Wilderness Investigation 1: The Idea of Wilderness

What is Wilderness?

Image of the Bob Marshall Wilderness
Wilderness Investigation 1: The Idea of Wilderness

What is Wilderness?

Investigation Summary:
Wilderness Investigation #1 introduces the concepts of wilderness and wildness. Students learn about the Wilderness Act and how to look for evidence of wildness in an outdoor location. The investigation introduces the concept of a hero and heroic actions.

Note to Parents:
The Wilderness Investigations note for the parents provides parents with a brief overview of what students are studying about wilderness. The letter also gives suggestions for discussion topics and activities. This letter may be tailored for specific teacher needs.

Wilderness in the Classroom:
Students will predict and discuss what they might expect to find in wilderness. Students will also learn about how an idea becomes a law and the Wilderness Act of 1964. They will study and make meaning of short phrases from the Wilderness Act.

Wilderness Hero Study with discussion and extension ideas:
Students will brainstorm a list of qualities that they associate with the word hero. They will learn about Arthur Carhart and explore his life history to determine why he is considered a wilderness hero. After surveying Trapper Lake in Colorado for development, Arthur Carhart proposed that the area be preserved and protected as wilderness. Students will work to find heroic acts of people in their community or family.

Wilderness Outside of the Classroom:
Students will visit a local wild place and observe its wild qualities. They will revisit their list of what they might find in wilderness and the list of phrases from the Wilderness Act. Students will record their observations and share them with the class.

Wilderness Profile Study with discussion and extension ideas:
The Bob Marshall Wilderness in Montana is one of the largest areas in the lower 48 states. It is full of diverse wildlife, geological wonders, rugged trails, scenic vistas, wild waterways, and few traces of modern people. Students will locate and learn about the wilderness area and the benefits of several wilderness areas being connected to form a wilderness complex. The class may choose to investigate the Bob Marshall Wilderness using Google Earth.

Wilderness Show and Tell:
Teachers and students share their observations, investigations, and ideas about wilderness with others. Each Wilderness Investigation is an opportunity to share the value of America’s wilderness and the Wilderness Act with others.
Note to Parents
Dear Parents and Guardians,
Your child is embarking on a series of wilderness investigations. There are five total investigations. The current investigation is in bold print.

1. What is Wilderness?
   • Students will explore the characteristics of wilderness and learn about the Wilderness Act of 1964. What do we expect to find in wilderness? What are some words we can use to describe wilderness?

2. Wilderness for All American People of Present and Future Generations
   • Students will study the concept of public lands and public spaces. Who can visit wilderness?

3. Outstanding Opportunities
   • Students will evaluate what people can do in wilderness. What can you do in wilderness?

4. Preservation of Wilderness Character
   • Students will examine the idea of wilderness character and how it applies to different wild places. Why is wilderness character important to protect?

5. Our Wilderness Heritage
   • Students will learn about America’s history of protecting and valuing wilderness. How can we get involved in preserving our wild places?

At the beginning of each investigation you will receive a letter about what your child is learning. The letter will provide you with ideas and information about how you can extend learning into your family, and inform you about school activities related to the investigations. Thank you for supporting Wilderness Investigations.

Sincerely,

The Creators of Wilderness Investigations
Wilderness Investigation #1: Out-of-School Extensions

What are some activities or conversations I can have at home about wilderness and wild places?

Here are some ideas for at-home discussions and activities.

Discussion Ideas:
- What is a wild place like? Are there any wild places near our home?
- What makes a wild place wild?
- What can you tell me about the Wilderness Act? Why is it important?
- Who is Arthur Carhart? What did he do that was important?

Activity Idea #1: Go for a hike.
Find a wild place in your community and go for a hike. Things to consider: How long do you want to walk? What do you need to take with you? (Suggested items include: Water, food, sunscreen, camera, map, etc.)

Activity Idea #2: Go for a picnic.
Eating a meal outside is a lot of fun. Plan a menu with your child.

