From the Forests of New Brunswick to the World

Lesson Overview
Students will examine how residents of New Brunswick made a living from forestry in three historical periods. After examining environmental factors that made possible the growth of a forest industry in the region, students will view use of these resources in lumber, shipbuilding, and pulp and paper. Knowledge about markets should reinforce the concept that forests have had an impact locally and globally.

Grade Level
Grades 6-8 (Middle)

Time Required
One or two classes

Curriculum Connection (Province/Territory and Course)
Atlantic Provinces Curriculum for Social Studies: Council of Atlantic Ministers of Education and Training (CAMET): New Brunswick
   People, Place and Environment:
   Interdependence

Link to the Canadian Atlas Online (CAOL)
http://canadiangeographic.ca/atlas/
Explore by theme: Natural Resources - Forestry

Additional Resources:
- Computers
- LCD projector
- Internet access
- Print atlases
- Copies of student worksheets (attached):
  1. “Brainstorming Organizer”
  2. "Timber Production and Trade to 1850”
  3. "Ships and Shipbuilding in New Brunswick 1863-1914”
  4. "The Forest Industry after 1845”
- Copies of student assessment sheet (attached)
- The following URLs:

  Historical Atlas of Canada: (or print copies if available)
  http://www.historicalatlas.ca/website/hacolp/

  Atlas of Canada Website:
  http://atlas.nrcan.gc.ca/site/english/maps/topo/map

  www.worldbook.com/wb/Students?content_spotlight/climates/north_american_climate_new_bruns
  www.nbforestry.com/
Main Objective:

Students can identify environmental reasons for growth of forest industry in New Brunswick, its development and change over time, and importance on a world scale.

Learning Outcomes:

Students will be able to:

- access online information
- understand through map study where New Brunswick is located
- understand how climate, rivers, and coastline created a forest industry
- understand how forestry supplied employment and how the industry changed over time, and
- understand how forests provided needed products to a global market.
The Lesson:

<table>
<thead>
<tr>
<th>Teacher Activity</th>
<th>Student Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td><strong>Brainstorming Organizer</strong>. Ask: “Why are the forests important to the province of New Brunswick?”</td>
</tr>
<tr>
<td>Note: Familiarity with the web sites is necessary. If atlases showing climate data and geographical features of New Brunswick are available, provide to students.</td>
<td>1. Complete brainstorming web about importance of forestry.</td>
</tr>
<tr>
<td>1. Hand out copies of worksheet #1: “Brainstorming Organizer.” Ask: “Why are the forests important to the province of New Brunswick?”</td>
<td>2. Complete second part of web from worksheet #1: “Brainstorming Organizer.”</td>
</tr>
<tr>
<td>2. Show information from websites to give a concept of climate and geographical conditions that favoured growth of forestry.</td>
<td>3. Participate in class discussion generated through questioning.</td>
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<tr>
<td>3. After completion of worksheet #1: “Brainstorming Organizer”. Discuss:</td>
<td>(This information is starting point for lesson. Students will present conclusions in class on importance of industry and reasons for development in region.)</td>
</tr>
<tr>
<td>- How did climate influence growth of the forest industry?</td>
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<tr>
<td>- How did the rivers of New Brunswick effect its development?</td>
<td></td>
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<tr>
<td>- How did large coastline help the industry?</td>
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Lesson Development

1. Provide the Canadian Atlas Online theme on Forestry or provide Plate 11 (v.2) of *Historical Atlas of Canada* using computer and LCD projector or via Internet or printed copies of parts referring to New Brunswick.

2. Pass out worksheet #2: "Timber Production and Trade to 1850" and allow time to complete.

3. Explain terms ("deals") with which students may have difficulty. Give information on Napoleon and his attempt to blockade Great Britain ([http://encarta.msn.com/encyclopedia_761566988/Napoleon_I.html](http://encarta.msn.com/encyclopedia_761566988/Napoleon_I.html))

4. After completion of research about this period in forest history. Ask such questions as:
   - Why was forestry important to early settlers?
   - Why was Britain the main market?
   - What practices may not have been the friendliest to the environment?
   - Why did the government have to regulate the industry?

