Fire on the Prairie

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Grade Level: Intermediate and up

Duration: 5 class sessions (approx. one hour each)

Objective: Students will understand the historical use of fire by Native American Tribes. They will communicate their understanding of the Native's use of fire in creating legends of their own, exhibiting knowledge of the components of a legend.

Montana State Standards: Literature

- Content Standard 1 benchmarks 1,2,3,4,5,6
 Content Standard 2 benchmarks 2,4
- Content Standard 4 benchmarks 1,2,3
- Content Standard 5 benchmarks 1,2,3

Social Studies

- Content Standard 3 benchmarks 3,4,5,6,7
- Content Standard 4 benchmarks 1,3,7
- Content Standard 6 benchmarks 2,4

Writing

- Content Standard 1 benchmarks 2,3,4
- Content Standard 2 benchmark 1
- Content Standard 4 benchmark 1,2
- Content Standard 5 benchmark 1,2
- Content Standard 6 benchmarks 3.4

Materials: DVD "Fires of Spring"

Books or copies of Native American Legends

- Beaver Steals Fire: (Salish Coyote Story) Author: Johnny Arlee Illus.:
 Sam Sandoval
- Coyote Steals Fire (Shoshone Tale) Author/Illus.: Northwestern Band of Shoshoni Nation of Utah
- <u>Fire Race: A Karuk Coyote Tale of How Fire Came to the People</u> Author: Jonathan London Illus.: Sylvia Long

Historical background information on Native's use of fire (see attachment)

Paper/ Pencil

Six Trait Writing Rubric

Vocabulary: *legend:* a story that is passed from generation to generation explaining why something happens in nature i.e. how a kangaroo got its tail

Background Info. http://www.wildlandfire.com/docs/biblio_indianfire.htm (attached)

Procedure:

Day 1

- 1. Show 30 minute DVD "The Fires of Spring" interviews of older tribal members as well as current activities in burning ecosystems by First Nations People of Northern Alberta
- 2. Present background information on the eleven historical uses of fire by Natives.
- 3. As a whole class, develop cause and effect relationships of burning.

Day 2

- 1. Introduce legends by reading aloud to class one or more of the Native American Legends on fire.
- 2. Define a legend and present 6 trait writing assessment rubric to students.
- 3. Assign class to develop their own legend on the "gift of fire".

Days 3-4

1. Allow class time for writing, editing, composing and illustrating legends.

Day 5

1. Students will present their legends to class.

Assessment: Students legends will be assessed using six-trait writing rubric.(attachment)

Role of Fire by Indians

Generally, the American Indians burned parts of the ecosystems in which they lived to promote a diversity of habitats, especially increasing the "edge effect," which gave the Indians greater security and stability to their lives. Their use of fire was different from white settlers who burned to create greater uniformity in ecosystems. In general, during the presettlement period, Indian caused fires were often interpreted as either purposeful (including fires set for amusement) or accidental (campfires left or escaped smoke signaling).

Most primary or secondary accounts relate to the purposeful burning to establish or keep "mosaics, resource diversity, environmental stability, predictability, and the maintenance of ecotones (Lewis 1985: 77)." These purposeful fires by almost every American Indian tribe differ from natural fires by the seasonality of burning, frequency of burning certain areas, and the intensity of the fire. For those Indian tribes that used fire in ecosystems tended to burn in the late spring just before new growth appears, while in areas that are drier fires tended to be set during the late summer or early fall since the main growth of plants and grasses occurs in the winter. Indians burned selected areas yearly, every other year, or intervals as long as five years. Steve Pyne put much of the Indian use of fire into perspective as he reported that:

the modification of the American continent by fire at the hands of Asian immigrants [now called American Indians, Native Americans, or First Nations/People] was the result of repeated, controlled, surface burns on a cycle of one to three years, broken by occasional holocausts from escape fires and periodic conflagrations during times of drought. Even under ideal circumstances, accidents occurred: signal fires escaped and campfires spread, with the result that valuable range was untimely scorched, buffalo driven away, and villages threatened. Burned corpses on the prairie were far from rare. So extensive were the cumulative effects of these modifications that it may be said that the general consequence of the Indian occupation of the New World was to replace forested land with grassland or savannah, or, where the forest persisted, to open it up and free it from underbrush. Most of the impenetrable woods encountered by explorers were in bogs or swamps from which fire was excluded; naturally drained landscape was nearly everywhere burned. Conversely, almost wherever the European went, forests followed. The Great American Forest may be more a product of settlement than a victim of it (Pyne 1982: 79-80).

