Bison and Northern Plains Culture in Montana

Understanding the Significance of Bison in the Life and Culture of the Northern Plains

This packet contains three lessons to be used alongside the materials found in the Bison Trunk.
Bison and Northern Plains Culture in Montana
Understanding the Significance of Bison in the Life and Culture of the Northern Plains
Keystone Species – Part 1
By Dr. Shane Doyle

Grade Band: 8 – 12
Suggested Pacing: 3 50-minute periods.
Subjects: Geography, environmental science, history, social studies
Key Terms: Bison bison, keystone species, tribal culture, ecosystem, ecologist, guardian, ungulate

Lesson Objectives:
Upon completion of the lesson, the students will be able to:

- Make inferences regarding the nature and use of products available in the Bison Trunk.
- Isolate a key concept or takeaway message from a piece of literature or work of media.
- Understand the place of the bison in the Native American ecosystems of the past and present.
- Conceptualize visually and graphically the magnitude of the change in bison populations in the 1800s.
- Define “keystone species” and “ecosystem” and identify multiple keystone species.
- Understand the important role keystone species play in maintaining biodiversity in ecosystems.
- Generate a reasonable hypothesis and correct that hypothesis as needed when new information is gained.
- Apply the research methods employed by other researchers to study keystone species to new ecosystem studies.
- Survey complex research articles to locate key information.
- Appreciate American Indians as early researchers.
- Consider their personal agency as a member of an ecosystem and an influencer.

Montana State Standards
IEFA AND SCIENCE FOR ALL K-12 Students
Content standards for Science ensure integration of the history, contemporary portrayals, and contributions of American Indians, with an emphasis on Montana Indians, for all students, across all content areas. Students will understand that American Indians’ use of scientific knowledge and practices are interdisciplinary and are a valid way to learn about the natural world.

6th – 8th grades
Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem and analyze scientific concepts used by American Indians to maintain healthy relationships with environmental sources.
9th – 12th grades

Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem and design a solution to maintain stability in an ecosystem and analyze scientific concepts used by American Indians to maintain healthy relationships with environmental resources.

Life Science

Evaluate the evidence supporting claims that changes in environmental conditions may result in: (1) changes in the number of individuals of some species, (2) the emergence of new species over time, (3) the extinction of other species, and (4) explain American Indian perspectives on changes in environmental conditions and their impacts.

Earth and Space Science

Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity and investigate and explain how some American Indian tribes use scientific knowledge and practices in managing natural resources.

Reading Standards for Literacy in History/Social Studies 6–12

6: Identify aspects of a text, including those by and about American Indians, that reveal an author’s point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts). Analyze the relationship between a primary and secondary source on the same topic, including sources by and about American Indians. Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. Include texts by and about American Indians.

Common Core Standards

9-12 Grade

CCSS.ELA-LITERACY.CCRA.R.1
Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

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.

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Draw evidence from literary or informational texts to support analysis, reflection, and research.

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CCSS.ELA-LITERACY.CCRA.R.2
Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

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CCSS.ELA-LITERACY.CCRA.R.9
Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

CCSS.ELA-LITERACY.WHST.11-12.2
Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.

Background Information: Robert Paine coined the term “keystone species” in 1969 as a result of his research as an ecologist and this awakened our contemporary society to man’s role in the delicate balance of ecosystems. However, American Indians have recognized their influence on ecosystems since time immemorial and have developed their cultural values, worldviews, and lifeways according to a respect for their role as guardians and participating members of ecosystems. This is one reason their stories include animals and the environment as key characters.

Materials:
The Great Race of the Birds and Animals by Paul Goble –
   Key concept: Man became the guardian of the world

The Path Back https://vimeo.com/244873118 -
   Key concept: Man continues to be the guardian of the world

Map of Bison Territory from its original range to 1889 (included at the end of this lesson) -
   Key concepts: The bison’s ecological and cultural impact has been greatly influenced by man-made changes. Neither tribes, animals, nor ecosystems were limited by the geographical boundaries we use today like the border between the US and Canada.

