

CTS Forestry: Forests and Society



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Forests and Society

Students will consider different perspectives on the values of the forest and examine policies and procedures that are in place to ensure all perspectives are considered in the management of forests.

Alberta Curricular Outcomes

- 1. Students will compare the social, economic, and environmental significance of forests.
- 2. Students will explain how personal needs, wants, beliefs, and actions may influence forest resources.
- 3. Students will demonstrate knowledge about public land use.

Resources

This toolkit is designed to give teachers the flexibility to use as an online resource, a hard-copy resource, or both. It includes a variety of activities, including options for individual study or group work.

Students may download the Student Activity Handouts on the Work Wild website: workwild.ca (in the Classroom Resources section). Alternatively, the student handouts are provided at the back of this Toolkit so they can be photocopied and handed out.









Lesson Plan Overview

Lesson Plan 1: Social, Economic, and Environmental Balance

Managing forests is about balancing multiple interests. It is important to "see the forest through the trees" and account for the variety reasons we enjoy and rely on forests. This lesson has students examine forest uses from a social, economic, and environmental perspective. After watching a series of short videos, and reviewing an interactive infographic, students will break into groups and participate in a discussion forum – a role playing exercise where they will discuss the importance of the forest to the group/interest they represent.

Lesson Plan 2: Sustainability at Work

Increasingly, consumers are making purchasing decisions based on a company's commitment to environmental sustainability. Companies in turn are being proactive in demonstrating what initiatives and efforts they are taking. Students will visit the website of a forestry/forest products company to learn about their environmental practices and accreditations, and consider how this might resonate with consumers. Students will explore how increased consumer awareness and industry commitment to sustainability affect society.

Lesson Plan 3: Forest Management Plans

Before a single tree can be cut, Alberta's forestry companies are required to submit detailed Forest Management Plans to the Government of Alberta for approval. Each plan guides forestry practices in a given geographical area – including harvest, protection of wildlife habitats, consideration of stakeholders, and replanting requirements. Working individually or in groups, students will review a Forest Management Plan and answer several questions to demonstrate an understanding of why these plans are so important.

Lesson Plan 1: Social, Economic, and Environmental Balance

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Time

Videos: 10 minutes

Explore Infographic: 20 minutes

Class Discussion and Handout: 50 minutes

Assessment

Formative: Review Activity 1 Handout to identify whether students have considered all points in the curricular objectives below.

Alberta Curricular Outcome

- 1. Students will compare the social, economic, and environmental significance of forests.
 - 1.1 Examine the economic significance of forests at local, national, and global levels, including but not limited to:
 - 1.1.1 Direct and indirect employment
 - 1.1.2 Forest products and export values
 - 1.1.3 Tourism
 - 1.1.4 Subsistence
 - 1.1.5 Tax revenue
 - 1.2 Examine the environmental significance of forests in local, national, and global contexts, including but not limited to:
 - 1.2.1 Wildlife habitat
 - 1.2.2 Watershed protection and maintenance
 - 1.2.3 Water, air, and soil quality
 - 1.2.4 Maintenance of ecosystems
 - 1.2.5 Climate change
 - 1.3 Examine the social and cultural significance of forests, including but not limited to:
 - 1.3.1 Entertainment and recreation
 - 1.3.2 Spirituality

Materials

- Work Wild video series (Alberta has a Wild Side)
 http://workwild.ca/forestry-resources/videos/
- Work Wild Forests and Society infographic http://workwild.ca/classroom-resources/studentactivities/activity-1-forestry-society-social-economicand-environmental-balance/
- Activity 1 Handout Students can either download this handout online or be provided with hard copies. Blank handouts are included at the end of this package for printing/photocopying.

Activity

- Watch the Alberta Has a Wild Side video series as an introduction to forestry in Alberta. Then review the Forests and Society infographic, highlighting the importance of balancing social, economic, and environmental uses when it comes to forest management. This can be done as a class or individually.
- 2. Using the information reviewed in the videos and infographic, have a discussion at a "public forum" that is coming to the town of Greenville. The moderator (the teacher) will ask the attendees at the forum to share their concerns around forest management.
- 3. Break the class into the following three groups:
 - Chamber of Commerce
 - Community Association
 - Environment Coalition

Give students 15 minutes to brainstorm key points for their group. This can be done individually, in partners, or in groups. Once students have noted some key considerations, guide them through a class discussion, asking each group to offer perspectives based on which group they represent. Guide students to consider all of the points in the curricular objectives. During or after the class discussion, have students fill out Activity 1 Handout, considering all three perspectives.

