

THE BIRTH OF GRIZZLY BEAR CONSERVATION

Natural Resource Management

Developed By: Dan Bertalan

Target Grade Level: 9-12

In This Activity...

Students will research and debate different stakeholder perspectives as 1850's grizzly bear management visionaries in developing a long-range conservation plan for protecting the habitat and populations of grizzly bears. Their plan will consider the safety of humans as they wrestle with the challenges of attempting to balance the biological carrying capacities of grizzly bears with the quickly changing definition of social carrying capacity for finding a place on the landscape for grizzlies.

Science Categories

Natural resources management, wildlife management, environmental preservation, social responsibility

Time Frame ~2.5 hrs; 3 class periods

- **Session 1:** Introduction, Video, Distribute Worksheets
- **Session 2:** Team Research & Plan Development
- **Session 3:** Stakeholder Group Presentations & Class Debate

Overview

Using flint-tipped spears and arrows, Paleo-hunters played a lethal role in the extinction of over 90 species of North America's megafauna over the past 15,000 years. Unfortunately, European immigrants continued killing America's wildlife for food and profit and by 1886 they had wiped out the passenger pigeon and killed an estimated 33 million buffalo, leaving only 540 bison in the Yellowstone area of Montana. One species in particular also presented both perceived and real physical threats to settlers expanding across the Western states during the 1800's... grizzly bears. That's one reason they were also killed indiscriminately which greatly reduced their range and population.

EDUCATIONAL PARTNERS



THE BIRTH OF GRIZZLY BEAR CONSERVATION

High School Lesson – Wildlife Management and Conservation Planning

But things began to turn around in 1872, when the outcry of early conservationists prompted President Ulysses S. Grant to establish Yellowstone, the nation's first national park. Over the following years, other conservation pioneers such as John James Audubon, John Muir, Aldo Leopold, Ding Darling, Teddy Roosevelt and many others made their voices and influence heard and helped stop the mindless slaughter of the nation's wildlife.

The Lacey Act of 1900 prohibited the illegal trade of wildlife by making it a federal offense to violate any underlying U.S. or foreign wildlife or conservation law. In short, the act banned the slaughter of America's wildlife by unregulated market hunters. This also helped pave the way for The North American Wildlife Conservation Model that has two basic principles; 1) our fish and wildlife belong to all Americans, 2) fish and wildlife need to be managed in a way so their populations will be sustained forever for future generations.

In this lesson, students will assume the fictional historic roles of 1850's user groups in researching, presenting, and debating on how to develop a "1850's Grizzly Bear Conservation Plan". These various stakeholder groups will set the stage for peer-driven learning where the entire class will ultimately vote on a grizzly bear conservation plan that they believe might achieve some balance between the biological carrying capacities of grizzly bears back in 1850 with a vision of the future changing social carrying capacity with the human expansion across America's western landscape.

Enduring Understanding

Students will understand the differences between conservation management for the primary benefit of humans versus the long-term benefit of large and potentially dangerous wildlife species that live on the landscape with them.

Content Objectives

Students will be able to evaluate the social and wildlife considerations that determine a responsible grizzly bear conservation plan for an area. They will also be able to research, debate and develop a grizzly bear conservation plan that benefits the long-term human and grizzly bear populations.

Learner Objectives

Students will use videos and online research to determine what solutions and strategies various stakeholders use in developing complex wildlife conservation plans. Students will use other online research, group discussions and debate to develop their own grizzly bear conservation plan that uses a combination of social, economic, safety and concepts for finding a place on landscape for grizzly bears.

Process Objectives

Students will work in small and large groups to process new information and use evidence to come to conclusions.

Materials Needed

- Access to computers and the Internet
- Link to: [The History & Distribution of Grizzly Bears](#) video
- Pre-lesson worksheet with questions to fill in while watching the video
- Pioneers Grizzly Bear Conservation Stakeholder Worksheets

Procedure

Session 1 – Before Watching [The History & Distribution of Grizzly Bears](#) video or reading background information ask students about the fundamental concepts of “wildlife conservation”. Also ask students how they may have been involved in some aspect of “wildlife conservation” during their outdoor recreational pursuits, which includes hunting. Lead a short discussion on what students have learned about their roles and responsibilities in conservation of America’s wildlife.