National Geographic Encyclopedia Online (Keystone Species)
https://www.nationalgeographic.org/encyclopedia/keystone-species/ -
   Key Concept: Bison were a keystone species on the Great Plains.

Worksheet: Bison as a Keystone Species (included at the end of this lesson)

Some Animals Are More Equal than Others: Keystone Species and Trophic Cascades
https://www.youtube.com/watch?v=hRGg5t5FMI -
   Key Concept: Removing keystone species from ecosystems has an observable negative impact on an ecosystem causing it to loose biodiversity and allowing for invasive species.

The Ecological Importance of Bison in Mixed-Grass Prairie Ecosystems
The Keystone Role of Bison in North American Tallgrass Prairie
https://pdfs.semanticscholar.org/be21/16ee8f5556f356a81c69779c29b3be2744ba.pdf

Wind River Tribes Unite to Return Yellowstone Bison to Their Native Homeland

Managing Bison to Restore Biodiversity
http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1542&context=greatplainsresearch

Wildlife that Depend on Wild Bison http://blog.nwf.org/2016/06/wildlife-that-depend-on-wild-bison/

Wes Olson Speaks on Bison as Keystone Species https://vimeo.com/188582004

Essential Questions:
What role have humans played in the lifecycle of the bison in the past?
What role have bison played in the lifecycle of humans in the past?
What role are humans currently playing in the lifecycle of the bison?
What role are bison currently playing in the lifecycle of humans?
What role do humans play in ecosystems?
How does our understanding of ecosystems impact our ability to influence and/or transform our environment positively and negatively?

Day 1

Engage (40 minutes) – Introduce the Buffalo Trunk – a collection of important items representing unique aspects of Native American peoples’ relationship to the American Bison (scientific name bison bison). Divide the class into groups of 4 and pass around 5-10 pieces from the buffalo trunk. Each group will record what the pieces are (a basic description) and what they think they are used for. Encourage students to work efficiently during the 10 minutes allotted for this activity. The teacher then reads the story (The Great Race of the Birds and Animals by Paul Goble) to the students as an example of an ancient tribal understanding of bison. At the close of the story ask students to define the key concept portrayed by this story (Man is the guardian of the world). (15 minutes) Students then watch the film about the history of bison removal from the Plains (The Path Back) and a contemporary tribal understanding of the cultural importance of bison today. Ask students to identify the key concept from this film. You might also call it “the takeaway message”. (Man continues to be the guardian.)

Explore (10 minutes) – Examine the map included at the bottom of this lesson (you may do this using the links provided for online viewing or by printing the images as handouts). The map provides a simple view of the change in bison range and population in the 1880’s, a period of extreme change in the Great Plains ecosystem propagated by the extermination of vast numbers of bison. Next show students the historical photos that partially capture the scope of this change (included at the end of this lesson) In their small groups, ask students to respond to the following questions: What ideas or thoughts do you have about the impact of the loss of the bison on tribal culture? What thoughts or ideas do you have about impact of the disappearance of bison on the ecosystem and landscape of the Northern Plains? Allow for a few minutes of thinking time and a few minutes for students to share their thoughts and ideas in small groups or as a whole class.

Day 2

Explain (15 minutes) – Using the National Geographic Encyclopedia entry on Keystone Species (https://www.nationalgeographic.org/encyclopedia/keystone-species/), student groups of four will research what a keystone species is. (If students do not have computer access as individuals or small groups, this entry can be printed and distributed to groups. Some of the technology standards for this lesson may not be
achieved if this option is chosen.) In their own words, students will draft a typed hypothesis about why the bison were a keystone species for the Northern Plains. Inform the students that a hypothesis is a guess you make based on the information you already know. As we gain more information, sometimes we find out that our hypothesis was wrong and that’s ok. Have each student print their hypothesis anonymously. Post the hypotheses on a wall or board in the room. Later we will return to this wall to evaluate which hypotheses were closest to being correct.