5. Provide the Canadian Atlas Online theme on Forestry or Plate 39 (v.2) of *Historical Atlas of Canada* using computer and LCD projector or via Internet or printed copies of parts referring to New Brunswick.

6. Pass out worksheet #3: "Ships and Shipbuilding in New Brunswick 1863-1914" to individual students (or groups) and allow time to complete.

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1. Go to the Canadian Atlas Online theme on Forestry or Plate 11 (v.2) of *Historical Atlas of Canada*

2. Complete worksheet #2: "Timber Production and Trade to 1850."

3. Write three conclusions about forestry of this period.

4. Come to general conclusions after prompting through questioning.

5. Go to Canadian Atlas Online theme on Forestry or plate 39 (v.2) of *Historical Atlas of Canada* and discuss findings in class.

6. Complete worksheet #3: "Ships and Shipbuilding in New Brunswick 1863-1914"
7. After completion, discuss geographical factors that aided development of shipbuilding, and why New Brunswick ships were important worldwide. Seek reasons for decline of shipbuilding.

8. Provide the Canadian Atlas Online theme on Forestry or plates 38 (v.2), and 50 (v.3) of *Historical Atlas of Canada* using computer and LCD projector or via Internet or printed copies of parts referring to New Brunswick.

9. Pass out worksheet #4: "The Forest Industry after 1845" to individual students (or groups) and allow time to complete.

10. After completion, discuss difference between primary and secondary production. Examine how pulp and paper has affected New Brunswick. Discuss problems facing industry today.

### Conclusion

1. Discuss results of worksheet activities.
2. Complete assessment.

8. Go to the Canadian Atlas Online theme on Forestry or plates 38 (v.2), and 50 (v.3) of *Historical Atlas of Canada*.

9. Complete worksheet #4 (*The Forest Industry after 1845*) individually or in a group.

10. Discuss findings in class.

### Lesson Extension

Have students study a famous New Brunswick sailing ship, the **Marco Polo**.

For more information:

- [http://new-brunswick.net/marcopolohistoric.html](http://new-brunswick.net/marcopolohistoric.html)
- [www.thecanadianencyclopedia.com/index.cfm?PgNm=TCE&Params=A1ARTA0005103](http://www.thecanadianencyclopedia.com/index.cfm?PgNm=TCE&Params=A1ARTA0005103)

Link to Canadian National Standards for Geography:

**Essential Elements #2: Places and Regions**
- Physical and human characteristics of places and regions in Canada and the world
- Changes in places and regions over time

**Essential Element #3: Physical Systems**
- Physical processes shape patterns in the physical environment
- Ecozones (major ecological communities such as boreal forest, polar regions, grassland, wetlands and desert)
- River systems of Canada and the world

**Essential Element #4: Human Systems**
- Demographic transition of a country
- Types and patterns of human settlement (from villages to megacities)
- Cities as providers of goods and services
- Regional development in Canada and the world
- Transportation and communications networks in Canada and the world
- Types and patterns of economic activity (primary, secondary, tertiary, quaternary)
- Global economic interdependence economic interdependence (trade, commerce and communication)

**Essential Element #5: Environment and Society**
- Effects of human modification of the physical environment (e.g. global warming, deforestation, desertification, urbanization)
- Limits and opportunities of the physical environment for human activities

**Geographic Skill #1: Asking Geographic Questions**
- Identify geographic issues, define geographic problems and pose geographic questions.

**Geographic Skill #2: Acquiring Geographic Information**
- Use maps to collect and/or compile geographic information.

**Geographic Skill #4: Analyzing Geographic Information**
- Interpret information obtained from maps, aerial photographs, satellite-produced images and geographic information systems.
- Use statistics and other quantitative techniques to evaluate geographic information.
- Interpret and synthesize information obtained from a variety of sources – graphs, charts, tables, diagrams, texts, photographs, documents and
Worksheet #1: Brainstorming Organizer

Importance of forests to New Brunswick

- Factors aiding New Brunswick forest industry
  - Coastline
  - Rivers

Climate

Rivers
Worksheet #2: Timber Production and Trade to 1850

Use The Canadian Atlas Online or plate 11 (V.) of *Historical Atlas of Canada* to provide the missing words:

1. Wood was a main staple or resource for trade in New Brunswick in the early 1800s. The bulk of exports came from _________________ area of New Brunswick.

