Wilderness

An Investigation of Place and Purpose for Children and Youth



Developed by Montana Conservation Elders
for 4th – 12th Grade Teachers
who want to pass on "the hush of the land."

Wilderness

An Investigation of Place and Purpose for Children and Youth

Unit Introduction

Our youth have become addicted to what is on a flatscreen, either held in their hand, on a desktop or as the focal element in their families living room. The lure of video games and social media has resulted in children not experiencing the great out of doors. Richard Louv, in his landmark book, *Last Child in the Woods: Saving Our Children From Nature-Deficit Disorder* (2005) documents this crisis and how this relatively new phenomena harms children and society.

Agencies like the Forest Service, and a host of non-profit organizations, encourage the public to learn about and enjoy what our forests have to offer. In Montana, over 60 percent of our State is public lands, including wilderness. Understanding the importance and power of nature and the heritage of conservation made manifest in our National Forests, wilderness, and public lands is indeed a responsibility and a birthright of the next generation. Without knowledge of, and experiences in, wild places, how will the next generation be capable of management of public lands in all their unique manifestations? Teaching about wilderness, conservation, and the value of public lands should be a part of our educational system.

Wilderness: An Investigation of Place and Purpose for Children and Youth has been developed in collaboration with the Montana Conservation Elders – Education Subcommittee. As the committee continues its work, we will revise and refine this draft. The unit in its current form, takes notes from Smoke's ongoing work and the work of his daughter Tammy Elser along with many ideas contributed by the Montana Conservation Elders.

Throughout the lessons, we will connect to other fine curricula that have been developed, including a number of high-quality environmental science curricula developed by the Confederated Salish and Kootenai Tribes, a fine lesson on the Badger Two Medicine by Dr. Shane Doyle, the Place Names Curriculum for the Flathead Reservation created by Dr. Michael Munsen, Dr. Jeff Crews, and Dr. Lisa Blank, and the Power of Place curriculum by Casey Olsen. All of the above have been published by or shared with schools through the Montana Office of Public Instruction Indian Education Division in fulfillment of the Montana Constitution *Indian Education for All* requirement. Additional support was contributed by Martha Kohl of the Montana Historical Society and the rich contributions of the Montana Conservation Elders in *A Wild Land Ethic: The History of Wilderness in Montana* edited by Dale Burk and Wayne Chamberlin, (2020).

We fully expect that any teacher who might pick up this curriculum will modify it to suit their students, their geographical area, and emerging issues concerning conservation. This series of lessons can be presented as standalone activities or a sequence of interrelated learning experiences, or be adapted to suit your needs.

Dedicated to the memory of Dale Burk, Jim Pozowitz, Louis Adams, Tom Edwards, and the many conservationists who worked tirelessly to save wild places for the next generation.

Rational

What we don't understand, we fail to protect. In a place rich in public lands, many residents take for granted that these treasured places will always be there. In addition, our economy depends on this fragile resource. Outdoor recreation is the leading economic driver for the State of Montana and students should learn how, and why we manage our wildlife, forests, and wilderness.

Few students know what wilderness actually is, and how it came to be preserved. Students should learn the history of conservation and the wilderness movement and why and how they came about. This curriculum is designed to help students explore the concept of wilderness, to understand and discuss the social and economic values of sound conservation.

Content Areas and Topics Addressed

US History, Tribal Histories, Montana History, Environmental Studies, Geography (map work and interpretation), Science, Reading (informational, primary and secondary sources), Writing, Speaking and Listening

Grade Levels / Learner Profile

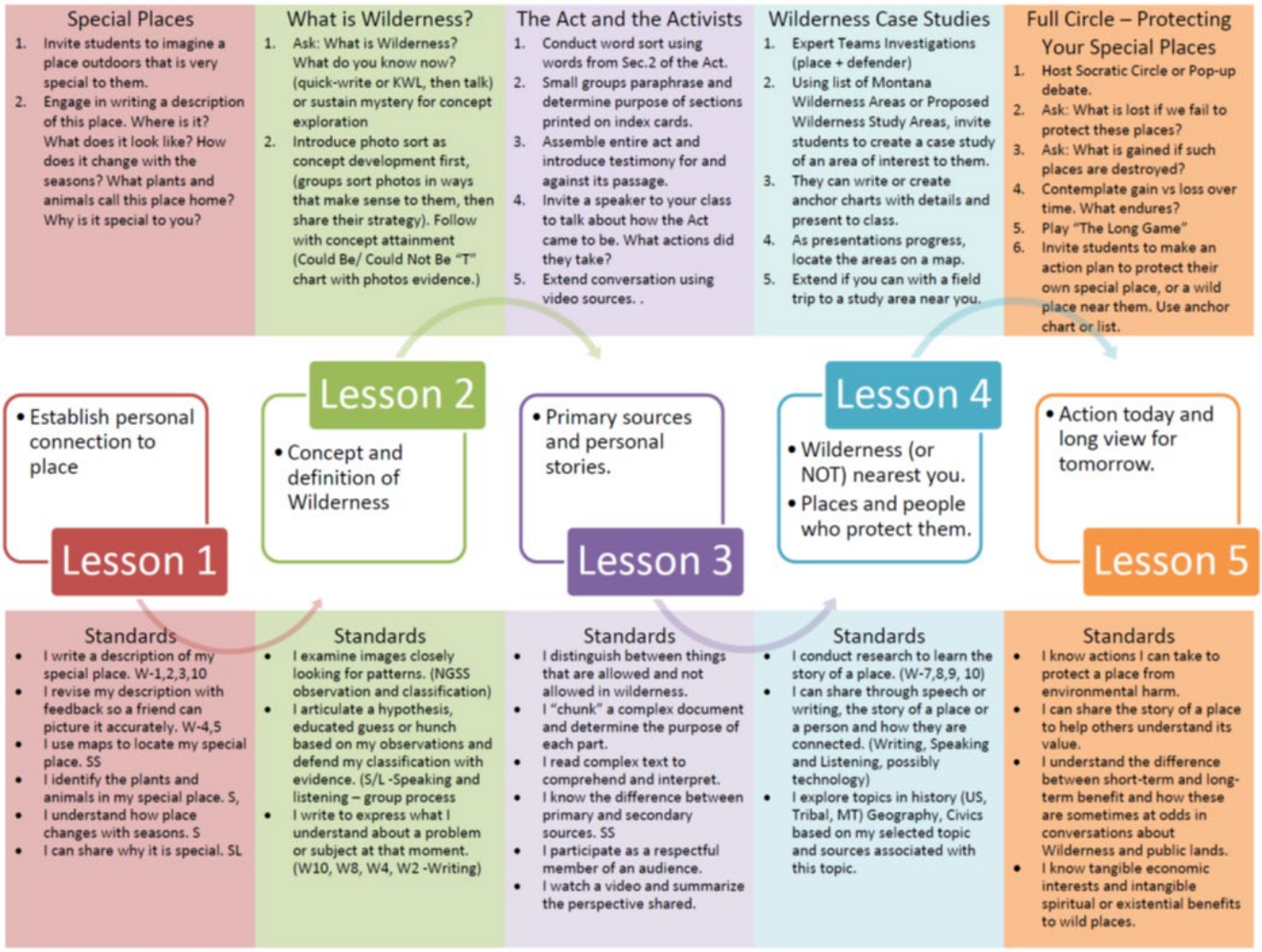
These lessons were written to be adaptable from grades 4 to 12. At upper grades, independent work and advanced research is ideal.