**Elaborate** (20 minutes) – Distribute an article to each group (Articles range in complexity and this may influence which articles the teacher assigns to each group. Take care to preview the articles provided above to ensure a good fit with your grade level). Each group will be a research team. As they read their article, each team is looking for answers to the questions on the included worksheet. (Each article will contain answers to some, but not all of the questions. Even if students do not finish reading their assigned article in entirety in the available time, they will still be able to answer a number of the questions.) When 15 minutes has elapsed, compile all of the information from each of the groups by asking, “Who found an answer to question X?” so that all of the questions are answered through their combined research.

**Evaluate** (15 minutes) — Return to the wall or board on which the hypotheses are posted. As a class, using a process of elimination, select the hypotheses that are closest to answering why the bison were a keystone species on the Northern Plains. Using the most correct selections as a jumping off point, draft an accurate description of why bison are a keystone species.

**Day 3**

**Engage** (25 minutes) - Social Action Level Applications of Research

As a class, view Some Animals Are More Equal than Others: Keystone Species and Trophic Cascades [https://www.youtube.com/watch?v=hRGg5it5FMI](https://www.youtube.com/watch?v=hRGg5it5FMI). Write the following key concept on the board: Removing keystone species from ecosystems has an observable negative impact on an ecosystem causing it to lose biodiversity and allowing for invasive species. Engage in a discussion using the following framing context: Let’s transport ourselves back to 1800 before the time of railroads across the Plains and observe the environment from a tribal member’s perspective. What does the ecosystem look like? (Students should see signs of a bison keystone ecosystem.) Now let’s fast-forward to 1889. How is the ecosystem changing? What observations can we make as people living in 1889? (Students should envision changes in plants, animals, cultural practices, products.) If students are primarily listing changes in the natural environment, remind them to reflect back to the very first activity they did with items from the trunk. This will remind them that these changes affected cultural practices and daily activities for people too.

**Elaborate** (25 minutes)
The video demonstrated how removing an organism from an ecosystem can have widespread changes. What ecosystems could you experiment with to study the impacts of change? Here’s a silly example: Let’s say we remove all of the seniors from the high school or all of the 8th graders from the middle school. What areas of your ecosystem would this change and how would you be impacted? What do seniors bring to the system that would go if they left? List as many impacts as you can think of. (Space, resources, costs, social effects, impacts outside of school, sports, etc.)

What ecosystems around you seem to be in trouble? Can you go back in time through research to see where parts of the ecosystem have changed? Is there a way that this ecosystem could be restored?

**Closing Question:** Knowing what we know now, what role are humans playing in the lifecycle of the bison and other keystone species? (Researchers, activists, consumers, legislators, guardians, unknowing bystanders, etc.)

**Extensions:**

Observations lead to important knowledge about ecosystems. We often fail to see that the careful observations Native people made in their ecosystems that informed their lifeways were the same thing we do today when we do “research”. An extension assignment that could be assigned to advanced students or classes with more time might be: Write a research proposal for how you might study the impact of bison on an ecosystem. OR Choose a species and write a proposal for how you might conduct a study to determine if this species is a
keystone species. Research proposals should include the methods (what, where, and how), data collection (what information is important to gather), data analysis (how will the information be evaluated), and conclusions (how you will determine what the data means). The option to carry out the study can be made available to students if the choice of species and ecosystem is accessible. Your class might also choose to study an ecosystem in cooperation with a researcher at a nearby academic or research institution.

** Modifications/Differentiation **
For students needing accommodations for written material or who have visual impairments, the following is a video that can be used in place of the articles for the research activity.
Wes Olson Speaks on Bison as Keystone Species [https://vimeo.com/188582004](https://vimeo.com/188582004) If time is limited, begin at 8:00.

