



Autumn Downey

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Shortest Route *



Traditional Knowledge



Case Studies



Authors' favourites

* The shortest route shading refers to the minimum activities needed to complete a cumulative mapping and charting assignment. This series of activities uses the caribou annual cycle to integrate topics such as natural and human stressors, research, caribou health and management.

Unit 1: Do We Care?



Students will be introduced to the concepts of caribou management, who has responsibility and what information managers need to make good decisions.

Opener: Should we be concerned?

Connector: Caribou Management: What are our priorities?

Activity 1: Caribou Management: What do we need to know?

Activity 2: Caribou Management: Who has responsibility?

Reflection: Respecting Caribou: What does it look like?



Unit 2: Have you Heard about the Herds?



caribou species, five sub-species and concept of herd. They will understand how herds are named and about the value of caribou to northern people.

Students will understand the

Opener: Have You Heard about the Herds?

Connector: What's in a Name?

Activity 1: Which Herd am I?



Activity 2: Where do they Roam?

Reflection: Traditional Stories about Caribou

Unit 3: Natural Stressors



Students will learn how changing environmental conditions and natural stressors influence the behavior and energy balance of caribou throughout their annual cycle.

Opener: Multiple Stressor Obstacle Course Part 1



Connector: Caribou Annual Cycle

Activity 1: Mapping the Natural Stressors

Activity 2: Climate Change and Traditional Knowledge

Activity 3: Climate Change Population Model

Activity 4: Snow Study

Activity 5: Traditional Knowledge and Natural Cycles of Caribou

Reflection: Assessment of what You Know

Unit 4: Research Opportunities



Students will gain an appreciation for what a biologist does to study the caribou throughout the caribou's seasonal life cycle. They will learn about the traditional methods of studying caribou and be asked to think about the ethics of caribou research.

Opener: Collaring Caribou

Connector: Research Cycle

Activity 1: Wildlife Counting Techniques

Activity 2: A Caribou Calving Ground Survey



Activity 3: Composition Surveys

Activity 4: Who Sets Research Priorities?

Activity 5: Traditional Knowledge and Wildlife Management

Reflection: A Research Dilemma

Unit 5: Habitat Assessment



Students will learn about the components of habitat and that the importance of different habitats can be ranked based on various criteria.

Opener: What's That? Habitat!

Connector: Mapping your own Habitats



Activity 1: Traditional Ways of Assessing Habitat

Activity 2: What's Hot Habitat?

Reflection: Competing Values

Unit 6: Caribou Health



Students will learn about field sampling techniques to assess caribou condition and about processing samples in a laboratory. They will learn about parasites and diseases which affect caribou and about safe meat handling. They will understand how the condition of caribou can affect population trends.

Opener: What Causes Population Declines?

Connector: Monitoring Caribou Health

Activity 1: Take it to the Lab



Activity 2: Common Diseases and Parasites

Activity 3: Contaminants

Activity 4: Caribou Anatomy Project

Reflection: Body Condition

Unit 7: Human Interactions



Students will understand that human activity impacts caribou on an individual and population level. Combined stressors, whether human or natural, may be referred to as cumulative effects.

Opener: What Types of Human Activities Impact Caribou?

Connector: What's Happening Out There?

Activity 1: The Value of Caribou

Activity 2: GIS Scavenger Hunt



Activity 3: Mapping Land Use



Activity 4: Google Earth Caribou Animations



Activity 5: Incredible Shrinking Island

Activity 6: Multiple Stressor Obstacle Course Part 2

Reflection: Using Cartoons to Make You Think

Unit 8: Management



Although there are a number of factors that may affect caribou populations the only ones that we have some control over are human activities. Students will understand who is responsible for both harvest management and land use management and the tools available for those managers.

Harvest Management

Opener: What's That? Habitat!

Connector: Respectful Hunting Practices

Activity 1: Why Bulls?

Activity 2: Who's Responsible?

Activity 3: Hidden River
Herd Challenge



Reflection: Vote with your Feet



Land Use Management

Connector: Protection and
Development.
Where's the balance?



Activity 1: Parks Scavenger Hunt

Activity 2: What's in a Land Use Plan?

Activity 3: Permitting Scenario

Activity 4: Presentation at Planning
Meeting

Reflection: Vote with your Feet

Unit 9: Case Study: Barren-Ground Caribou



Students will examine the land use management and caribou management issues involved in a decision about mining development in the range of the Beverly caribou herd.

Opener: ENR News Report

Connector: Where is This Happening?

Activity 1: Co-Management Perspectives

Activity 2: Show what you know

Reflection: This is what I think

Unit 10: Case Study: Woodland Caribou

Students will understand the issues surrounding the expansion of Nahanni National Park Reserve. They will learn how these issues may impact boreal and mountain woodland caribou.

Opener: Nahanni Caribou: Medzih

Connector: Nah?a Dehé: Medzih

Activity 1: Alternate Futures
Think – Pair – Share

Activity 2: Development in the Nahanni

Activity 3: Prioritizing Values: What is
Important?

Reflection: What Future Do you Choose?