Documented Reasons or Purposes for Indian Burning

Keeping large areas of forest and mountains free of undergrowth and small trees was just one of many reasons for using fire in ecosystems. What follows is a summary of documented reasons or purposes for changing ecosystems through intentional burning by American Indians. This activity has greatly modified landscapes across the continent in many subtle ways that have often been interpreted as "natural" by the early explorers, trappers, and settlers. Even many research scientists who study presettlement forest and savannah fire evidence tend to attribute most prehistoric fires as being caused by lightning (natural) rather than by humans. This problem arises because there was no systematic record keeping of these fire events. Thus the interaction of people and ecosystems is down played or ignored, which often leads to the conclusion that people are a problem in "natural" ecosystems rather than the primary force in their development.

Henry T. Lewis, who has authored more books and articles on this subject than anyone else, concluded that there were at least 70 different reasons for the Indians firing the vegetation (Lewis 1973). Other writers have listed fewer number of reasons, using different categories (Kay

1994; Russell 1983). In summary, there are eleven major reasons for American Indian ecosystem burning, which are derived from well over 300 studies:

- Hunting The burning of large areas was useful to divert big game (deer, elk, bison) into small unburned areas for easier hunting and provide open prairies/meadows (rather than brush and tall trees) where animals (including ducks and geese) like to dine on fresh, new grass sprouts. Fire was also used to drive game into impoundments, narrow chutes, into rivers or lakes, or over cliffs where the animals could be killed easily. Some tribes used a surround fire to drive rabbits into small areas. The Seminoles even practiced hunting alligators with fire. Torches were used to spot deer and attract or see fish at night. Smoke used to drive/dislodge raccoons and bears from hiding.
- Crop management Burning was used to harvest crops, especially tarweed, yucca, greens, and grass seed collection. In addition, fire was used to prevent abandoned fields from growing over and to clear areas for planting corn and tobacco. One report of fire being used to bring rain (overcome drought). Clearing ground of grass and brush to facilitate the gathering of acorns. Fire used to roast mescal and obtain salt from grasses.
- Improve growth and yields Fire was often used to improve grass for big game grazing (deer, elk, antelope, bison), horse pasturage, camas reproduction, seed plants, berry plants (especially raspberries, strawberries, and huckleberries), and tobacco.
- Fireproof areas Some indications that fire was used to protect certain medicine plants by clearing an area around the plants, as well as to fireproof areas, especially around settlements, from destructive wildfires. Fire was also used to keep prairies open from encroaching shrubs and trees.
- Insect collection Some tribes used a "fire surround" to collect & roast crickets, grasshoppers, pandora moths in pine forests, and collect honey from bees.
- Pest management Burning was sometimes used to reduce insects (black flies & mosquitos) and rodents, as well as kill mistletoe that invaded mesquite and oak trees and kill the tree moss favored by deer (thus forcing them to the valleys where hunting was easier). Some tribes also used fire to kill poisonous snakes.
- Warfare & signaling Use of fire to deprive the enemy of hiding places in tall grasses and underbrush in the woods for defense, as well as using fire for offensive reasons or to escape from their enemies. Smoke signals used to alert tribes about possible enemies or in gathering forces to combat enemies. Large fires also set to signal a gathering of tribes. During the Lewis & Clark expedition, a tree was set on fire by Indians in order to "bring fair weather" for their journey.
- Economic extortion Some tribes also used fire for a "scorched-earth" policy to deprive settlers and fur traders from easy access to big game and thus benefitting from being "middlemen" in supplying pemmican and jerky.
- Clearing areas for travel Fires were sometimes started to clear trails for travel through areas that were overgrown with grass or brush. Burned areas helped with providing better visibility through forests and brush lands for hunting and warfare purposes.
- Felling trees Fire was reportedly used to fell trees by boring two intersecting holes into the trunk, then drop burning charcoal in one hole, allowing the smoke to exit from the other. This method was also used by early settlers. Another way to kill trees was to surround the base with fire, allowing the bark and/or the trunk to burn causing the tree to die (much like girdling) and eventually topple over. Fire also used to kill trees so that the wood could later be used for dry kindling (willows) and firewood (aspen).
- Clearing riparian areas Fire was commonly used to clear brush from riparian areas and marshes for new grasses and tree sprouts (to benefit beaver, muskrats, moose, and waterfowl).

The following references are part of a growing literature of the intentional use of fire by American Indians in English speaking portions of North America. Thus, the compiler has not listed references from Mexico, Central America, South America, or other countries (e.g. Australia), although they will certainly prove instructive. Henry Lewis has written extensively about the use of fire by the Aboriginal people of Australia. Steve Pyne, in his recent book World of Fire: The Culture of Fire on Earth (1995) notes that use of fire by native peoples to change ecosystems or portions thereof is almost universal.