Articles provided in the materials section for the research activity vary in level of difficulty. Some articles break down concepts into more digestible language and others challenge students ready for college-level research literature.
Buffalo Territory: The Grasslands

https://tankafund.org/tankareturns - map source
Large pile of bison skulls that will be ground into fertilizer in the US around 1870. Photograph courtesy of Burton Historical Collection, Detroit Public Library.  
https://www.researchgate.net/figure/Large-pile-of-bison-skulls-that-will-be-ground-into-fertilizer-in-the-US-around-1870_fig5_283584918

Dodge City, 1874, Smithsonian National Archives.  
http://americanhistory.si.edu/buffalo/hidezoom-manrifle.html
As you read through the article assigned to your group, answer the following questions (If you are unsure of some concepts or terms review the information from the National Geographic Encyclopedia on keystone species.):

1. How are bison a keystone species?

2. How are bison a flagship species?

3. How are bison a foundation species?

4. How are bison nutrient vectors?

5. What are the keystone hosts for bison?

6. In 1870 what was the apex predator for bison?

7. In the historic past of tribes from the Norther Plains region, how did changes in the bison ecosystem impact cultural practices and lifeways?

8. In the present day, how do changes in the bison ecosystem impact the cultural practices and lifeways of Native people on the Northern Plains?
9. Why did the Bison become such a key part of Plains tribal culture?

10. What other species relied upon the bison for their survival?

11. Why did bison wallows create such an important part of the ecosystem?
Lesson Objectives:
Upon completion of the lesson, the students will be able to:

- Make inferences regarding the significance of bison restoration to specific tribes.
- Isolate a key concept or takeaway message from a work of media.
- Understand the place of the bison in the Native American cultures and ecosystems of the present.
- Conceptualize the impact of the historical decimation of bison on present Native American cultures.
- Define “bison restoration” and identify key agencies and people who play a role in achieving bison restoration.
- Understand the important role keystone species like the bison play in maintaining diversity in social perspective, oral histories, and ecosystems.
- Apply multiple perspective lenses in considering the position of people and agencies supporting and opposing bison restoration.
- Survey complex research articles to locate key information and to observe the structure of scholarly writing.
- Appreciate the American Indian perspective on bison restoration by understanding it from ecological, cultural, social, and historical points of view.
- Consider their personal agency as a member of a social system and an influencer.

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6th – 8th grades
Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem and analyze scientific concepts used by American Indians to maintain healthy relationships with
environmental sources

9th – 12th grades

Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem and design a solution to maintain stability in an ecosystem and analyze scientific concepts used by American Indians to maintain healthy relationships with environmental resources

Life Science

Evaluate the evidence supporting claims that changes in environmental conditions may result in: (1) changes in the number of individuals of some species, (2) the emergence of new species over time, (3) the extinction of other species, and (4) explain American Indian perspectives on changes in environmental conditions and their impacts

Earth and Space Science

9th – 12th grades

Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity and investigate and explain how some American Indian tribes use scientific knowledge and practices in managing natural resources

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Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

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CCSS.ELA-LITERACY.CCRA.R.9
Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

CCSS.ELA-LITERACY.WHST.11-12.2
Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.

Background Information: Bison restoration is occurring in public, private, and tribal sectors, but it is pursued in very different ways and for very different reasons within these sectors.

Materials:
Essay: Bison Restoration in the Great Plains and the Challenge of Their Management
http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1541&context=greatplainsresearch

Science and ceremony herald the return of bison to northern Colorado grasslands

Celebrating the Historic Ties of Native Americans to the Bison
https://blog.nationalgeographic.org/2013/03/01/celebrating-the-historic-ties-of-native-americans-to-the-bison/


Inii Initiative – The Return of the Buffalo
https://www.youtube.com/watch?v=6LJfPMoGMAg

Boy-zshan Bi-den (Buffalo Return)
https://www.youtube.com/watch?v=5fSPqtxcP2M

Create and Manage Student Blogs in 5 Simple Steps
https://www.thedublogger.com/create-and-manage-student-blogs/

What is a Blog?
https://firstsiteguide.com/what-is-blog/

Essential Questions:
What are humans playing in the restoration and lifecycle of the bison?
What role are bison playing in the lives of those who are working to restore the bison?
How do the perspectives of bison restorers in the different sectors (public, private, tribal) differ?
How are the perspectives of bison restorers similar?
What are the key factors of ecosystem that vary in public, private, and tribal sector restoration plans?
How does our understanding of ecosystems and our personal values impact our ability to influence and/or transform our environment positively and negatively?