Materials

- Student journals or notebooks (ideal if you want deep reflection)
- Photo images 6 x 4 (ideally) representing wilderness and non-wilderness
- Photo images (1 for each of several MT Wilderness Areas, to be used for grouping)
- Terms associated with wilderness and non-wilderness on index cards (second sort activity)
- Wilderness Act Index Cards
- The Wilderness Act (redacted and original versions)
- Various text and video supports found in the appendices folder:
    - Louis Adams - Place of the Big Bull Trout
    - Louis Adams - Red Topped Mountains
    - 3 Miles An Hour
    - WIld Montana: Value of Wilderness
    - Arthur Carhart: Honoring the Promise
    - More….
- Various PowerPoint files shared to support specific lessons or activities
- Writing materials

- Technology for research (Internet connectivity and projection devises)
- Chart paper and markers (for anchor charts as selected)
- Maps! Include various forms and scales. Do not rely on Google Maps or Google Earth alone as students need both concrete and digital experience finding "place."

Overview and Pathway At-A-Glance



Lesson 1 ❁ A Special Place

A Special Place – Introduction

Students of any age have special places. In this introduction, your students will connect with and remember a place outdoors that is special to them. Invite them to recall the place across seasons, along with the plants and animals who live there. The lesson starts with a quick-write lasting only 3 to 4 minutes. After this, students turn and talk to a partner, reading what they have written to each other and possibly posing questions to add more detail. Usually, after such sharing which takes only about 5 minutes, kids will eagerly engage in another 3-minute revision session to add detail. As the teacher, you can take this descriptive writing through all the stages of the writing process - or NOT. It can rest in their notebooks as a simple draft description of their special place, or progress to become a finished and highly descriptive paragraph, an essay, or even a poem.

A Special Place – Time

20-30 minutes to several hours spread over a week if you select to have student return to this writing and use the writing process to achieve a finished product.

A Special Place – Materials

- writing materials typical in your classroom (can be a computer, notebook, paper, pencil…what have you)
- projection device and Internet access (if using short videos of elders in their own special places)
- photos (if you choose to use them) printed or digital from students', your own files or stock images

A Special Place - Learning Targets

- I write a description of my special place. W-1,2,3,10
- I revise my description with feedback so a friend can picture it accurately. W-4,5
- I use maps to locate my special place. SS
- I identify the plants and animals in my special place. S,
- I understand how place changes with seasons. S
- I can share why it is special. SL
- I reflect on how being in that place makes me feel (social and emotional learning, SEL)

A Special Place - Steps

1. Introduce students to the topic – Your Special Place.

2. Model by sharing a place in the outdoors special to you. Invite students depending on age to close their eyes and picture the placed as you describe it to them.
3. Be DETAILED. Include plants, animals, what you see in different seasons, smells and sensations associated with that place, and how it makes you feel when you are there, etc…
4. Ask: "Can you picture this place in your mind? How do you think you would feel if you were in this place right now?" (Peaceful, happy, reflective, content…. ?)
5. Now share an image or two of your special place.
6. Ask: "Does what you had in your mind look like this? How? And how did it differ?"
7. Have students get out writing materials.
8. Frame the task – "Today, you are going to write a detailed description of YOUR OWN special place outdoors. This is a Quick Write! Here are the rules. (Remind them of these rules and you may also use the PP slide created by Tammy Elser and attached to this lesson as a support for this Quick Write now, and others in the future.
    - You have (3 to 5 minutes) until the timer goes off to write everything you can think of describing your special place.
    - You must work silently (no talking as this is all about writing!)
    - Write quickly and do not stop. (Pen stays on paper, and in motion!)
    - Don't worry about spelling or grammar as you get your ideas down.
    - This is what you think or know now. There are no "wrong" answers.
    - Go! *Create urgency. Allow 3-4 minutes (or so) for the quick-write. Stretch time as you see all engaged. Once they lose steam, sound the "all clear" bell to stop.*
9. After alarm sounds allow just 15 seconds to finish a thought, then have them pair up with partner and share what they wrote. The partners can ask a question or two for clarification, allow 5 minutes or less.
10. When pair-share is done ask: How many of you would like a bit more time to add to what you wrote after talking with your partner?
11. Allow 3 minutes for a short revision based on conversations.
12. Invite students to bring a picture of their special place the next day if they have one.
13. You can extend this lesson using a layered approach. For example: add a 5-minute timed task to improve some aspect of the description each day for the week until students feel the description is so strong that others can picture their special place in their minds or even match it to a photo of the place. See extensions following.