Activity Idea #3: Read a book aloud about a wild place.
Suggested books:
Wilderness in the Classroom

Overview: As a class, students will brainstorm what they might find in wilderness. In partnerships, students will compare and contrast their schoolyard with wilderness and share their ideas with the class. Students will draw or sketch a picture of their schoolyard and what they think their schoolyard would look like if it were a wilderness area. Teachers will share with the students a brief history of wilderness and the Wilderness Act.

Teacher Goals: The teacher will...
- Introduce the Wilderness Act of 1964.
- Talk about selected phrases from the Wilderness Act.
- Compare their schoolyard to a wilderness area.

Learning Targets
- I can articulate my own ideas.
- I can work with a partner to compare and contrast ideas and places.
- I can draw two places or ideas.
- I can listen describe my ideas about wilderness.

Standards Applied

<table>
<thead>
<tr>
<th>Standards Applied</th>
<th>Abilities to distinguish between natural objects and objects made by humans</th>
</tr>
</thead>
<tbody>
<tr>
<td>NS.K-4.5</td>
<td>Key Ideas and Details 2: Determine the main idea of a text and explain how it is supported by key details; summarize the text.</td>
</tr>
<tr>
<td>Common Core 4th Grade Reading Standards</td>
<td>Research to Build and Present Knowledge 7: Conduct short research projects that build knowledge through investigation of different aspects of a topic.</td>
</tr>
<tr>
<td>Common Core 4th Grade Speaking and Listening Standards</td>
<td>Comprehension and Collaboration 1: Engage effectively in a range of collaborative discussions with diverse partners on grade 4 topics, building on others' ideas and expressing their own clearly. (d) Review the key ideas expressed and explain their own ideas and understandings in light of the discussion.</td>
</tr>
<tr>
<td>Common Core 4th Grade Language Standards</td>
<td>Vocabulary Acquisition and Use 4a: Determine or clarify the meaning of unknown and multiple-meaning words and phrases. Use context as a clue to the meaning of a word or phrase.</td>
</tr>
<tr>
<td>National Environmental Education 4th Grade Guidelines</td>
<td>Strand 2.4 Environment and Society B: Learners understand that places differ in their physical and human characteristics. Compare their neighborhood or town with another nearby place, or compare their favorite park with another park they know. List characteristics that make one place different from another.</td>
</tr>
</tbody>
</table>

Estimated Time: 45 minutes

Materials:
- My Wild Places Journal (for each student, Appendix)
- Copy of How an Idea Becomes a Law (WI #1 on page 10)
- Copy of the Wilderness Act (Appendix)
- Phrases from the Wilderness Act (WI#1 on pages 11-14)
- Dictionaries (optional)
**Teacher Background Information:**
The word wilderness evokes varied images from different people. Age, geographic location, cultural background, and personal experiences shape one’s view of wilderness. During this investigation you will explore individual impressions and thoughts about wilderness along with some of the specific terms established in the Wilderness Act of 1964.

“A wilderness is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man is a visitor who does not remain.” [Wilderness Act Sec. 2.(c)] The Wilderness Act is a ground-breaking document that is unique to America because it lays out the plan for a preservation system to protect wildness in America forever.

The concept of wilderness evolved a great deal during the past three centuries. In the 1600 and 1700s, non-Native pioneers experienced North America as a vast, untouched, wild place full of wildlife and inhospitable open spaces. They were unaware that millions of people had been living in North America for millennia. Native People’s traditional way of life was of the land instead of on the land, a lifestyle that some practice today. According to Tony Incashola, Director of the Salish-Pend d’Oreille Culture Committee in western Montana, most Native Peoples, past and present, viewed themselves as part of the landscape whether wilderness or not. “In the past, Native People had no word for or mental construct for wilderness,” stated Tony during a recent conversation (June 2011). It was simply their home.

Increased human activity between 1800 and the early 1900s ultimately impacted the landscape. As cities grew, infrastructure crisscrossed our country, and industry expanded, while our wild places shrank. In order to preserve some amount of wilderness for the future, a legal action was necessary. During this investigation students will examine characteristics of wilderness, learn about a prominent figure in our national history of wilderness, and analyze the Wilderness Act of 1964.