Print and distribute the Pre-Lesson Student Worksheet (further in this PDF). Instruct students to fill in the worksheet while watching the video. Go over the questions with the students before viewing so they know what to look and listen for. After viewing the video, review and discuss the answers to the questions as a class. Encourage discussion.

Next, divide the class into these **three** 1850’s Grizzly Bear Conservation Stakeholder groups:

1. **Pioneers First**
2. **Grizzly Bears First**
3. **Seven Generations**

Inform students they will be working together as teams within their stakeholder group to achieve their assigned goals in Sessions 2, 3 and 4.

Session 2 – Team Research & Plan Development

Print and pass out the three 1850’s Grizzly Bear Conservation Stakeholder worksheets to each of the groups and review the background information.

The three (3) stakeholder groups have specific and sometimes conflicting subjective goals in developing their 1850’s Grizzly Bear Conservation plan. In their separate assigned stakeholder groups, have the students perform online research from the links provided, plus other sources they discover, then discuss and develop within their group their Grizzly Bear Conservation plan. The worksheets provide instructions and research guidelines for students to gather information.

Inform each group that two members of their group will also present their 1850’s Grizzly Bear Conservation Plan recommendations to the class during Session 3. Their presentations should be supported by factual research and/or evidence, and presented with at least one form of art or media prepared by the group (either video, poster, graphs, charts, images).

THE BIRTH OF GRIZZLY BEAR CONSERVATION

High School Lesson – Wildlife Management and Conservation Planning

Session 3 – Stakeholder Group Presentations & Class Debate

Have each stakeholder group present their 1850's Grizzly Bear Conservation Plan and supporting research and reasons for key points in their plan. Limit each group to seven (7) minutes presentation time followed by a few minutes of questions by the other groups.

After the three groups present their conservation plans, lead a group discussion on how similar or key parts of the various plans could be included in an overall plan that would satisfy the main interests of all three stakeholder groups. The teacher may assist in leading the discussion while listing the key parts of a **joint 1850's Grizzly Bear Conservation Plan**.

Conclude the discussion by challenging students to come up with ideas on how they can spread the word to other students and the general public about the importance of a genuine 21st Century Grizzly Bear Conservation Plan.

Assessment

Students will be informally assessed based on their participation within their groups and during class presentations and discussions. Teachers could collect the discussion notes students took during the video to check for completion.

Students can be formally assessed using their Pre-Lesson Student Worksheets. Students can be assessed on meeting the formal learning objectives on how thoroughly students completed their Grizzly Bear Conservation Plan worksheets.

Extension Activities

Students can perform online research to see if any state or federal conservation agencies have developed plans that included parts of their stakeholder plans. They can give a short presentation to the class on how grizzly bear conservation professionals validated parts of their plans.



THE BIRTH OF GRIZZLY BEAR CONSERVATION

High School Lesson – Wildlife Management and Conservation Planning

Educational Standards

COMMON CORE ELA

READING INFORMATIONAL TEXT

GRADES 9-10

- **CCSS.ELA-Literacy.RI.9-10.1** Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- **CCSS.ELA-Literacy.RI.9-10.2** Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.
- **CCSS.ELA-Literacy.RI.9-10.7** Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.
- **CCSS.ELA-Literacy.RI.9-10.8** Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.

READING INFORMATIONAL TEXT

GRADES 11-12

- **CCSS.ELA-Literacy.RI.11-12.1** Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.
- **CCSS.ELA-Literacy.RI.11-12.3** Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.
- **CCSS.ELA-Literacy.RI.11-12.7** Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.

WRITING

GRADES 9-10

- **CCSS.ELA-Literacy.W.9-10.1** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
 - **CCSS.ELA-Literacy.W.9-10.1.a** Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence.
 - **CCSS.ELA-Literacy.W.9-10.1.b** Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns.
 - **CCSS.ELA-Literacy.W.9-10.1.c** Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.

THE BIRTH OF GRIZZLY BEAR CONSERVATION

High School Lesson – Wildlife Management and Conservation Planning

- **CCSS.ELA-Literacy.W.9-10.1.d** Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
- **CCSS.ELA-Literacy.W.9-10.1.e** Provide a concluding statement or section that follows from and supports the argument presented.
- **CCSS.ELA-Literacy.W.9-10.4** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)
- **CCSS.ELA-Literacy.W.9-10.5** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grades 9-10 here.)
- **CCSS.ELA-Literacy.W.9-10.7** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
- **CCSS.ELA-Literacy.W.9-10.8** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.
- **CCSS.ELA-Literacy.W.9-10.9** Draw evidence from literary or informational texts to support analysis, reflection, and research.