Extensions

1. Invite students to take a picture of their special place and connect it to their writing or post the photos on a bulletin board and have each student read their description and see it others can guess which photo it describes.
2. Have students create a Special Places bulletin board connecting their descriptive writing to the photos they shared.
3. Construct a classroom map with students' special places referenced as a local geography lesson.

4. Invite careful revision and encourage them to craft their descriptions with special emphasis on figurative language and focused word choice.
5. Follow up by suggesting they use the images and their descriptions as the basis for a poem that captures the essence of the place.
6. Encourage students to think about, remember and visit their special place in their mind and memory during times of stress or as a form of quiet contemplation. This practice supports self-regulation and can diminish depression in children, youth, and adults.
7. Place Names curriculum (Flathead Reservation curriculum linked here is a rich investigation of place and includes many environmental science teachings)

Assessment

- Students descriptive writing whether draft or revised and edited.

Lesson 2 ❁ What is Wilderness?

What is Wilderness? – Introduction

Today students will explore images that are and are NOT wilderness. The photo set is designed to allow you to move from an open-ended concept development lesson (where groups of students sort images into categories of their choosing, then share how they categorized them) to a concept attainment lesson with the same images, where the teacher places the images into 1 of 2 columns, labeled Is/Is Not, and students hypothesize about what concept the categories represent. The teacher's mystery categories are "wilderness" and "not wilderness." Through these activities students investigate and internalize critical concepts that define wilderness.

Teacher Tip: Use short videos to learn or review lesson types and be better prepared. Here is an excellent example of a professor demonstrating Concept Attainment - the "Is" or "Is Not" example above.

Part 1: Concept Attainment

Part 2: Concept Attainment

What is Wilderness? – Time

1 to 2 class periods depending on whether you select to layer the concept development and concept attainment lesson or do a single whole class concept attainment lesson as a standalone. If that is your choice, assemble materials excluding the grouping photo of a MT wilderness area and start at step 18 with concept attainment. This shortens the time needed but also diminishes critical thinking, discussion, and group process opportunities.

What is Wilderness? – Materials

- Photo sets - one stack per student group of at least 12 images with 6 being wilderness (or having the characteristics of wilderness) and 6 clearly being trammeled or permanently altered or developed (having characteristics that are not allowed in wilderness.) A set by example are provided in the Appendices folder of the digital version of this curriculum.
- Letter size or 8x10 images of Montana Wilderness areas (1 per group, for grouping if you are using this strategy)
- Tape, chart paper, markers.
- Dry erase white board, or e-white board to conduct Concept Attainment lesson (sorting images into 2 columns, Yes / No or Could Be / Could Not Be.)
- Images for grouping activity of Wilderness Areas near you, go to wilderness.net (Arthur Carhart National Wilderness Training Center)

What is Wilderness? - Learning Targets

- I examine images closely looking for patterns. (NGSS observation and classification)

- I articulate a hypothesis, educated guess or hunch based on my observations and defend my classification with evidence. (S/L -Speaking and listening – group process
- I write to express what I understand about a problem or subject at that moment. (W10, W8, W4, W2 -Writing)

What is Wilderness? - Steps

Preparation

1. Assemble and print photo sets with at least 12 (6 “wilderness or could be” 6 “could not be wilderness”) based on the definitions in the Wilderness Act of 1964. Make a set for each group of 4 students (5 to 6 sets for a typical classroom.) Note that adding additional images that are ambiguous or controversial adds complexity to the tasks for example, mountain bikes (hotly contested) or historical structures, bridges and the like. These photos will be printed 6x4 (photo paper or index cards).
2. If using the grouping strategy below, print 8x10 or 9x11 images from Montana Wilderness Areas. https://carhart.wilderness.net/ Search images and select landscapes that show the diversity of places designated as wilderness. These will be used for grouping activity at the opening and then referenced later at the end of this lesson or sequence of lessons to reinforce and consolidate understanding. At that time, you will share the name of the wilderness area in the image and also its location. For now, it remains a mystery.
3. Review video supports for Concept Development and Concept Attainment lessons. You might select to do only Concept Attainment only, if time is a limitation or students are younger, but the rich discussion created by a full Concept Development lesson (open ended exploration) is usually worth it and your students will surprise you with their thinking and unique ways of categorizing the images.
4. Determine grouping. Sometimes I do this to make my groups feel random while actually allowing me control for a balance of skills, personalities and background experiences.
    - Select actual Montana Wilderness area photos featuring as many areas as you will need groups (usually 4-6) You will need one image per group. Be sure each group has a different wilderness area image. These are easy to find and download as JPGS by Googling: “photos, Montana Wilderness. You want identifying information and captions cropped out. You will need one photo for each group.
    - Print photos and place student names on the back side randomly.
    - Using an exacto knife or scissors, cut the photos into pieces from the back side so a student name appears on each piece, jigsaw puzzle style.
    - Mix up and place photos, face down, names up, randomly on a table.
    - Direct students to go to the table with the puzzle pieces, find their name and reconstruct their photo. To do so, they will have to mingle and locate their group members matching their puzzle pieces. Time this to keep them on task… musical chairs style.

- Once students know their group assignments, have them move to an assigned table or rearrange the room to accommodate group seating.

5. Give each group a large piece of chart paper and have them assemble and tape their photo together, keeping it separate from the chart paper.
6. On the chart paper, have them make a standard KWL three column format to record what they know or think they know, what they wonder or want to know, and later in the unit, what they learned.