2. During this period, Britain was the main market for wood products from New Brunswick. This was due to the fact that in the early 1800s._________________, Emperor of France, tried to blockade goods from reaching Britain from Europe. Britain also lowered taxes or _________________ on goods coming into from its North American colonies.

3. Square timber was the main product of the early trade. Because trees were hewn or cut with an axe where they fell, much wood was _________________. Lumber, the product of a ________________, was a valuable export. The most important lumber export, known as ________________, was larger than other lumber exports in size.

4. Until the mid-1820s, there was no organized system of ________________ governing the cutting of trees in New Brunswick. At that time, lumbermen had temporary rights to cut wood from tracts of land called ________________.

5. At first, lumbermen cut the best trees, usually the easily accessible ________________ trees, which they transported by ________________ to market. By the 1840s, they began to cut mainly ________________ trees.

6. At this time, forestry depended largely on the labour of _________________. ________________ would take wood from these people in payment for purchases made. Port merchants, saw millers, brokers (or agents) and ________________ or small-scale independent traders all played an important role in exporting timber.

7. ________________, ________________, ________________, and ________________ were four areas of New Brunswick that contributed most to the export of forest products around 1850.
**Worksheet # 3: Ships and Shipbuilding In New Brunswick  1863-1914**

From study of geography and information in The Canadian Atlas Online or plate #38 of *Historical Atlas of Canada*, complete these charts:

How did these factors favour the development of a shipbuilding industry?

<table>
<thead>
<tr>
<th>COASTLINE</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rivers</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Climatic Conditions</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Growth of Trees</strong></td>
<td></td>
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<tr>
<td><strong>Tides</strong></td>
<td></td>
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</tbody>
</table>
**WORKSHEET #3: Ships and shipbuilding in New Brunswick, 1863-1914**

<table>
<thead>
<tr>
<th>Tonnage of Shipbuilding (average annual in thousands)</th>
<th>Richibucto (Highest)</th>
<th>Richibucto (Lowest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miramichi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saint John</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Shipbuilding in Saint John**

- Which decade were the most ships sold?
- Where were the most ships sold?

**Shipbuilding in Miramichi**

- Which decade were the most ships sold?
- Where were the most ships sold?

**Largest Type of Ships Built**

- Richibucto
- Miramichi
- Saint John

**Year of Peak Tonnage**

- Richibucto
- Miramichi
Worksheet # 4: The Forest Industry after 1845

Use The Canadian Atlas Online and plates # 24 (v. 2), # 38 (v.2), and # 50 (v.3) of Historical Atlas of Canada to answer these questions:

1. What conclusion can be reached about export of wood from New Brunswick from 1845 to 1890?

2. What is the difference between primary and secondary wood production?

3. Which was more important in New Brunswick in 1891 – primary or secondary wood production?

4. How did the number of people working in forestry in 1891 in New Brunswick compare to the number working in forestry in 1929?

5. What major development occurred in the forest industry between 1891 and 1931?

6. What were the two main markets for sawn lumber in 1870? ________________, ________________.

7. Where were the pulp and paper mills located in New Brunswick by the 1950s? ________________

8. What do you think is happening in the forest industry in New Brunswick today?
Student Assessment: From New Brunswick’s Forests to the World

**Answer the following questions:**

1. How does climate aid in the development of a forestry industry in New Brunswick?

________________________________________________________________________________________

2. How did the many rivers of New Brunswick help the development of a forestry industry in New Brunswick?

________________________________________________________________________________________

3. How did New Brunswick’s long coastline aid in the development of a forestry industry?

________________________________________________________________________________________

4. In what ways was the forestry industry not always friendly towards the environment over the history of the forest industry?

________________________________________________________________________________________

5. Why can one say that the forests have been very important to New Brunswick?

________________________________________________________________________________________

________________________________________________________________________________________

Imagine that you were a worker in one of the three historical periods that you studied. Write in three or four paragraphs a description of your daily life.

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________