WRITING

GRADES 11-12

- **CCSS.ELA-Literacy.W.11-12.1** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
 - **CCSS.ELA-Literacy.W.11-12.1.a** Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.
 - **CCSS.ELA-Literacy.W.11-12.1.b** Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases.
 - **CCSS.ELA-Literacy.W.11-12.1.c** Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
 - **CCSS.ELA-Literacy.W.11-12.1.d** Establish and maintain a formal style and objective

THE BIRTH OF GRIZZLY BEAR CONSERVATION

High School Lesson – Wildlife Management and Conservation Planning

tone while attending to the norms and conventions of the discipline in which they are writing.

- **CCSS.ELA-Literacy.W.11-12.1.e** Provide a concluding statement or section that follows from and supports the argument presented.
- **CCSS.ELA-Literacy.W.11-12.4** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)
- **CCSS.ELA-Literacy.W.11-12.5** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grades 11-12 here.)
- **CCSS.ELA-Literacy.W.11-12.7** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
- **CCSS.ELA-Literacy.W.11-12.8** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
- **CCSS.ELA-Literacy.W.11-12.9** Draw evidence from literary or informational texts to support analysis, reflection, and research.

SPEAKING AND LISTENING

GRADES 9-10

- **CCSS.ELA-Literacy.SL.9-10.1** Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
 - **CCSS.ELA-Literacy.SL.9-10.1.a** Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.
 - **CCSS.ELA-Literacy.SL.9-10.1.b** Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed.
 - **CCSS.ELA-Literacy.SL.9-10.1.c** Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions.

THE BIRTH OF GRIZZLY BEAR CONSERVATION

High School Lesson – Wildlife Management and Conservation Planning

- **CCSS.ELA-Literacy.SL.9-10.1.d** Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.
- **CCSS.ELA-Literacy.SL.9-10.2** Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.
- **CCSS.ELA-Literacy.SL.9-10.4** Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.
- **CCSS.ELA-Literacy.SL.9-10.5** Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

SPEAKING AND LISTENING

GRADES 11-12

- **CCSS.ELA-Literacy.SL.11-12.1** Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
 - **CCSS.ELA-Literacy.SL.11-12.1.a** Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.
 - **CCSS.ELA-Literacy.SL.11-12.1.b** Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.
 - **CCSS.ELA-Literacy.SL.11-12.1.c** Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.
 - **CCSS.ELA-Literacy.SL.11-12.1.d** Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.
- **CCSS.ELA-Literacy.SL.11-12.2** Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

THE BIRTH OF GRIZZLY BEAR CONSERVATION

High School Lesson – Wildlife Management and Conservation Planning

- **CCSS.ELA-Literacy.SL.11-12.4** Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.
- **CCSS.ELA-Literacy.SL.11-12.5** Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

Next Generation Science Standards (High School)

- **HS-LS2-1 Ecosystems: Interactions, Energy, and Dynamics** Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.
- **HS-LS2-2 Ecosystems: Interactions, Energy, and Dynamics** Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales.
- **HS-LS2-7 Ecosystems: Interactions, Energy, and Dynamics** Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.*
- **HS-LS2-8 Ecosystems: Interactions, Energy, and Dynamics** Evaluate evidence for the role of group behavior on individual and species' chances to survive and reproduce.
- **HS-LS4-6 Biological Evolution: Unity and Diversity** Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.*

Resources

Grizzly Bear Booklet – [Grizzly Bears of Montana: Second Edition](#)

THE BIRTH OF GRIZZLY BEAR CONSERVATION

Pre-Lesson Student Worksheet

Name:

Class:

Date:

Before watching [The History & Distribution of Grizzly Bears](#) video or exploring the website, review these questions below and look for answers during the video.

QUESTIONS

1. What was the historic range of grizzly bears in North America before European immigrants or their descendants began pioneering westward?
2. What types of “pioneering activities” may have affected humans from living with grizzly bears on the landscape during the 1800’s?
3. What happened to grizzly bear distribution and populations during the 1800’s?
4. Why didn’t Native American populations have such an impact on grizzly bears populations compared to immigrant pioneers?
5. How did the Lacey Act of 1900 affect wildlife populations in America, including the grizzly bear?
6. What are the principles of the North American Model of Wildlife Conservation?