We **K**now…	We **W**onder…	We **L**earned…

7. Direct the groups to analyze and discuss the photo and write what they know and what they wonder. The following questions may prompt them:
   - What do you notice?
   - Where do you think this is?
   - When was this photo taken? How can you tell? (students might notice season, or may think it was long ago based on their understanding of wild land.)
8. Have them assign a scribe and fill in the K (Know) and W (Wonder) on their chart paper. Only provide one color marker to all teams so you and they can see the progression of their thinking later.
9. As groups work, don't allow them to examine other groups photos.
10. Have each group share their findings, what they know and what they wonder, with the class and then show the photo they were assigned.
11. If you downloaded these images and placed in a single folder, it is easy to make a photo album of them in PowerPoint or from the electronic file for this unit, so the entire class can see the images clearly during the sharing or later when they are engaged in their case study and presentations. In Microsoft Office 2007 go to Insert > New Photo Album > then select your jpg files from your hard drive. It takes seconds. You can set the boarders, background etc… as you would any PP but it is much faster from the Photo Album feature.

Concept Development (option 1 or layer 1)

12. In this lesson, the STUDENTS have opportunities to explore a data set (photos in your case) in order to develop concepts regarding how that data can be grouped or categorized.
13. The data set we will use (much like a list of related items) is a packet of photos that include both possible Wilderness and Non-wilderness. All are outdoor images and vary in the degree to which people, animals (both wild and domesticated) and human built structures are present. NOTE

that the teacher sustains the inquiry by NOT sharing the concept up front. Student must grapple and collaborate sorting and resorting the images and labeling the groups logically.

14. Students in groups, each with a set of photos, begin creating clusters of images based on patterns of what they notice in the pictures.
15. With each grouping, students create labels (example: "these all have wild animals, these all have people, these have neither animals nor people….)
16. Students regroup and relabel until they can collectively think of no additional groups or labels that may apply.
17. Teacher might pose the question: What do you notice or think? What are the big patterns in the groups / labels you identified? Follow this with option 2 below to bring the target concept (Wilderness and Non-Wilderness) into focus.

Concept Attainment (option 2 or layer 2)

18. Using the same photo set above, this time the teacher will lead by placing images one at a time in one of 2 columns labeled "Could Be" and "Could Not Be." (I use tape and a dry erase white board with a "T" chart.)
19. Examples are placed one by one and after 3 or so, the teacher poses a question inviting a hypothesis.
20. Students make a hypothesis based on the patterns emerging so far. (Example after an image of a Grizzly sow and a cub in the backcountry, and an landscape with a barn in the background, a student might say "With animals and without animals? The teacher then adds an image with black bear crossing a highway or several cows in a pasture to the No or Could Not Be column, disproving this hypothesis.
21. With each incorrect hypothesis, the a short discussion of why it is disproven is conducted.
22. The process continues until students eventually come to, or are guided to, the answer (wild places or places with permanent structures, or other human impacts not allowed in Wilderness.
23. At the end, help students make a statement of their correct hypothesis and discuss the evidence (examples) in each image making it true.
24. Provide a brief definition of wilderness consistent with the Wilderness Act of 1964.

Extensions

1. An opening activity found in the next lesson involves a very fast repeat of this activity after the short definition is in place. It involved a list of things consistent and inconsistent with "wilderness character" as defined by the Act and uses as many terms found in the actual act as possible. Invite student groups to do this at the close of this day's lesson, or the beginning of the next to support their growing understanding and eventual reading of the Act. Have them move as class to view each groups sort of the terms to see if they can correct each other's inconsistency based on the introductory definition of wilderness provided so far.

Assessment

- Track the hypothesis presented and disproved or proved.
- Observe group interactions for participation (balance) and appropriate interaction.
- Use your cell phone to take quick pictures of various groups sorts, hypotheses and ideas as they emerge to compare to later understanding.

Lesson 3 ❁ The Wilderness Act of 1964

The Wilderness Act – Introduction

This lesson is designed to teach students a "divide and comprehend" approach to reading technical documents of any kind. The focus of this lesson is on reading the *Wilderness Act of 1964*, but the same process can be applied to treaties, constitutions, ordinances, and many other primary source historical documents that are written in sections. In addition, these strategies can be applied to tasks as mundane, yet important, as reading a contract or even a credit card agreement. Almost any technical document can be made accessible to nearly any reader if the right combinations of temporary supports are employed. Here, the focus on chunking, repeated reading, annotation, purpose setting, prediction, group process and structured analytic tools allow for deep understanding of the text and high levels of student success as readers. At the close of the lesson, students will have a good understanding of the Act, and would benefit from a guest speaker who participated in these efforts over decades.

The Wilderness Act – Materials

- Word Cards (to be printed on 6x4 plan index cards) one set per group (terms represent things prohibited and also present in Wilderness as defined by the Act.)
- Wilderness Act on Index Cards (printable chunks on plan 6x4 index cards). There are 18 chunks some of which are redacted, each student should get 1 – card. Note that longer passages can be split to accommodate larger class sizes as some are quite lengthy. The teacher might distribute cards to support struggling readers *(allows teacher to select shorter and simpler passages, without the students knowing!)*
- A clear copy of the Wilderness Act of 1964 (there are 3 versions attached, heavily redacted, moderately redacted and unredacted. Select based on grade level and students reading levels or limits to time, one per student.
- Highlighters for each student
- Word Work Form (one per group)
- Analysis of the Wilderness Act Form(s) (one per group)
- Impacts Form (one per group)
- Wilderness Connect Interactive Map of Wilderness Areas in US

Vocabulary

preservation, enduring, wilderness, character, resource, inclusion, appropriation, system, conservation, scenic, scientific, administration, designated, untrammeled, primitive, unconfined, practicable, classification, unimpaired, solitude, dominate, suitability, prohibition, provisions