After much debate and revision, Congress passed and President Lyndon Johnson signed the Wilderness Act in 1964. Take some time to read and review the Wilderness Act prior to beginning the investigation. See WI Appendix for a copy.

**Teaching Sequence:**
1. **Discuss**
   Class brainstorm. Record student answers on a large piece of paper, whiteboard, etc. Students may record their ideas in their own copy of the *My Wild Places Journal* on journal page 3.

   *What is wilderness? What do you think wilderness is like? What do you think you would find in wilderness? What would you probably not find in wilderness?*
2. **Sketch**
   In partnerships or individually, ask students to create two sketches in their *My Wild Places Journal* on journal page 4. One of the schoolyard or playground, and one of what the place might look like if it were a wilderness. Ask if any students would like to share and explain their sketches.

   *What would this area look like if it were a wilderness? Imagine we removed all the buildings and structures and let it grow. What would be different? What might you add to the picture? What might you subtract from the picture?*

3. **Analyze**
   Introduce the idea of a legal *Act* and the *Wilderness Act of 1964*. Discuss the specific terms and phrases that define wilderness in the Wilderness Act. Display the Wilderness Map in the classroom to aid discussion and observation about wilderness areas. Students may want to look up unfamiliar words. Briefly introduce how an idea becomes an act. Use *How an Idea Becomes a Law* resource. (*How an Idea Becomes a Law* is on page 10 of Wilderness Investigation #1.)

**Background Information on the Wilderness Act:**

- **Before European explorers came to North America in 1492,** American Indians lived in groups all across the continent. They ate food from the land and had no word for “wilderness” because it was simply their home.

- **1700- early 1900s:** Non-Indians moved westward into wild areas and began to build homes, start farming, mine for minerals, harvest trees, and other activities.

- **During the early 1900s** groups of American citizens decided that they wanted to protect and preserve wild and natural areas from humans. Presidents, states and communities had the power to set aside specific areas to protect, like national parks, national monuments, state parks.

- **1950-1964** More people became aware and concerned that our country’s wild places were disappearing. Citizens, politicians, and government officials worked together to create a system to preserve wilderness. In 1964 Congress and President Lyndon B. Johnson signed into law the Wilderness Act.
\textbf{Note: Wilderness in the Classroom} component of \textbf{Wilderness Investigation #5} covers the history of wilderness in America. Teachers may choose to include it in Wilderness Investigation #1.

The Wilderness Act is the legal document that carefully defines wilderness. Examine some of the language from the document to get an idea of the definition of wilderness. Use \textbf{Phrases from the Wilderness Act} on pages 11-14. Cut out the phrases and distribute to groups of students or discuss each phrase as a whole class.

\begin{quote}
\textit{Listen to some of the words and phrases used in the Wilderness Act. What do you think they mean? Do they help you paint a mental picture of wilderness?}
\end{quote}

4. \textbf{Compare and Contrast}
Use your schoolyard as an example to compare with a true wilderness area. Create a large Venn diagram on the board or on a piece of chart paper. Students may record their ideas in their \textbf{My Wild Places Journals} on journal page 5.

\begin{center}
\includegraphics[width=0.5\textwidth]{venn_diagram.png}
\end{center}

\textbf{Adaptations:}
\begin{itemize}
\item Students can do two contrasting sketches of their home as it is now as it might be if it were a wilderness.
\item Use the provided Wilderness Map to locate your community and find the closest designated wilderness area. Discuss any patterns you see in the distribution of wilderness in our country. Create a class hypothesis about the pattern observed.
\item Create a bulletin board about wilderness using student sketches, terms from the Wilderness Act, and other student ideas.
\end{itemize}
Resources:

- Copy of the Wilderness Act in the Appendix.
- Copy of the Wilderness Map.
- Recommended read aloud or reading group books:
- Recommended reading for teachers:
- Wilderness Basics
  - [http://nature.nps.gov/views/Classic/KCs/Wilderness/HTML/01_Intro.htm](http://nature.nps.gov/views/Classic/KCs/Wilderness/HTML/01_Intro.htm)
How an Idea Becomes a Law

A bill is an idea that someone wants to become a law. An elected government representative must take the bill to the Legislature.