In addition, Henry T. Lewis, retired professor from the University of Alberta, has put together as 16mm film (33 minutes) on Indian (First Nation people) burning the boreal forests and grasslands in Northern Alberta, Canada. The film, "The Fires of Spring," has been transferred to video tape and is available through Dr. Lewis and/or the University of Alberta. The film shows interviews of older tribal members as well as current activities in burning ecosystems by First Nations people of Northern Alberta.

6+1 Trait® Writing

Scoring Continuum



WOW!

Exceeds expectations

5 STRONG:

shows control and skill in this trait; many strengths present

- IDEAS
- ORGANIZATION
- VOICE
- WORD CHOICE
- SENTENCE FLUENCY
- CONVENTIONS
- PRESENTATION



4 EFFECTIVE:

on balance, the strengths outweigh the weaknesses; a small amount of revision is needed



3 DEVELOPING:

strengths and need for revision are about equal; about half-way home



2 EMERGING:

need for revision outweighs strengths; isolated moments hint at what the writer has in mind



1 NOT YET:

a bare beginning; writer not yet showing any control

IDEAS

- This paper is clear and focused. It holds the reader's attention. Relevant anecdotes and details enrich the central theme.
 - A. The topic is narrow and manageable.
 - **B.** Relevant, telling, quality details give the reader important information that goes beyond the obvious or predictable.
 - C. Reasonably accurate details are present to support the main ideas.
 - **D.** The writer seems to be writing from **knowledge** or **experience**; the ideas are **fresh** and **original**.
 - E. The reader's questions are anticipated and answered.
 - **F. Insight**—an understanding of life and a knack for picking out what is significant—is an indicator of high level performance, though not required.
- The writer is beginning to define the topic, even though development is still basic or general.
 - A. The topic is fairly broad; however, you can see where the writer is headed.
 - **B.** Support is attempted, but doesn't go far enough yet in fleshing out the key issues or story line.
 - **C.** Ideas are reasonably clear, though they may not be detailed, personalized, accurate, or expanded enough to show indepth understanding or a strong sense of purpose.
 - **D.** The writer seems to be drawing on knowledge or experience, but has difficulty going from general observations to specifics.
 - E. The reader is left with questions. More information is needed to "fill in the blanks."
 - **F.** The writer generally stays on the topic but does not develop a clear theme. The writer has not yet focused the topic past the obvious.
- As yet, the paper has no clear sense of purpose or central theme. To extract meaning from the text, the reader must make inferences based on sketchy or missing details. The writing reflects more than one of these problems:
 - **A.** The writer is **still in search of a topic**, brainstorming, or has not yet decided what the main idea of the piece will be.
 - B. Information is limited or unclear or the length is not adequate for development.
 - C. The idea is a simple restatement of the topic or an answer to the question with little or no attention to detail.
 - **D.** The writer has **not begun to define the topic** in a meaningful, personal way.
 - **E.** Everything seems as important as everything else; the reader has a hard time sifting out what is important.
 - **F.** The text may be **repetitious**, or may read like a collection of **disconnected**, **random thoughts** with no discernable point.

ORGANIZATION

- The organization enhances and showcases the central idea or theme. The order, structure, or presentation of information is compelling and moves the reader through the text.
 - **A.** An **inviting introduction** draws the reader in; a **satisfying conclusion** leaves the reader with a sense of closure and resolution.
 - B. Thoughtful transitions clearly show how ideas connect.
 - C. Details seem to fit where they're placed; sequencing is logical and effective.
 - **D.** Pacing is well controlled; the writer knows when to slow down and elaborate, and when to pick up the pace and move on.
 - **E.** The **title**, if desired, is **original** and captures the central theme of the piece.
 - F. The choice of structure matches the purpose and audience, with effective paragraph breaks.
 - The organizational structure is strong enough to move the reader through the text without too much confusion.
 - **A.** The paper has a **recognizable introduction and conclusion**. The introduction may not create a strong sense of anticipation; the conclusion may not tie-up all loose ends.
 - **B.** Transitions sometimes work; at other times, connections between ideas are unclear.
 - **C. Sequencing** shows **some logic**, but not under control enough that it consistently supports the development of ideas. The structure may be predictable and **taking attention away from the content.**
 - D. Pacing is fairly well controlled, though the writer sometimes lunges ahead too quickly or spends too much time on details that do not matter.
 - **E.** A **title** (**if desired**) **is present**, although it may be uninspired or an obvious restatement of the prompt or topic.
 - F. The organization sometimes supports the main point or story line, with an attempt at paragraphing.
 - The writing lacks a clear sense of direction. Ideas, details, or events seem strung together in a loose or random fashion; there is no identifiable internal structure. The writing reflects more than one of these problems:
 - A. There is no real lead to set-up what follows, no real conclusion to wrap things up.
 - **B.** Connections between ideas are **confusing** or absent.
 - C. Sequencing is random and needs lots of work.
 - **D.** Pacing feels awkward; the writer slows to a crawl when the reader wants to move on, and vice versa.
 - **E.** No title is present (if requested) or, if present, does not reflect the content.
 - **F.** Problems with organization make it **hard for the reader to understand** the main point or story line, with little or no attempt at paragraph breaks.