The Wilderness Act - Day Three Learning Targets

- I determine the meaning of unfamiliar words in context (L4, 5, 6)
- I translate from legal language into common language parts (sections) of the Act. (R1, W4, W9, W10)
- I write in my own words (paraphrase), to summarize sections and subsections from the Act (L4, 5, 6, W4, W10)
- I interpret the intended purpose of each part of the Act from different points of view – conservationists, industry, scientists, developers etc… (RI1, RI2, RI3, RI6)
- I am aware of some of prohibited and included qualities or uses determined by the ACT (RI1)
- I integrate and evaluate content from a documentary film, looking for patterns, relationships and impacts of events on individuals and groups. (RI7, SL2, SL3)
- I write to reflect and deepen my content knowledge regarding the Wilderness Act, its passage and impacts on life in Montana today. (W2, W4, W7, W8, W10, L-All as required)
- I participate in discussions, listening to others reflections and sharing my own, to explore issues associated with the Wilderness Act. (SL1, SL4)
- I work in a team to develop an anchor chart or graphic depiction of the impact of Wilderness Act capturing key details and impacts. (Optional) (SL 5)
- I debrief in a presentation with my team to our class on these findings, using the anchor chart for visual support. (Optional) (SL5, SL6)
- I participate in a formal Socratic seminar for the purpose of exploring issues associated with the Wilderness Act. (Optional) (SL1, SL4, SL6)
- I develop a short report or essay on the Wilderness Act synthesizing information from this investigation. (Optional) (W2, W4, W5, W6, W7, W8, W10, L-All as required)
- I write to reflect and deepen my content knowledge regarding the Wilderness Act, its passage and impacts on life in Montana today. (W2, W4, W7, W8, W10, L as required)
- I distinguish between things that are allowed and not allowed in wilderness.
- I "chunk" a complex document and determine the purpose of each part.
- I read complex text to comprehend and interpret.
- I know the difference between primary and secondary sources. SS
- I participate as a respectful member of an audience.
- I watch a video and summarize the perspective shared.

The Wilderness Act - Steps

Day One (Approximately 1 hour)

1. (Option) Consider priming the students for this lesson by teaching about primary and secondary sources and how both are used to make sense of history. Martha Kohl of the Montana Historical Society has shared an outstanding PowerPoint with examples of primary and secondary sources, definitions, and an interactive 'quiz' you can do with your students. This will help them as they read the Wilderness Act, a primary source, and in discussion later of the perspectives and contributions of leaders in conservation, who can be both primary and secondary sources

depending on the resource. PowerPoint for this option is available in an electronic file of Appendices. Allow 30 minutes or an extra class period if selecting this option.

2. (Option) if you did not use the previous day, open this lesson by having students in small groups sort word cards (see attached file in Appendix folder) using the concept attainment (Could Be / Could Not Be) two column structure.
3. Invite students to do this but set a 5-minute timer. Once it goes off, debrief by reviewing your short definition from previous day, then invite entire class to move from group to group to correct and refine their thinking. Check to be sure no prohibited item (roads, generators, chainsaws, etc.) is included in the column that represents wilderness character.
4. Bell ringer activity to write their way in, ask students to write their best guess definition of "wilderness," then draw a line under this thinking.
5. Have students share with table partners and see if they can come to consensus on a working definition.
6. Have the class craft this working definition and write on the board.
7. Have students individually read a section or subsection of the Wilderness Act. (You might give them that section printed on an index card. This makes it seem more accessible to struggling readers or students with less confidence.)
8. Set a timer and give them 5 - 12 minutes for the first independent reading.
9. During the reading they highlight words or phrases they do not know or points of confusion.
10. Whole class, conduct a short discussion about the reading.
    - What does this document do?
    - Was it hard to read?
    - If yes, why?
    - Do you think there is a way to read this so you understand it?
    - Do you think others found the same parts or words to be troublesome or hard to understand?
11. Conduct a line up activity with their highlighted papers (or index card Section 2.c -definition of wilderness is recommended).
12. Holding their copies in front of them, facing out, have them mingle in the room looking for patterns in each other's highlighting.
13. After checking out each other's areas of confusion and hard words, have students line up from most highlighter to least highlighter facing the teacher.
14. Split the line in half.
15. Fold the lines by having the individuals at the center lead and walk down the line until they face the person at the end of each line, and the second person faces the next person etc…. creating divergent pairs.
16. Ask them to share and briefly discuss their areas of confusion and see if they have any tough terms in common.
17. Seat students in divergent groups of four. (divergent = high, low, and middle highlighting if these differences exist.)

18. In groups, have them reread the section of the act, stopping when they come to an unfamiliar word.
19. For each unfamiliar word, the group will develop a group "hunch" or a have-a-go definition and then they will cross check their hunch with a dictionary (online or text) selecting the definition that most closely matches their hunch.
20. Have each group use the word work form attached to capture their thinking.

Day Two (Approximately 1 Hour)

21. Seat students in groups from the previous day.
22. Invite groups to preview the entire Act (or your selected redacted version.)
23. Have groups read the Act, but this time, they work as a group to paraphrase section by section into simple, everyday language. Their goal is a GIST statement of the purpose of the section by way of a preview.
24. The key question for groups to focus on is, “What does this section do, or require?”
25. Encourage them to use their word work form from the previous day to aid in comprehension.
26. Have groups capture their paraphrased summaries of the articles on the Analysis of The Wilderness Act form (GIST version) attached.
27. They can do this as a simple bulleted list for each section.
28. You may select to require these statements to be complete sentences, or place other parameters to support strong language use. If not required today, have them do so in a subsequent day. Break the tasks up based on student stamina and frustration, but don’t allow the final to be stated as fragments.
29. Finally, have groups go back to the Act again, but this time, using the second analysis form, go sub-section by sub-section, discussing the following three questions.
    - What’s in it for the public, including residents of the State? + -
    - What’s in it for the wildlife? + -
    - What’s in it for the Montana and the Nation? + -
30. Use the data capture form attached to gather information from these different perspectives.
31. When all groups are done, they process this information by reporting back to the entire class.
32. Conduct a discussion, pop-up debate, or stage a Socratic circle to foster debate over divergent interpretations.
33. You may opt to provide points of clarification as you can, or simply collect lingering questions for another day.
34. Consider inviting an expert into the classroom for a discussion of The Wilderness Act. The Montana Conservation Elders hosts a Speakers Bureau for this purpose go to Montana Conservation Elders.
35. Follow up questions and activities include:
    - Who was involved in the framing of the Wilderness Act?
    - Who opposed it at the time and why?
    - Did any opponents change their thinking over time? Why or why not?
    - What might have happened if The Wilderness Act was not passed in 1964?
        - For people?