THE BIRTH OF GRIZZLY BEAR CONSERVATION

Pioneers First Group

Name:

Class:

Date:

Welcome to the **Pioneers First** group. You belong to a rugged breed that have overcome challenges to begin life in America's west back in the year of 1853. Your axe, your plow, your rifle, and your determination have helped you carve out, claim, and protect your new cattle ranch in a lush valley rimmed by mountains.

Many of the challenges and threats that you face have been reduced by the U.S. Army forcing out most of the indigenous people, and other settlers' rifles and traps have thinned out the wolves, black bears, and grizzly bears that were seen as a threat to their safety and livelihoods that can include ranching, trapping, and commercial hunting. Despite the "thinning" of those predators, grizzly bears still loom large as a perceived and real threat to not only your livelihood, but your family as well. You never venture outside without your rifle and you shoot any grizzly bear on sight. Your motto is, *a good grizzly is a dead grizzly*.

Despite the civic benefit that you think you may be providing to other pioneers and the few remaining indigenous people that live in the valley and mountains, some groups oppose the indiscriminate killing of wildlife, especially the isolated grizzly bears occasionally seen wandering through the landscape. If some of these newer pioneers had only witnessed what a grizzly can do to human body in seconds, they may either never leave their cabins or also shoot grizzlies on sight. But with more and more incoming pioneers from back East settling the landscape, combined with your experience controlling grizzly numbers, you've been asked to help develop ***an 1850's Grizzly Bear Conservation Plan***.

Your Goals - To develop your plan, you will conduct online research and create a plan that supports the goals of your Pioneers First group. These goals include:

- Protect the safety of other like-minded pioneers and indigenous people that share the landscape.
- Ensure the pioneer's livelihoods by protecting your cattle and livestock (chicken, pigs, goats) and those of your neighboring ranchers.
- Get other groups to understand that sharing the landscape with grizzly bears isn't possible without serious conflicts between humans and bears.

When developing your plan, consider the possible goals of the other groups and how they might conform or conflict with your goals. In class Session 3, all of the groups will present their plans then have a class debate on possible solutions to developing an overall ***1850's Grizzly Bear Conservation Plan*** that best serves the interests of both the present and future of humans, grizzly bears, and the ecosystem within your valley.

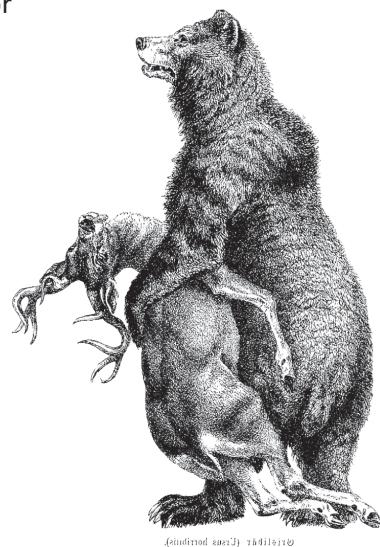
Considerations to address when developing your plan and during the class debate in Session 3. Just remember, it's 1853... (electricity won't come to America until 1882)



- Can your rifle really protect all the pioneers and indigenous people that share the landscape with grizzly bears?
- What other ways or methods might help protect other humans... including those who aren't skilled enough or able to load and shoot a rifle?
- Your research has revealed that grizzly bears are often killing livestock in distant pastures when you can't be babysitting cattle 24/7. Are there other ways to protect livestock?
- Your plan is so important, it needs to live on into the future for the next 100 years. What other considerations can you include that make it "ageless"?

Working with other members of your Pioneers First group, research and develop your *1850's Grizzly Bear Conservation Plan* that addresses your group **goals** and **considerations**. You will use your plan and your research to develop a "debate presentation" that will include at least one form of art or media such as either video, poster, graphs, charts, or images. Two members of your group will present your plan to the entire class during Session 3. Each group will have seven (7) minutes of plan presentation time, followed by a few minutes of questions by the other groups.

After the three groups present their conservation plans, the teacher will lead a group discussion on how similar or key parts of the various plans could be included in a unified plan that would satisfy the main interests of all three stakeholder groups.