Activity 1 Handout - ANSWER KEY

Greenville Public Forum

After watching the Work Wild Video Series and exploring the Work Wild *Forests and Society* infographic, you have learned that it is important to consider social, economic, and environmental interests when it comes to forest management.

A public forum is being held to discuss how to manage the forest around the town of Greenville. The organizers are looking for feedback on things they need to consider when putting together a forest management strategy.

The class will split into three groups representing each of the following perspectives. What topics or concerns would you raise as a part of your group? After the discussion, fill in considerations for all three perspectives.



Group 1: Chamber of Commerce (Economic Interests)

This is a group of business people. What must be considered when it comes to ensuring that the economic interests of the community and the country are represented?

Considerations:

- The forest sector contributes to the local economy and to the Canadian economy (through exports).
- Forestry is a major provider of employment to the citizens of Greenville. People need jobs to pay for their houses, food, cars, and more.
- Other Greenville businesses (from restaurants to grocery stores to retail stores) depend on the business of those employed by the forest sector for their success.
- The forest is important to the local tourism industry.
- Greenville collects taxes from the forestry companies and the people they employ. These taxes pay for a variety of important services including libraries, schools, and health care.
- Some people rely on hunting, fishing, and trapping to support their basic needs.

Activity 1 Handout - ANSWER KEY Continued

Group 2: Community Association (Social Uses)

This group is made up of residents who use the forest for a variety of recreational purposes. What must be considered when it comes to ensuring the social interests are represented?

Considerations:

- People enjoy the forest for entertainment and recreational purposes, including camping, hiking, and bird watching.
- Residents may object to trees being harvested for a number of reasons. Many may have chosen to live in Greenville because they like the forested surroundings. They may be concerned about the impact on wildlife, scenery, and the community at large.
- Members of Indigenous communities have a spiritual and cultural connection to the land that could be impacted if traditional areas are harvested.

Group 3: Environmental Coalition

This group is made up of environmentally-minded people. What must be considered when it comes to ensuring the environmental interests are represented?

Considerations:

- This group may be concerned about the impact forestry could have on wildlife populations. They might advocate to protect certain habitats particularly those that are home to endangered species of animals and plants.
- They may be concerned with protecting and maintaining healthy watersheds. Trees play an important role in filtering water, enhancing soil quality, and preventing erosion.
- The forest is considered a carbon sink because it absorbs more carbon dioxide than it produces. When trees are harvested, they should be replaced quickly so new trees can begin absorbing carbon dioxide and producing oxygen.

Lesson Plan 2: Sustainability at Work

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Time

Company Exploration: 20 minutes

Handout: 40 minutes

Assessment

Formative: Review Activity 2 Handout to assess that students have considered all points in curricular outcomes listed below.

Alberta Curricular Outcome

- 2. Students will explain how personal needs, wants, beliefs, and actions may influence forest resources.
 - 2.1 Describe how consumer and marketing trends in society may affect forest resources, including but not limited to:
 - 2.1.1 Needs vs. wants
 - 2.1.2 Media influence
 - 2.1.3 Third party environmental certification
 - 2.1.4 Use of environmentally friendly products
 - 2.2 Describe the impact of individual attitudes, actions, and lifestyles on forest resources, including but not limited to:
 - 2.2.1 Conservation and sustainability ethics
 - 2.2.2 Consumer practices and trends
 - 2.2.3 Recreational patterns

Materials

 Activity 2 Handout – Students can either download this handout online or be provided with a hard copy. A blank handout is included at the end of this package for printing/ photocopying.

Activity

Consumers have increasingly high expectations of the companies they purchase products from. Modern companies are expected to act in an environmentally responsible manner – or risk losing the business of their environmentally-minded customers.

Students will visit the website of a forestry company to find out what the company is saying about its commitment to environmentally sustainable practices. What certifications do they have? What claims can they make that would resonate with consumers who are concerned with sustainability?

To answer the handout questions students can search on their own for companies, or select from the list of Alberta Forest Products Association companies at albertaforestproducts.ca/about-us/our-members/

Lesson Plan 3: Forest Management Plans

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Time

Review links to Tenure, Forest Management Plans, and FMA map: 30 minutes

Review Company Forest Management Plan and answer questions: 45 minutes

Assessment

Formative: Review Activity 3 Handout to assess that students have demonstrated an understanding of the curricular objectives listed below.

