.





WOCKSHEET I

ACTIVITY 2: MAP THE TRAIL

- 1) From the Head of Trails parking lot, take Horse Lake Trail to the water. Start the exercise at the end of the trail when it intersects with Bruce Trail (Bruce Trail is marked with white markers).
- 2) Interested in going further?
 A five minute climb further along the trail will take you to a lookout bluff with a great view.
 NOTE: An adult is required to ensure students do not approach the edge of the cliff in this area.
- **3)** Find a spot around the rock cairn for students to reflect on the trail topography and begin sketching their map.
- 4) Return the way you came.

ACTIVITY 3: HUMAN USE AT THE PARK AT INDIAN HEAD COVE AND OVERHANGING POINT

- 1) Hike the Georgian Bay Trail beginning at the Head of Trails parking lot to the shoreline at Indian Head Cove where it intersects with the Bruce Trail.
- **2)** To reach Overhanging Point, walk 25 minutes past Boulder Beach and continue upwards along the Bruce Trail. Watch for the "Overhanging Point" sign.
- **3)** You are now on the roof of the overhang. Keep walking and be careful not to approach the cliff edge. Go past the hole on the left of the trail.
- **4)** For access under the overhang, there is a small side trail to the right two minutes past the hole. There are two overhangs side by side to walk under and where students should complete activity 3.
- **5)** You can head back to the parking lot using Marr Lake Trail in a loop this is the quickest way back.

ACTIVITY 4: MIND MAP LAND-USE AND RESOURCES

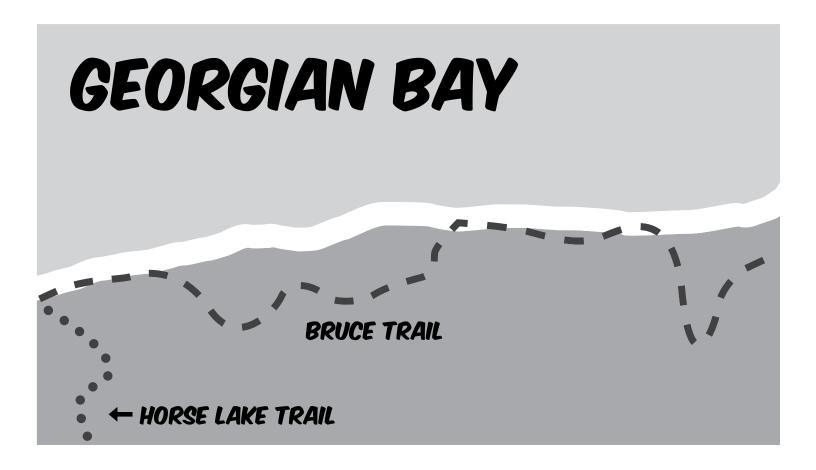
- **1)** From the Head of Trails parking lot, walk to the Horse Lake viewing platform.
- **2)** Sit at the viewing platform overlooking Horse Lake to complete the mind map.
- **3)** Return the way you came.







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INTERRELATIONSHIPS CHART

INTERRELATIONSHIPS IN GEOGRAPHY OBSERVATION CHART

WHAT I SAW	WHAT IT REVEALS	HUMAN IMPACT (LOW TO HIGH)





WORKSTEET & MIND MAP

ENVIRONMENT

HISTORY

ECONOMY

Intensive logging between 1870 and 1910 cleared most trees from the upper Bruce Peninsula. So much forest was cut that massive areas of land were left virtually barren. Lumber would be transported to mills just south of the park on the Georgian Bay coastline. Names such as 'Horse Lake' come from the logging era when horses were used to pull sleighs full of cut timber in the winter to the shoreline. Often, crossing a frozen lake was easier than trekking through the forest.

GEOGRAPHY

Parks Canada