The bill is given to the House and the Senate and if passed is given to the Executive Branch (president). If the President signs it, the bill becomes a law.

The idea must be written into legal language. Writing a bill is called drafting. The bill may be drafted many times.

A committee, or a group is assigned to read the bill and decide if it should become a law or not.

The bill is given to the House or the Senate to read.
Phrases from the Wilderness Act of 1964

**Teachers:** The following phrases are from the Wilderness Act of 1964. Phrases vary in complexity.

**Options:**
1. *Cut out and distribute* phrases to groups of students to interpret and present to the whole class.
2. Discuss selected phrases as a whole class.

---

### Secure for the American people of present and future generations

Student speak: *Wilderness is protected for people today and people in the future.*

### Unimpaired for future use and enjoyment as wilderness

Student speak: *Wilderness is protected so that people can enjoy it in the future, not just today.*
In contrast with areas where man and his own works dominate the landscape

Student speak: Wilderness is different from other places where human life and influence is the most obvious feature.

An area where the earth and its community of life are untrammeled by man

Student speak: Wilderness includes the land, plants, animals and weather. It cannot be controlled by people.

Where man is a visitor who does not remain

Student speak: All people can visit wilderness, but they are only visitors. They cannot stay in wilderness forever.
Without permanent improvements or human habitation

Student speak: *People cannot build houses or live in wilderness. They also cannot make other changes to the landscape.*

Protected to preserve its natural conditions

Student speak: *Wilderness is protected so that it stays wild and natural.*

Opportunities for solitude

Student speak: *In wilderness people can find a quiet or natural place to spend time with few directions.*
May contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Student speak: *In wilderness you may find animals, rocks, historical buildings, beautiful views, natural processes, and human artifacts from our past.*

Opportunities for unconfined type of recreation

Student speak: *People can do many activities in wilderness, such as hike, ride a horse, hunt, fish, camp, take pictures, and be free.*

Affected primarily by the forces of nature

Student speak: *People cannot control what happens in wilderness. Natural forces, like wind, rain, fire, flood, and drought can impact wilderness.*
Wilderness Hero Study #1: Arthur Carhart

Use the wilderness hero concept map for your study of Arthur Carhart. Students may record their thoughts on journal page 19 in their My Wild Places Journals.

Discussion:
1. As a class or in small groups, discuss the word hero. Generate a list of qualities that describe a hero.
   Examples: selfless, brave, goes against the norm, working for good

   Who is a hero? What makes someone a hero?

2. Who was Arthur Carhart? Why is he considered a wilderness hero?

Extension Activity 1: Wilderness Hero Interview

Give a group of two or three students the Arthur Carhart Wilderness Hero concept map. Ask them to study the map and design a mock interview of Arthur Carhart. Students may play the following roles: Arthur Carhart, interviewer, US Forest Service director at the time Carhart proposed to protect Trapper Lake (1920s). Students may do further research about Arthur Carhart before presenting their interview to the class.

Extension Activity 2: Hero in My Home

After learning about Arthur Carhart and discussing why he is a hero, students will look for a hero in their own homes. Carhart is a hero for many reasons, but primarily because he dared to go against his assignment for the greater good. He took a risk. What kind of heroic activities or qualities can students find in the people they know?

Extension Activity 3: Wilderness Hero Timeline

Create a timeline that will include all five wilderness heroes by the completion of Wilderness Investigation #5. This might look like a long strip of paper on a wall, a piece of clothesline strung across a portion of the room, or a long line on a bulletin board. Add the key events from Arthur Carhart’s life to the timeline. Revisit the timeline for each wilderness hero. You may want to include other heroes identified in your community.
Wilderness Hero Profile #1: Arthur Carhart

He studied landscape architecture and worked for the Forest Service.

Arthur grew up in Iowa and loved natural landscapes.

He was assigned to survey Trapper Lake in Colorado for a road and a housing development. He did his job but recommended that the area be left wild.

He wrote many letters and documents about early ideas of wilderness and the importance of wilderness.