- For wildlife?
- To ecosystems?

36. Close this lesson by returning to the definition of the Wilderness Act at the beginning. In their individual notebooks, have them write about what they now understand the Wilderness Act to be and why it is important and relevant today. Ask them to be specific.

Extensions

1. To adapt this lesson for younger students, begin by providing a whole class demonstration. Using a Smart Board, or overhead projector, take one or two sections and model how to read it part by part and paraphrase into simple, clear and brief language. Fill out one entire analysis form.
2. You might also select to have younger students in groups take on elements - then assemble the entire Act after group parts are analyzed – jigsaw style.
3. Extend the learning for 4th- 6th graders by having them take their phrases and rewrite as a group in complete sentences.
4. Extend high school students' abilities to interpret the Act by assigning additional research and advanced reading. Have students do this work in pairs or groups, chart out their findings over a day or two and then report back to the entire class.

Assessment

- Definition and revised definition (whole class and individual).
- Highlighted individual copies of the Act, showing initial confusion or lack of understanding.
- Word work forms completed from each group with key terms from the Act defined.
- Analysis of the Wilderness Act forms for each group.
- Direct observation of student discussion and equitable group participation.

Teacher Notes and Cautions

- Our culture has grown divisive, intolerant, and thoughtful discussions are few and far between. This unit presents an opportunity to take an issue some would consider controversial, and model skills of discourse. As with civics, the art of argumentation needs to be taught and practiced. Arguments demand critical thinking, the statement of a stand or claim, then the presentation of evidence grounded-in-reality. The Wilderness Act went through an extensive period of argument. The Wild Montana website states,

> "After 66 drafts and 18 hearings, the Wilderness Act of 1964 passed the House of Representatives with just one dissenting vote. One of the most broadly supported bills in U.S. history, this landmark conservation tool has led to the designation of 15 wilderness areas in Montana and served as a model for the

Confederated Salish and Kootenai Tribe's designation of the Mission Mountains Tribal Wilderness."

Each Wilderness Study Area under consideration is fraught with contentious issues. Civil, respectful discourse, with presentation of evidence must be taught and practiced. Listening and speaking skills must be taught and practiced. One standard for literacy (RI8) can be paraphrased as 'unpacking arguments and weighing evidence' and is foundational to engaging in civil discourse.

- Summarization and the ability to take complex content and translate it so you can more deeply understand it is a critical skill that needs to be practiced often. Use this same lesson format to support further development of this skill with other primary source documents such as treaties, constitutions, agreements, or contracts.
- Repeated reading of primary source documents on complex and unfamiliar subjects is essential for comprehension. This lesson involves independent reading followed by at least three purpose driven repeated readings in small group settings. Each exposure to a complex text needs to place different cognitive demands on the learner to increase depth of comprehension. When you use primary sources, work to stretch students thinking, shift perspectives or set new purposes for their reading.
- If the text is too difficult for independent reading for your students, consider scaffolding to support their reading comprehension. You might select to read a complex section aloud, then partner read (every other section…) along with the students to build confidence. Move them gradually to ever higher levels of independence while requiring them to engage actively in reading.

Word	We think it means … in this document.	The closest dictionary definition to our hunch is….
untrammeled (example)		

Analysis of The Wilderness Act By (group names here)_____

Directions: Summarize each article in the fewest words possible. Use plain clear language. Do not use more than 10 words.

	GET the GIST – What does each section DO?
Section 1	
Section 2	
Section 3	
Section 4	
Section 5	
Section 6	
Section 7	

Analysis of the Wilderness Act By (group names here)_____

Directions: Summarize each article in the fewest words possible. Use plan clear language. Do not use more than 10 words.

Section 1	
Section 2	
(a)	
(b)	
(c)	
Section 3	
(a)	
(b)	
(c)	
(d)	
(e)	

Section 4	
(a)	
(b)	
(c)	
(d)	
Section 5	
(a)	
(b)	
(c)	
Section 6	
(a)	
(b)	

Impacted Parties	Positive Impacts +	Negative Impacts -
What's in it for the people?		
What's in it for wildlife?		
What's in it for Montana and the Nation?		

Lesson 4 ❁ Wilderness Case Studies

Wilderness Case Studies – Introduction

This lesson can take many forms and be a short as a single class period with a second to follow-up and report findings, or an entire month-long unit conducting a deep investigation into a place, person, perspective or event with significant original research. Casey Olsen, author or the *Power of Place* curriculum published as an OPI Indian Education for All curricular resource has these suggestions that fit very well here:

Overview of the Basics:

- Start Where You Are
- Choose Your Focus
- Find Directions for the Research
    - Local Texts & Resources
    - Cultural & Historical Advisors
    - Help Students Connect Personally Through Place
- Do Authentic Research
- Share with a Genuine Audience (Students Educate the Public)

This is a wise list to start any investigation and particularly relevant to a place-based project to be conducted by individuals or small groups. To see what Casey's students created, and explore the powerful process they used go to Power of Place Curriculum.