THE BIRTH OF GRIZZLY BEAR CONSERVATION

Grizzly Bears First Group

Name:

Class:

Date:

Welcome to the **Grizzly Bears First** group. You belong to a new breed of Western pioneers who have ventured from the East thinking you will bring education and sophistication to America's rugged west back in the year of 1853. One reason that you settled in this lush mountain valley is to share the landscape with the wildlife that call this place home. In particular, you hope to see the once abundant grizzly bears because of they are the iconic species that truly represent the grandeur of the "wild west" in its most majestic form.

You've read enough in Eastern newspapers to understand that over the past 50 years many wildlife species, especially the grizzly bears, have been killed by rifle-toting pioneers. You find it ironic that the indigenous people have lived with America's abundant wildlife for thousands of years, but European immigrants with their guns seemed compelled to kill everything with fur or feathers as soon as they can pull a trigger. It's even more ironic that these pioneers appear more concerned with "conserving" their crops and invasive livestock, yet have no concept of conserving the dwindling wildlife species that called this valley home before the pioneers arrived and displaced them (along with displacing indigenous people... the genuine "First Americans").



Even though you're relatively new to life in the valley, you feel that all stakeholders here need to put wildlife first before people and recognize their historic right to live in peace on their heritage landscape. That's why you're going to use your sense of wildlife compassion, intellect, and power of persuasion to develop a **1850's Grizzly Bear Conservation Plan** for the benefit of all creatures within the valley.

Your Goals - To develop your plan, you will conduct online research and create a plan that supports the goals of your Grizzly Bears First group. These goals include:

- Conserve the remaining grizzly bear habitat so they have a place to live conflict-free from humans.
- Educate the pioneers and new settlers in the valley on how to prevent conflict with grizzly bears.
- Offer community-based solutions to protect other settler's cattle and livestock and crops from bear and other wildlife.
- Get other groups to understand that sharing the landscape with grizzly bears is the historic right of bear that can actually make life more enriching without serious conflicts between humans and bears.

When developing your plan, consider the possible goals of the other groups and how they might conform or conflict with your goals. In class Session 3, all of the groups will present their plans then have a class debate on possible solutions to developing an overall **1850's Grizzly Bear Conservation Plan** that best serves the interests of both the present and future of humans, grizzly bears, and the ecosystem within your valley.

Considerations to address when developing your plan and during the class debate in Session 3. Just remember, it's 1853... (electricity won't come to America until 1882)

- Can your plan really protect all the pioneers and indigenous people that share the landscape with grizzly bears?
- How will your group determine if certain troublesome bears or too many bears in a certain area need to be "eliminated" from the valley... and how will they be eliminated?
- Your research has revealed that the new wave of inventions being developed during the 1850's might offer "technology solutions" to reducing conflict between humans, their livestock, and grizzly bears. What new innovative ways of inventions might be used?
- Despite early pioneers thinning out grizzlies with their rifles, some bears continue to threaten humans. So, if killing bears hasn't completely eliminated the bear threat, are there smart ways to "kill the conflict" without "killing the bear"?
- What will you include in your plan if nonlethal methods don't work for preventing the conflict and bears still continue to be a threat to humans and livestock?
- Your plan is so important, it needs to live on into the future for the next 100 years. What other considerations can you include that make it "ageless" as both technology and society advance... at the same time that both human and grizzly bears are expanding into each other's home ranges?

Working with other members of your Grizzly Bears First group, research and develop your *1850's Grizzly Bear Conservation Plan* that addresses your group **goals** and **considerations**. You will use your plan and your research to develop a "debate presentation" that will include at least one form of art or media such as either video, poster, graphs, charts, or images. Two members of your group will present your plan to the entire class during Session 3. Each group will have seven (7) minutes of plan presentation time, followed by a few minutes of questions by the other groups.

After the three groups present their conservation plans, the teacher will lead a group discussion on how similar or key parts of the various plans could be included in a unified plan that would satisfy the main interests of all three stakeholder groups.

Grizzly Bears First Motto
"I won't hurt you if you don't hurt me."