His idea was bold. No one had ever suggested this before!

Arthur worked his entire life to protect wilderness.

Trapper Lake is currently part of the Flat Tops Wilderness.

In 1920 the Forest Service took his suggestion. This was the first time the Forest Service decided not to develop a proposed area.

1892-1978

Arthur grew up in Iowa and loved natural landscapes.

He was assigned to survey Trapper Lake in Colorado for a road and a housing development. He did his job but recommended that the area be left wild.

He wrote many letters and documents about early ideas of wilderness and the importance of wilderness.

His idea was bold. No one had ever suggested this before!

Arthur worked his entire life to protect wilderness.

Trapper Lake is currently part of the Flat Tops Wilderness.

In 1920 the Forest Service took his suggestion. This was the first time the Forest Service decided not to develop a proposed area.

1892-1978
Wilderness Outside of the Classroom

Overview: As a whole class or in small groups, take a walk in a wilderness area or wild place, like a park or schoolyard. Use the list of what the students expected to find in a wilderness area to discuss whether the area is wilderness or not. Students will practice looking for evidence of wildness.

Teacher Goals: The teacher will...

| Review the Wilderness Act of 1964. |
| Guide students to investigate outdoors. |
| Facilitate a discussion of student observations in a wild place. |

Learning Targets

| I can make observations about my wild surroundings. |
| I can record my observations and ideas. |
| I can identify reasons why a location is wild. |
| I can make connections between my ideas and others’ observations. |

Standards Applied

| Geography: Places and Regions NSS-G.K-12.2 | Understand the physical and human characteristics of places. Understand that people create regions to interpret Earth's complexity. |
| Geography: Environment and Society NSS-G.K-12.5 | Understand how human actions modify the physical environment. |
| Science: Personal and Social Perspectives NS.K-4.6 | Understand changes in environments. |
| Science: Science and Technology NS.K-4.5 | Able to distinguish between natural objects and objects made by humans. |
| National Environmental Education 4th Grade Guidelines | Strand 1 Questioning, Analysis and Interpretation Skills C: Learners are able to locate and collect information about the environment and environmental topics. Observe and record characteristics, differences, and changes in objects, organisms, events, places, and relationships in the environment. |
| | Strand 1 Questioning, Analysis and Interpretation Skills E: Learners are able to describe data and organize information to search for relationships and patterns concerning the environment and environmental topics. Summarize observations and describe data. |

Estimated Time: 1½ hours to a half day

Materials:

- My Wild Places Journal for each student
- Drawing and writing supplies
- Clipboards or notebooks (optional)
- Binoculars, hand lenses, digital cameras (optional)
Teacher Background Information:
Few schools are within a reasonable distance of a wilderness area. Consider locating a wild place within walking distance or a short drive of the school. Parks, fields, and school grounds have many elements of wildness. To help reinforce terminology, review the class list of what might be found in a wilderness and the phrases from the Wilderness Act. Students may explore the wild place from a big perspective (standing back and looking at it as a whole) or they may explore minute elements with their fingers at a close distance, such as an ant hill near a picnic table, tall grass growing around a water fountain, or a squirrel nest in a tree. Encourage students to look closely at a variety of different areas or aspects of the wild place.

Teaching Sequence:
1. **Review**
   Take another look at the list of what the students expect to find in a wilderness and the defining words from the Wilderness Act. (See Wilderness Investigation #1.) Predict what students might expect to find on the field trip.

2. **Create Groups**
   Divide the class into smaller groups, if possible. Each group will need one adult. Explain the guidelines for safe exploration provided in the Appendix.

3. **Observe and Record**
   As the group walks around, look for evidence of wildness. (You might not find true wilderness.) Students may record their observations in their **My Wild Places Journals** on journal page 6. Students may also gather information by taking photos. If the area is large enough, assign groups of students to specific areas.

4. **Discuss/Recap**
   As a whole class, share what students found during the investigation and their methods of investigation. (What did you do to learn about the ant hill?)

   Examples of evidence of wildness: animal tracks, nests, unmanaged grasses, animal sounds, evidence of flood or fire

5. **Discussion:**

   What did you find that makes this place wild?