Wilderness Case Studies – Materials

- Mission Mountain Tribal Wilderness Case Study Document (in appendices)
- Our Last Refuge The Badger Two Medicine Story Video
- Preserving Sacred Landscapes _The Badger Two Medicine Curriculum
- Wild Montana (for descriptive list of Montana's Wilderness Areas and Wilderness Study Areas)
- Power of Place Curriculum
- Confederated Salish and Kootenai Tribes Natural Resource Education Curricula
- Fire on the Land Curriculum
- Explore the River Curriculum
- Wilderness Connect
- Carhart Wilderness Investigations
- Missoula Conservation Roundtable Site (awardees!)
- Montana Outdoor Hall of Fame Site
- Montana Indians: Their Histories and Locations
- Packets with articles, resources, maps, images (see following) if conducting Expert Teams activity
- Internet, digital display (TV or smart board)

- Chart paper and markers for groups

Vocabulary

case study, biography, wilderness area, proposed wilderness study area

Wilderness Case Studies - Day Four Learning Targets

- I conduct research to learn the story of a place. (W-7,8,9, 10)
- I can share through speech or writing, the story of a place or a person and how they are connected. (Writing, Speaking and Listening, possibly technology)
- I explore topics in history (US, Tribal, MT) Geography, Civics based on my selected topic and sources associated with this topic.

Wilderness Case Studies - Day Four Steps

Option 1 – Expert Teams

1. Prep in advance creating a packet of related resources for each area to be investigated by each group. Carhart Wilderness Investigations are a GREAT resource with images, maps, bios, and descriptions of areas. Also, short biographies can be found at the Missoula Conservation Roundtable Site (awardees!) and also the Montana Outdoor Hall of Fame Site.

Class Period 1

2. Open by sharing two distinct case studies the Badger Two Medicine and the Mission Mountains Tribal Wilderness. The Badger Two Medicine story is well captured by Dr. Shayne Doyle for OPI here Preserving Sacred Landscapes _The Badger Two Medicine Curriculum
3. This video (25 minutes) is used in Dr. Doyle's lesson and is a fine jump off point. Our Last Refuge The Badger Two Medicine Story Video
4. Consider having students keep a double entry journal for notes while viewing: two columns, They Say / I Think Ask students to capture names and perspectives as they can.
5. Search and share bio of John Murray on Outdoor Hall of Fame site.

Class Period 2

6. The Mission Mountains Tribal Wilderness Case Study is a small book that can be shared or read in pieces by the group.
7. Emphasize the 3 Yaya's story of activism saving Ashley Creek and ultimately the Mission Mountains from logging claims.
8. Search and share bios of the 3 Yaya's, who were inducted into the Outdoor Hall of Fame can be found on that website and shared whole group.

Class Period 3 - 4

9. Break class into groups of 4 or 5.
10. Provide each group with chart paper and markers.
11. Provide each group with a packet of resources to explore on a nearby Montana Wilderness Area or Study Area. Each group will have 1 copy of each artifact or resource. If a longer reading is included, make a copy for each group member. Groups will have a different place, person, etc. Include the following:
    - Description of the place with a bit of background if possible. (Wilderness Area or Study Area)
    - Brief bio of a person who defended or advocated for that place.
    - 1-2 maps including context
    - 1-5 images
    - Short history, news article, testimony, etc. that helps tell the story of that place (if possible)
12. Using a timer tool allow groups 10-15 minutes to read the short articles or example artifacts or resources provided.
13. After silent reading and review time, set the timer for another 10-15 minutes asking students to discuss and then create an anchor chart of their findings summarizing the information for the class.
14. Invite them to tape images and maps to their charts paper.
15. Have expert teams report out on their place to the rest of the class one by one, (5 minutes each) connecting the story of the place, person and status etc.
16. This workshop is a powerful way to begin an in-depth study of a topic. It can be accomplished in 1-2 class periods.

Places	People	Perspectives
Wilderness Areas in Montana Absaroka-Beartooth Wilderness Anaconda-Pintler Wilderness Bob Marshall Wilderness Cabinet Mountains Wilderness Gates of the Mountains Wilderness Great Bear Wilderness Lee Metcalf Wilderness Medicine Lake Wilderness Mission Mountains Wilderness Mission Mountains Tribal Wilderness Rattlesnake Wilderness Red Rock Lakes Wilderness Scapegoat Wilderness Selway-Bitterroot Wilderness UL Bend Wilderness Welcome Creek Wilderness **Wilderness Study Areas in MT** Ten Lakes WSA Big Snowies WSA Blue Joint WSA	Theodore Roosevelt Hubert Humphrey Howard Zahniser Mike Mansfield Lee Metcalf Cliff Merritt John Craighead Cecil Garland Tom Edwards Stuart Brandborg Thurman Trosper Doris Mellner Ann Sutton …and many more.	Suggest Each Chapter of *A Wild Land Ethic* could be focus of individual or small group study. Chapters list here.

Hyalite-Porcupine-Buffalo Horn WSA Middle Fork Judith WSA Sapphire WSA West Pioneer WSA Antelope Creek WSA Axolotl Lakes WSA Bell and Limekiln Canyons WSA Big Horn Tack-on WSA Billy Creek WSA Bitter Creek WSA Black Sage WSA Blacktail Mountains WSA Bridge Coulee WSA Burnt Lodge WSA Burnt Timber Canyon WSA Centennial Mountains WSA Cow Creek WSA Dog Creek South WSA East Fork Blacktail Deer Creek WSA Elkhorn WSA Ervin Ridge WSA Farlin Creek WSA Henneberry Ridge WSA Hidden Pasture Creek WSA Hoodoo Mountain WSA Humbug Spires WSA Musselshell Breaks WSA North Fork Sun River WSA Pryor Mountain WSA Quigg West WSA Ruby Mountains WSA Seven Blackfoot WSA Sleeping Giant/Sheep Creek WSA Square Butte WSA Stafford WSA Terry Badlands WSA Twin Coulee WSA Wales Creek WSA Woodhawk WSA Yellowstone River Island WSA		

Extensions

- Have students use Wilderness Connect site images to create a slide show of images from Wilderness Connect

- Conduct discussion after viewing images about allowable uses. What do they notice? What don't they see? Where are outdoor toys like snowmobiles and mountain bikes allowed? What are the implications of this?
- Consider following Casey Olson's lead and developing a longer investigation with a product that supports understanding of a place and is available to the public.
- Use Montana Indians: Their Histories and Locations to dig into the Tribal history of an area under study. Who was there? When? How did they interact with this landscape? Where are they located today? Note that the Wild Montana list of Wilderness Areas and Study Areas includes the Tribes that called that area part of their traditional homeland.