Day 1

Engage (40 minutes) – Introduce the essay on bison restoration challenges. This article is an academic essay, but it is not overly challenging. For younger students or lower-level readers teachers can read the article aloud asking students to listen for the answers to key questions (see essential questions above). Older students should be given the essential questions and then asked to read the article alone or in small groups as they search for key answers. The teacher should point out that the article is a scientific essay and the students should be prompted to locate the one sentence that says what this article is all about. Next have students look at how citations are used. What are the sources and why were they used? How are APA and MLA formats used to help scientists communicate about how they have gathered their information and why the information is important to include in the document?

Upon finishing the reading, students should discuss the conclusions they feel the author has made. Then ask students to define the set of values that is closest to how they feel about the purpose of bison restoration at this time.

Explore (30-50 minutes) – Next we’ll use the above articles and video links to explore Native American perspectives on bison restoration from several different tribes. Create 5 stations for small groups of students. At each station students should think of themselves like reporters present at the documented events. The groups will either watch a video or read an article and then rotate tables after 5-10 minutes (adjustments can be made to fit class time schedules by moving through the stations more quickly or selecting a smaller number of articles or videos to view.) Thinking of themselves as bloggers, (an detailed explanation of what blogging entails is included in the materials above), students will use their journals or notebooks to record the following information about each event. This article is about…. One important observation I have related to this article is…. One question I have related to this article is…. My understanding of the Native American perspective represented here is that… My understanding of other perspectives is that… Key interest groups involved in this article were…

Day 2

Explain (50 minutes) – Using yesterday’s notes on the articles and videos and the information from the scientific essay, ask your class of bloggers to write a one-page blog. Each blog author or small team of authors should research a bison interest group, assume that they have been hired as a journalist for that organization or group, and write a blog article for the general public from the perspective of that interest group. The blog should be explanatory, persuasive, but also factual, including citations for important information. (At this point the teacher should determine whether or not to have an actual class blog. Studies show that when students are writing for a real audience they are more engaged and they learn more content in more depth. There is a guide to setting up a class blog in the materials above. If the teacher opts for a class blog this should be set up in advance and students will submit this assignment by posting their blog. If teachers opt not to have a real class blog, a mock blog can be created by displaying hard copies of each student’s blog on a wall simulating a web page.)

Day 3

Elaborate (25 minutes) – Ask each student to read at least 5 of the other bloggers’ writing. After reading the blog, each student should leave feedback for the blogger by completing the following prompts in the comments section online or on the paper mock version: The most compelling thought or argument you presented was…. It was compelling because… One area where your blog could be improved for clarity and impact is ….
Evaluate (15 minutes) — Allow each blogger to review the peer feedback they received. Ask them to carefully evaluate the comments and make decisions on how best to make at least 2 significant changes or additions to their blog to strengthen it.

Wrap Up (10 minutes) – Bring your bloggers together for an informal debriefing conversation. What kind of impact do you think your blog could have on the public? Why is information sharing of all kinds and from many perspectives important? How has our blogging exercise today deepened and strengthened your understanding of the perspectives surrounding bison restoration?
Bison and Northern Plains Culture in Montana
Understanding the Significance of Bison in the Life and Culture of the Northern Plains
Oral Histories – Part 3
By Dr. Shane Doyle

Grade Band: 8 – 12
Suggested Pacing: 2-50 minute periods.
Subjects: Environmental science, history, social studies, Native American studies
Key Terms: Bison bison, oral history, tribal culture, historic preservation, ethnography, qualitative research

Lesson Objectives:
Upon completion of the lesson, the students will be able to:

- Make inferences regarding the lessons or messages that can be conveyed through stories passed down through oral history.
- Isolate a key concept or takeaway message from a piece of literature or work of media.
- Understand the place of the bison in the Native American in the oral history of the past and the role this history plays in the present.
- Define “oral history” and examine how the non-Native use of terms like mythology, myth, or legend influences the value, importance, or credibility of information gained through oral histories.
- Understand the important role bison play in maintaining a complete body of oral history for specific tribes.
- Survey complex oral stories to locate “difficult to see” information.
- Appreciate American Indians as early historians and scientists.
- Understand the role of stories in scientific disciplines like ethnographies and qualitative research.
- Consider their personal agency as an informed member of a cultural body and an influencer.

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**Earth and Space Science**

9th – 12th grades

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Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.

Background Information: Studying the oral stories of diverse cultures is a robust way to understand the important role of social science in adding to our knowledge and understanding. The oral stories of Native American tribes and the values, perspectives, and worldviews of the people who told them and continue to tell them are intimately tied to the elements of their ecosystem including landforms and animals.

Materials:

Celebrating the Historic Ties of Native Americans to the Bison, National Geographic
https://blog.nationalgeographic.org/2013/03/01/celebrating-the-historic-ties-of-native-americans-to-the-bison/

Paul Goble Obituary

Buffalo Woman

The Great Race of the Birds and Animals

The Gift of the Sacred Dog

The Legend of the White Buffalo Woman

Spirit of the White Bison

The Great Buffalo Race

Essential Questions:
What role did and does the presence of bison play in the oral traditions of Native American tribes?
What role are humans currently play in the preservation of oral history?  What role have humans played in preserving oral history in the past?
What is ethnography?
What is qualitative research?
How does using the cultural iceberg model help us to gain a better understanding of diverse cultures and people?
How does the depth of our understanding of other cultures influence our life perspectives, beliefs, values, motivations and actions?

Day 1

Engage (5 minutes) -- Read the following quote from the National Geographic Article, Celebrating the Historic Ties of Native Americans to the Bison:

Jim Stone is executive director of the Intertribal Buffalo Council, an organization with 58 member tribes in 19 states. He promotes bison as a leaner, healthier alternative to beef to combat the high rates of diabetes, obesity and cardiovascular disease that many Native Americans suffer from.
Stone’s own tribe, the Yankton Sioux in South Dakota, has in the past century witnessed the gradual erosion of buffalo culture within their community. Before the early 1990s, the last time the Yankton Sioux harvested buffalo on their reservation was in 1886.
“When you’re an oral society and there’s no reason for a given story to come to the surface, it tends to be forgotten,” says Stone. To recover some of this lost history, the Yankton Sioux visited other tribes, who shared prayers and some of the lore associated with the bison.

Explore (10 minutes) – Recovering and preserving oral stories is very important to Native American tribes. Reintroduce the Buffalo Trunk and the Paul Goble stories contained in it. – Think about the cultural stories you’ve had in your life growing up (ex. Aesop’s Fables, personal stories from the lives of relatives, stories related to holidays, even movies today can be cultural stories, etc.). What kinds of stories were told to you and what was telling them meant to achieve? We often hear oral stories referred to using terms like mythology, myth, or legend. How do these terms influence our perspective of the value, importance, or credibility of information gained through oral histories? Why is the preservation of stories as important to our history as preserving scientific evidence like bones or fossils? What do stories teach us that we may not be able to learn from historical texts or academic writing? In what ways can we preserve the stories of our past? How is this preservation related to ethnography?

Spend some time introducing the students to ethnography and qualitative research.

Ethnography is a research method central to knowing the world from the standpoint of its social relations. It is a qualitative research method predicated on the diversity of culture at home (wherever that may be) and abroad. Ethnography involves hands-on, on-the-scene learning — and it is relevant wherever people are relevant. Ethnography is the primary method of social and cultural anthropology, but it is integral to the social sciences and humanities generally, and draws its methods from many quarters, including the natural sciences. (https://anthropology.princeton.edu/research-programs/ethnographic-studies/what-ethnography)

Qualitative research is a process of naturalistic inquiry that seeks in-depth understanding of social phenomena within their natural setting. It focuses on the “why” rather than the “what” of social phenomena and relies on the direct experiences of human beings as meaning-making agents in their every day lives. Rather than by logical and statistical procedures, qualitative researchers use multiple systems of inquiry for the study of human phenomena including biography, case study, historical analysis, discourse analysis, ethnography, grounded theory and phenomenology.