   Did you find anything surprising during your investigation?

   Did you find any evidence of wildlife?

   Is this place a wilderness?

   What makes this wild place unique?
Adaptations:

- If it is not possible to travel to a wild place, this experience could take place on school grounds.
- Students may choose to sketch their observations instead of writing observations.
- Students may use binoculars or magnifying glasses to help them make clear, concise observations.
- Map the wild area. Students may find it useful to create a basic map of the area and fill in items, creatures, or aspects they observe.
- Provide groups with a hula hoop or loop of string to set on the ground and help them focus on small-scale wildness investigations.

Teacher Notes:

- It may be helpful for students to work in partnerships as they investigate the wild place. You may also divide the wild place into smaller areas for partnerships to explore.
- Depending on the length and location of your trip to a wild place, you will need to adequately prepare yourself and your students for a successful experience. Students may need lunches, water, first aid kit, proper clothing, and sun protection.
- If you will be outside in wet weather, it may be helpful to provide each student with a large resealable bag to protect their journals.
- If equipment is available, students may also elect to gather information by taking photos or video with a digital camera. Sound recordings can be especially useful for review in the classroom or different media projects.
- Recommended reading for teachers:
Wilderness Profile Study #1: Bob Marshall Wilderness

Use the wilderness profile concept map for your study of the Bob Marshall Wilderness. Students may record their thoughts on journal page 22 in their My Wild Places Journals.

Discussion:
1. Can you find the Bob Marshall Wilderness on the Wilderness Map?

2. What do you notice about the number of wilderness areas near the Bob Marshall Wilderness?

   The Bob Marshall Wilderness is connected to two other wilderness areas: The Scapegoat Wilderness and the Great Bear Wilderness. Together they are called the Bob Marshall Wilderness Complex. Locals just call it The Bob.

3. A wilderness complex means the wild places are not split into smaller areas. Can you think of some benefits of having three large wildernesses joined together? (Hint: Consider benefits for wildlife and the habitat in general.)

Extension Activity #1: Mark the Wilderness Map
Highlight, circle, or mark the Bob Marshall Wilderness on your displayed Wilderness Map. Create a small card, flipbook or informational brochure about the unique features of the wilderness area. Add each studied wilderness as they are presented in the five Wilderness Investigations.

Extension Activity #2: Google Earth Virtual Tour
Use Google Earth to explore the Bob Marshall Wilderness. Based on your exploration, make a list or sketch of what you could do in different locations in the Bob Marshall Wilderness.

Extension Activity #3: Wilderness Narrative
After students learn about the Bob Marshall Wilderness, they can write a brief personal narrative of a journey into the wilderness. What do you see? What do you do? Where do you go? What do you encounter? What was it like?
**Wilderness Profile #1: Bob Marshall Wilderness**

**Landscape:** Rugged peaks, alpine (mountain) lakes, waterfalls, grassy meadows with streams, forests, and big river valleys.

**Named** after an early forester, wilderness preservation pioneer, and Wilderness Society co-founder Bob Marshall.

**Designated** as wilderness by Congress in 1964.

**Location:** Montana

**Native People’s Historic Presence:** Bitterroot Salish, Pend d’Oreille, Kootenai, Blackfeet

**Wildlife:** grizzly bear, lynx, mountain lion, wolf, black bear, moose, mountain sheep, mountain goat, elk, many types of birds, and many types of small mammals.

**Plants:** Whitebark pine trees, Lodgepole pine trees, Douglas fir trees

**Trails:** more than 1,000 miles

**Flathead Alps/ Bob Marshall Wilderness**
(from wilderness.net; image 3824)
Teacher Information:
At the end of each investigation work with the students to create a display or presentation about their learning, skills acquired, and experiences. It may be useful to take photos of students during the Wilderness Outside of the Classroom portion of the investigation. Use this space as a planning template.

Big Ideas from Wilderness Investigation 1:

Presentation or Display Ideas:

Student Involvement Component:

Location and Date of Event:

Logistics of Event: (refreshments, seating)