Alberta Curricular Outcome

- 3. Students will demonstrate knowledge about public land use.
 - 3.1 Identify public forested land in Alberta
 - 3.2 Identify and explain the implementation of legislation and policies that govern the use of public lands, including but not limited to:
 - 3.2.1 Tenure
 - 3.2.2 Reclamation
 - 3.2.3 Reforestation

Materials

- Government of Alberta website: Forest Tenure http://www.agric.gov.ab.ca/app21forestrypage? cat1=Forest%20Management&cat2=Forest%20Tenure
- Government of Alberta website: Forest Management Plans http://www.agric.gov.ab.ca/app21/forestrypage? cat1=Forest%20Management&cat2=Forest%20 Management%20Plans

- Forest Management Agreement (FMA) map http://www1.agric.gov.ab.ca/\$department/deptdocs. nsf/all/formain15743/\$FILE/forest-managementagreement-map-november-2016.pdf
- Activity 3 Handout Students can either download this handout online or be provided with hard copies. A blank handout is included at the end of this package for printing/ photocopying.

Activity

- As a group or individually, review the content on the Government of Alberta Forest Tenure and Forest Management Plans web pages. Next, review the map, which outlines the boundaries of the Forest Management Plans developed across the province of Alberta.
- 2. After learning about Forest Tenure and Forest Management Plans, scroll to the bottom of the Forest Management Plans page and select a company under "FMP's in Alberta". Then click on the links under the "Forest Management Plan" heading to view the company's forest management plan. Some companies have full plans in a single document, and others have them split into multiple files.
- Students will use the chosen company's Forest Management Plan to answer Activity 3 Handout questions.

Student Handouts

Activities 1-3

Activity 1 - Handout

Greenville Public Forum

After watching the Work Wild Video Series and exploring the Work Wild Forests and Society Infographic, you have learned that it is important to consider social, economic, and environmental interests when it comes to forest management.

A public forum is being held to discuss how to manage the forest around the town of Greenville. The organizers are looking for feedback on things they need to consider when putting together a forest management strategy.

The class will split into three groups representing each of the following perspectives. What topics or concerns would you raise as a part of your group? After the discussion, fill in considerations for all three perspectives.



Group 1: Chamber of Commerce (Economic Interests)

This is a group of business people. What must be considered when it comes to ensuring that the economic interests of the community and the country are represented?

Activity 1 - Handout Continued

Group 2: Community Association (Social Uses)

This group is made up of residents who use the forest for a variety of recreational purposes. What must be considered when it comes to ensuring the social interests are represented?

Group 3: Environmental Coalition

This group is made up of environmentally-minded people. What must be considered when it comes to ensuring the environmental interests are represented?

Activity 2 - Worksheet

Sustainability at Work

Consumers have increasingly high expectations of the companies they purchase products from. Modern companies are expected to act in an environmentally responsible manner - or risk losing business of their environmentally-minded customers.

Visit the website of a Canadian forestry company and answer the following questions. You can search on your own for companies, or select from the list of Alberta Forest Products Association companies at http://albertaforestproducts.ca/about-us/our-members/



What is this company doing to operate in an environmentally sustainable manner? (This may be reflected in its products, operational practices, charities, or environmentally-minded organizations it supports).

What accreditations does the company have as proof of its commitment to environmentally responsible practices?

Why do you think it is important for companies to work to earn and maintain these accreditations?

Activity 2 - Handout Continued

What is being said about the company's environmental practices in the mainstream media or on social media? Is the company responding?

Now, consider your own choices and the choices of other individuals to answer the following questions.

How can an individual's attitudes, actions, and lifestyle affect the forest as a:

- a. Habitat
- b. Provider of clean water
- c. Producer of oxygen
- d. Provider of wood products
- e. Place to enjoy recreational activities and experience nature

Which of the above are "needs" versus "wants"?

Activity 2 - Handout Continued

How do individual consumer practices and trends impact the forest?

How can individuals change their behaviours to positively impact the forest?

Activity 3 - Handout

Forest Management Plans

The details of where, when, and how trees on Crown land in Alberta are harvested and managed sustainably are contained in Forest Management Plans. These are prepared by industry and approved by the Government of Alberta, with input from the public and other stakeholders.



Visit the Government of Alberta website and choose a company's Forest Management Plan to answer the following questions. http://www.agric.gov.ab.ca/app21/forestrypage? cat1=Forest%20Management&cat2=Forest%20Management%20Plans

On what date was the Forest Management Plan initially approved?

Describe the Forest Management Area that this company operates in.

Activity 3 - Handout Continued

What measures does this plan take to consult with stakeholders, including Indigenous communities and the general public?

What does the plan address with regard to:

- a. Wildlife habitat and populations?
- b. Invasive species such as insects or disease?
- c. Silviculture (regenerating the forest after harvest)?