The three major focus areas are individuals, societies and cultures, and language and communication. Although there are many methods of inquiry in qualitative research, the common assumptions are that knowledge is subjective rather than objective and that the researcher learns from the participants in order to understand the meaning of their lives. To ensure rigor and trustworthiness, the researcher attempts to maintain a position of neutrality while engaged in the research process. (https://nursing.utah.edu/research/qualitative-research/what-is-qualitative-research.php)
How might studying a collection of oral stories about bison from different Native American tribes be a form of ethnography or qualitative research? What can we find out about by reading or listening to oral stories as socially, historically, and scientifically-informative sources?

**Explain** (15 minutes) – What are the products of ethnographic research? Introduce Paul Goble as the author of the books in the trunk by reading his obituary (see link in materials above). Present these questions to the class: Is Paul Goble an ethnographer? Why or why not? What kind of qualitative research did he conduct? What role do Paul’s stories play in preserving the oral stories of Native American people? Can we consider Paul Goble an authentic or reliable source for Native American oral stories? How might we check this authenticity/reliability?

**Elaborate** (20 minutes) – Many times we study other cultures we’re really only looking at the tip of the iceberg. How many times have we only learned about the food, dances, or dress of another culture without gaining any new perspectives or understanding of what it actually means to be a part of this culture? Let’s examine what we could learn if we want to go beyond the tip of the iceberg. Show students the diagram of the cultural iceberg or print it for each student or group of students.
The Cultural Iceberg

www.janinesmusicroom.com
**Day 2**

**Elaborate** (30 minutes) -- Distribute the Paul Goble stories to small groups. Ask one person in each group to read their story aloud to the group. For the first half of the book, ask the reader not to show the illustrations to the group. For the second half of the book, ask the reader to show the illustrations to the group. How does having Paul's illustrations change your listening, thinking, and processing experience? What do you think the take-away message of this story is? Does the message vary according to the listener? Does everyone have to have the same understanding of what the story means? If you heard this story again 10 years from now, do you think it would mean the same thing to you? How do oral stories show us what is hard to see about a culture?

**Evaluate** (15 minutes) — As the final activity, ask your class to evaluate each story using the cultural iceberg diagram. What are the inferences we may be able to draw about social thoughts, ideas, or values of Native Americans from different tribes by reading these stories? If we did not have these oral stories from the past are there other ways that we could understand how people thought and reasoned in the past? Are there other ways that we could understand the psychology, philosophy, or ethics of the people in our past? Can physical evidence like bone or fossils give us these insights? How far back in time can stories take us? Why is the physical presence of bison important to the continuing worldviews of American Indian tribes? How does the physical presence of bison impact the preservation of oral stories? How do these stories show us what is hard to see about the cultural value of bison?

Ask students to reflect on their bison stories and using the diagram of the bison on the attached worksheet, write out words and phrases that explain the easy to see parts of Native American culture that pertain to the bison and then fill in at least 5 hard to see components. For each of the 5 hard to see components, use one sentence to explain where in the book this hard to see concept was illustrated. For instance if family roles are defined in a bison story how did the story define these? (This activity will likely take more than 15 minutes. Students should complete their bison iceberg as homework.)

**Wrap Up** (5 minutes) - Why is the physical presence of bison important to the continuing worldviews of American Indian tribes? How does the physical presence of bison impact the preservation of oral stories? How do these stories show us what is hard to see about the cultural value of bison?
The Bison Cultural Iceberg

Story Title: _______________________________

Tribe of Origin: ____________________________

Easy to see

Difficult to see