Assessment

- Double Entry Journals
- Anchor chart for each group
- Group presentations
- Larger projects with products

Teacher Notes and Cautions

Research Organizer Tool (with gratitude to Casey Olsen)

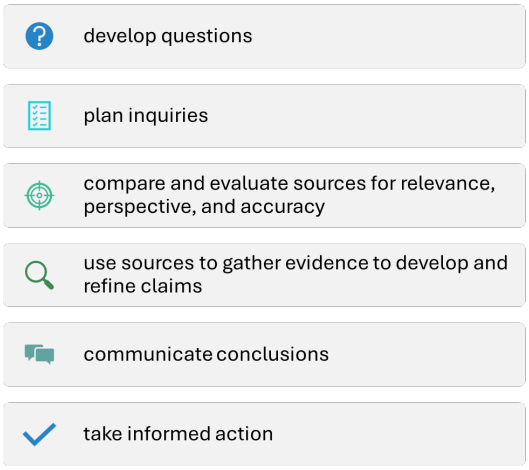
Student Researcher Name(s): _____

Source of Information Text, Oral History, Expert, Web- site, Field Visit.	**Type of Research:** ● Personal Experience? ● Primary Research? ● Secondary Research?	**Annotations** Record any notes about what you learned from this source.

Lesson 5 ❁ Protecting *Your* Special Place

Protecting *Your* Special Place – Introduction

The Montana standards for Social Studies require students to develop six skills in an investigation. In this lesson, the arc of inquiry comes to fruition with a focus on communicating conclusions (including civil argumentation) and taking informed action. Students may participate in a Socratic seminar using a formal discussion protocol, or a less formal pop up debate in class. They might play an interactive game called The Long Game pitting the forces of need and greed against the context of a specific place. And they will be encouraged to consider a plan to advocate and defend their own special places.



Protecting *Your* Special Place – Materials

- Question set for Socratic Seminar or pop-up debate protocol
- The Long Game game cards
- Chart paper and markers
- Writing materials as required
- WOOP goals and planning ideas (WOOP stands for Wish, Outcomes, Obstacles and Plans) this link is to a fun interactive online planning app where students could be encouraged to create a goal for their own informed action and advocacy for protection of a special place.

Vocabulary

advocacy, argument, claim, counter claim, evidence,

Protecting *Your* Special Place - Day Five Learning Targets

- I participate in a discussion, Socratic Circle, or Pop-up Debate engaging in civil and thoughtful conversation about big ideas and potentially heated topics stating my claims in the argument and defending those claims with evidence based on facts.
- I know actions I can take to protect a place from environmental harm.
- I can share the story of a place to help others understand its value.
- I understand the difference between short-term gain vs. long-term value and how these are sometimes at odds in conversations about Wilderness and public lands.
- I know tangible economic interests and intangible spiritual or existential benefits to wild places.

Protecting *Your* Special Place - Day Five Steps

Socratic Seminar Option (with gratitude to Dr. Anna East for her concise instructions!)

1. Split the class into even groups of no more than eight students. If you have a large class, you can use three groups and have one group out of rotation at all times. For the purposes of this description, two groups will be used.
2. Place enough chairs for one group in a circle with ample space in the center. The inner circle sits on the floor, in the center. The outer circle sits in chairs. Option is outer circle stands and inner circle is seated in chairs.
3. The rules for the process are: stick to the question, use your text, your notes, your experiences, and your thoughts to support your ideas. The outer circle must not speak while the inner circle discusses the question.
4. Allow eight to ten minutes for the inner circle. Participate as the teacher only to ask another question or re-focus them if necessary. Stay out of it completely, if possible.
5. After the inner circle is done, have the outer circle comment on the inner circle's successes. They should discuss how the inner circle functioned (civility, equity, welcoming diverse opinions while taking a stand), not what they talked about. They might offer suggestions, comment on interruptions or silences, or focus on a specific aspect of listening/speaking skills that you have prepared them to watch for. Two to three minutes is sufficient for this discussion.
6. The groups then switch places for round two. It is useful to provide a new question.

The Long Game Option

1. Place students in small groups of 4-6.
2. Provide groups with chart paper, markers, and 3 decks of Long Game Cards (Need, Greed, and Place)
3. Groups flip a card from each pile (color coding here) and then discuss the scenario based on the idea of The Long Game (in some cultures, seven generations into the future are what elders based their current decisions upon. How will my action today impact my great, great, great, great grandchild?
4. Set a timer tool for 5 minutes to talk, then another 2 minutes to draw based on the scenario. At the end they say thumbs up or down to the proposed development.

Extensions

Socratic Seminar Considerations

The following outstanding suggestions are provided by Dr. Anna East, who mastered this protocol in her high school English classes.

- Consider asking different questions of each group, or if one question provoked much discussion and there's clearly more to be said, allow the second group to pick up where the first group left off.
- Consider never breaking the awkward silence. It is good for students to feel the pressure, to have to rescue themselves. If you rescue them, they will look to you for guidance, and that is the opposite of the Socratic premise.

- Consider providing sentence starters such as “I agree because…” or “I disagree because…” or “Can you tell me more about…” These can feel contrived, but they are helpful if students will use them.

The Long Game Considerations

Protection Plan Considerations

Assessment

Teacher Notes and Cautions

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https://www.youtube.com/playlist?list=PLslv1AWg6F8aFgCmiFb8tQPnF9GANlDcq

Wild Montana Video History Playlist