Forestry in Canada – Then and Now

Lesson Overview
In this lesson, students will explore the distribution and current uses of different forests in Canada. Students will then trace the evolution of the forestry industry in various regions of Canada pre-1850 to the 1960s, revealing the importance of the forestry industry economically, ecologically, socially and politically.

Grade Level
Grades 9-12 (secondary school)

Time Required
Two 60 minute lessons

Curriculum Connection (Province/Territory and course)
British Columbia: Social Studies 10 Canadian History 1850 onwards; Geography 12 Resource Management

Link to the Canadian Atlas Online (CAOL)
www.canadiangeographic.ca/atlas/

Explore by theme: Natural Resources - Forestry

Additional Resources, Materials and Equipment Required
- Computer Lab
- Activity Sheets:
  - Forestry in Canada Introductory Brainstorming Sheet
  - Forestry in Canada Now and Then
- Website: http://www.pc.gc.ca/pn-np/nb/Kouchibouguac/natcul/natcul6_e.asp for a photograph of a mixed forest in Canada.

Main Objective
The primary goal of the lesson is to develop an understanding of the value of Canada’s forests economically, ecologically, socially and politically over time and space.

Learning Outcomes
By the end of the lesson, students will be able to:
- List the uses of Canada’s forests e.g.: lumber for house construction, plant and animal habitat, tourism and recreation
- Describe the distribution of Canada’s different forest types.
- Trace the evolution of Canada’s forestry industry by focusing on different forest regions in Canada.
- Explain the value of Canada’s forestry industry in economic, environmental, social and political terms over space and time.
<table>
<thead>
<tr>
<th>The Lesson</th>
<th>Teacher Activity</th>
<th>Student Activity</th>
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<tbody>
<tr>
<td>Introduction</td>
<td>Divide the class into groups of four. Distribute one activity sheet per group: <em>Forestry in Canada: Introductory Brainstorming Sheet</em>. Provide instructions for students to complete the brainstorming activity. Use the graphic organizer activity sheet: <em>Forestry in Canada: Introductory Brainstorming Sheet</em> to brainstorm the uses of Canada’s forests. Focus on economic, ecological, social and political aspects.</td>
<td>Use the graphic organizer activity sheet: <em>Forestry in Canada: Introductory Brainstorming Sheet</em> to brainstorm the uses of Canada’s forests. Focus on economic, ecological, social and political aspects. Each group provides feedback to the whole class.</td>
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<td>Lesson Development</td>
<td>Introduce students to the fact that natural resources have been vital to Canada’s economy for well over a century. Explain that forestry is one of the most important of these natural resource bases. Students will explore the evolution of the forestry industry over time. Distribute the worksheet entitled: <em>Forestry in Canada: Now and Then</em>. Students will access the Internet to complete the worksheet. Be ready to answer questions and provide feedback.</td>
<td>Complete the activities on the worksheet titled: <em>Forestry in Canada: Now and Then</em>.</td>
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<tr>
<td>Conclusion</td>
<td>Assign essay.</td>
<td>Use the information gathered as the foundation for the homework essay.</td>
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Lesson Extension

Essay

Assessment of Student Learning

Assess the essay according to the BC provincial guidelines for evaluating a five paragraph essay.

Link to Canadian National Standards for Geography

Essential Element #1: The World in Spatial Terms
- Map, globe, and atlas use (e.g. observing and analyzing relationships)
Geographic Skill #4: Analyzing Geographic Information
• Use the processes of analysis, synthesis, evaluation and explanation to interpret geographic information from a variety of sources.
Forestry in Canada

In your group, brainstorm the different uses of forests.
STUDENT ACTIVITY WORKSHEET

Forestry in Canada – Now and Then

**Uses of Canada’s Forests**
Using the ideas generated in the brainstorming session, summarise the main uses of Canada’s forests under the relevant headings in the table below.

<table>
<thead>
<tr>
<th>Economic Uses</th>
<th>Environmental Uses</th>
<th>Social Uses</th>
<th>Political Uses</th>
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**Distribution of Canada’s Forests**

Describe briefly the distribution of Canada’s forests by forest type.

<table>
<thead>
<tr>
<th>Forest Type</th>
<th>Distribution in Canada</th>
<th>Trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coniferous Forest</td>
<td></td>
<td>Conifers such as Douglas Fir, cedars, pines and firs. Leaves consist of needles, seeds are borne in cones.</td>
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<tr>
<td>Broadleaf Forest</td>
<td></td>
<td>Deciduous broadleaf trees such as maple and yellow birch. Leaves change colour and fall from the tree in autumn.</td>
</tr>
<tr>
<td>Mixed Forest</td>
<td></td>
<td>A mix of coniferous and deciduous trees in the forest.</td>
</tr>
<tr>
<td>Transitional Forest</td>
<td></td>
<td>A mix of land covers with up to 50% of the area covered by trees. e.g.: forest giving way to grassland or tundra.</td>
</tr>
</tbody>
</table>
To view photographs of coniferous, broadleaf deciduous and mixed forest refer to these websites:

- Website: http://en.wikipedia.org/wiki/Conifer for photograph of a conifer
- Website: http://www.pc.gc.ca/pn-np/nb/Kouchibouguac/natcul/natcul6_e.asp for photograph of mixed forest in Canada.