THE BIRTH OF GRIZZLY BEAR CONSERVATION

Seven Generations Group

Name:

Class:

Date:

Welcome to the **Seven Generations** group. It's 1853 and you belong to an indigenous tribe who have occupied this valley for over a thousand years. And for the past seven generations you have chosen to live with grizzly bears and other abundant wildlife because of your cultural and spiritual belief systems. One guiding belief of your tribe is that the Earth as a sacred, life-giving entity that is deeply interconnected with all living things. You strongly believe that if you conserve the habitat of Mother Earth, she will supply you with life sustaining resources. Another strong belief is that you must plan ahead so that Mother Earth and all she offers will be protected for another seven generations.

However, your belief systems have been devastated over recent generations by the flood of European immigrants sweeping westward with their impact on wildlife, landscapes, and your people. Iron guns and plows have decimated wildlife and habitat, while their infectious smallpox and measles have wiped out 90% of your people. There is nowhere to run or migrate away from this havoc. The only weapon you have to make a difference now is your historic wisdom and your cultural and spiritual beliefs... if the pioneers are willing to listen and consider them. In particular, you hope to use the example of the once abundant grizzly bears to tell the story of the rich past, the recent changes, and the possible future for the benefit of bears and humans.



Because you coexisted with grizzly bears for a thousand years, groups of new pioneers have asked that you join them in figuring out a plan on how to share the landscape with grizzly bears. Despite what Europeans have done to Mother Earth, you're willing to embrace the invitation to possibly make a difference in how these pioneers treat grizzly bears and the landscape... and maybe even indigenous people. That's why you're going to use your seven generations belief system and power of persuasion to develop a **Seven Generations Bear Conservation Plan** for the benefit and future of all creatures within the valley.

Your Goals - To develop your plan, you will conduct online research and create a plan that supports the goals of your Seven Generations group. These goals include:

- Conserve Mother Earth and the remaining grizzly bear habitat so they have a place to live conflict-free from humans.
- Educate the pioneers and new settlers in the valley on how to reduce conflict with grizzly bears as you've done for hundreds of years.
- Present solutions to living sustainably with all that Mother Earth offers instead of altering ecosystems for the sole benefit of European livestock and crops.
- Using the grizzly bear as your prime example, persuade other groups to embrace your seven generations beliefs so they can turn back the hands of time where nature was something to live in harmony within as opposed to something that must be conquered or destroyed.

When developing your plan, consider the possible goals of the other groups and how they might conform or conflict with your goals. In class Session 3, all of the groups will present their plans then have a class debate on possible solutions to developing an overall **Pioneers Grizzly Bear Conservation Plan** that best serves the interests of both the present and future of all human cultures, grizzly bears, and the greater ecosystem within your valley.

Considerations to address when developing your plan and during the class debate in Session 3. Just remember, it's 1853... (electricity won't come to America until 1882)

- Can your plan really protect all the pioneers and members of the tribe that share the landscape with grizzly bears?
- How will your group determine if certain troublesome bears or too many bears in a certain area need to be "removed" from the valley... and how will they be removed?
- While some pioneers think that their new inventions might help manage grizzly bear and conflicts, what generations-old tribal ways might accomplish the same thing? How did your grandfather in your tribe share this land with the great and "horrible" bears?
- Despite early pioneers thinning out grizzlies with their rifles, bears continue to create conflicts with humans. So, if killing bears hasn't been the cure, are there seven generations ways to "kill the conflict" without "killing the bear"?
- What will you include in your plan if nonlethal methods don't work for preventing the conflict and bears still continue to be a threat to humans and livestock?
- Does your plan take into consideration the cultural and spiritual beliefs of other tribes that live with grizzly bears, which can vary greatly, including those tribes who rely on farming and ranching for their livelihoods?
- Your plan is so vital, it needs to live on into the future for at least the next seven generations. What other considerations can you include that make it "ageless" as both European pioneers and grizzly bears continue to expand into each other's home ranges... and Mother Earth's shrinking wilderness.

Working with other members of your Seven Generations group, research and develop your *1850's Grizzly Bear Conservation Plan* that addresses your group **goals** and **considerations**. You will use your plan and your research to develop a "debate presentation" that will include at least one form of art or media such as either video, poster, graphs, charts, or images. Two members of your group will present your plan to the entire class during Session 3. Each group will have seven (7) minutes of plan presentation time, followed by a few minutes of questions by the other groups.

After the three groups present their conservation plans, the teacher will lead a group discussion on how similar or key parts of the various plans could be included in a unified plan that would satisfy the main interests of all three stakeholder groups.