Uses of Canada’s Forests over Time

In order to understand the value of Canada’s forests, we will trace the evolution of Canada’s forestry industry in different regions of Canada at different times in her history. Use the Forestry section of the Canadian Atlas Online (www.canadiangeographic.ca/atlas) to complete the sections below.

Timber Production and Trade to 1850

View the map *Exports of Timber Products ca 1850* and read the accompanying text to answer the following questions.

1. Read paragraph 1. What does the following statement mean?

   "Wood was the great staple of early-19th-century British North America”?

2. Refer to the map. By value, which country was the largest trading partner with regards to receiving Canadian forest products?

   ______________________

   a. Based on your understanding of Canadian history, suggest a reason for this strong partnership.

   b. Which other political factor concerning Napoleon’s continental blockade contributed to this increase in trade?

3. Using map evidence, from which region of Canada did most of the forest products for export originate?

4. What were the primary uses for forest products exported to Canada’s largest trading partners? Refer to the pie charts and map legend.
5. Based on evidence from the map illustrating the areas of exploitation (coloured pink on the map) how do you think most of the timber was transported from where it was harvested to the Canadian ports for export? (HINT: read paragraphs 1 and 2)

6. Read paragraph 2. What was the impact of the lightly regulated harvesting of timber prior to 1820? (HINT: consider the impact on the forests as well as the industry itself.)

The Forest Industry 1850-1890
View the map The Sawn Lumber Industry ca 1870 and read the accompanying paragraphs to answer the following questions.

Read paragraph 1.

7. The forestry industry developed from being timber focused to lumber focused in the mid 1800s. What does this mean?

8. Read paragraph 2 and refer to the map.
   a. Where was the major growth sector for sawn lumber concentrated? Why?

   b. Is this fact supported by evidence from the map? How?

9. Refer to the map. By value and volume of lumber, which country was the largest trading partner with regards to receiving Canadian sawn lumber forest products? Suggest a reason for the shift in major trading partners from before 1850 to after 1850.

10. Read paragraph 3. The wood based manufacturing sector expanded. What products were produced and where? Suggest a reason for this expansion in Canada?
New Brunswick Forest Industry 1891-1931

11. Refer to the 3 maps, 1891, 1911 and 1931. Describe the changes you see occurring between 1891, 1911 and 1931. Explain these changes. (HINT: consider technological changes over time.)

12. Refer to the chart Production and Employment. Describe the changes observed on the chart. Suggest reasons for this shift between sawmill and pulp & paper production.

British Columbia Resources 1891-1928

13. Refer to the chart Value of Resources. Briefly outline what happened to the forestry sector in British Columbia between 1891 and 1928.

14. Refer to paragraph 1. Prior to the opening of the Canadian Pacific Railway (CPR) in Vancouver in 1887, how was all British Columbian timber exported?

15. Refer to the chart Water-Borne Lumber Shipments. Between 1911 and 1921, there were two peaks of lumber shipments to the UK and Europe. From your understanding of Canadian and world history, suggest reasons for these two peaks.

16. Refer to the chart Lumber Production. Locate the two main lumber producing industries in British Columbia. Suggest how these two lumber industries may be different. (HINT: consider climate variations in British Columbia.)
Ships and Shipping 1863-1914
Refer to paragraph 1.

17. Outline the factors that led to the rise of the sailing-ship building industry in Atlantic Canada using forest products.

18. Outline the factors that led to the decline of the sailing-ship building industry in Atlantic Canada using forest products.

Read paragraph 2.

19. Despite the decline in sailing ships in the late 19th and early 20th industry, Halifax continued to build sailing ships. Why? (HINT: consider other resource based industries and the famous Bluenose schooner.)

Pulp and Paper 1920-1928 on the Shield
Refer to the charts Provincial Pulp Production and Provincial Paper Production.

20. Describe the trend of pulp and paper production on the Shield between 1920 and 1928.

21. Read paragraph 1. List the factors which contributed to the growth of the pulp and paper industry on the Canadian Shield in the early 20th century.

The Pulp and Paper Industry, 1961
Refer to the map The Pulp and Paper Industry, 1961.

22. Describe the distribution of the pulp and paper industry in Canada in 1961 according to capacity of production.
23. Compare the ownership of production between western and eastern pulp and paper production.

24. List the reason why 90% of Canadian newsprint was exported.

Culminating Activity

Essay Question:

Discuss the importance of the forestry industry to the economic, social and political development of Canada from the 1850s to the present day.