VOICE

- The writer speaks directly to the reader in a way that is individual, compelling, and engaging. The writer crafts the writing with an awareness and respect for the audience and the purpose for writing.
 - A. The writer connects strongly with the **audience** through the intriguing focus of the topic, selection of relevant details, and the use of natural, engaging language.
 - B. The **purpose** of the writing is accurately reflected in the writer's choice of individual and compelling content, and the arrangement of ideas.
 - C. The writer takes a **risk** by the inclusion of personal details that reveal the person behind the words.
 - D. **Expository or persuasive** writing reflects a strong commitment to the topic by the careful selection of ideas that show why the reader needs to know this.
 - E. **Narrative** writing is personal and engaging, and makes you think about the author's ideas or point of view.
- The writer seems sincere, but not fully engaged or involved. The writing has discernable purpose, but is not compelling.
 - A. The writing attempts to connect with the audience in an earnest, pleasing, but impersonal manner
 - B. The writer seems aware of a purpose, and attempts to select content and structures that reflect it.
 - C. The writer occasionally reveals personal details, but primarily avoids **risk**.
 - D. **Expository or persuasive** writing lacks consistent engagement with the topic, and fails to use ideas to build credibility.
 - E. Narrative writing is sincere, but does not reflect a unique or individual perspective on the topic.
- The writer seems indifferent to the topic and the content. The writing lacks purpose and audience engagement.
 - A. The writer's ideas and language fail to connect with the **audience**.
 - B. The writer has no clear **purpose**, and the chosen style does not match the content or ideas.
 - C. The writing is **risk** free, and reveals nothing about the author.
 - D. **Expository or persuasive** writing is lifeless and mechanical, or lacks accurate information.
 - E. Narrative: The development of the topic is so limited that no point of view is discernable.

WORD CHOICE

- Words convey the intended message in a precise, interesting, and natural way. The words are powerful and engaging.
 - **A.** Words are **specific** and **accurate**. It is easy to understand just what the writer means.
 - B. Striking words and phrases often catch the reader's eye and linger in the reader's mind.
 - C. Language and phrasing are **natural**, **effective**, and **appropriate** for the audience.
 - **D.** Lively verbs add energy while specific nouns and modifiers add depth.
 - **E.** Choices in language **enhance** the **meaning** and **clarify** understanding.
 - **F. Precision** is obvious. The writer has taken care to put just the right word or phrase in just the right spot.
- The language is functional, even if it lacks much energy. It is easy to figure out the writer's meaning on a general level.
 - **A.** Words are **adequate and correct in a general sense**, and they support the meaning by not getting in the way.
 - **B.** Familiar words and phrases communicate but rarely capture the reader's imagination.
 - **C.** Attempts at colorful language show a willingness to stretch and grow but sometimes reach beyond the audience (thesaurus overload!).
 - D. Despite a few successes, the writing is marked by passive verbs, everyday nouns, and mundane modifiers.
 - **E.** The words and phrases are **functional** with only **one or two fine moments**.
 - **F.** The words may be **refined in a couple of places**, but the language looks more like **the first thing that popped into the writer's mind**.
- The writer demonstrates a limited vocabulary or has not searched for words to convey specific meaning.
 - A. Words are so nonspecific and distracting that only a very limited meaning comes through.
 - **B.** Problems with language **leave** the **reader wondering**. Many of the **words** just **don't work** in this piece.
 - **C.** Audience has not been considered. **Language is used incorrectly** making the message secondary to the misfires with the words.
 - **D.** Limited vocabulary and/or misused parts of speech seriously impair understanding.
 - E. Words and phrases are so unimaginative and lifeless that they detract from the meaning.
 - F. Jargon or clichés distract or mislead. Redundancy may distract the reader.

SENTENCE FLUENCY

- The writing has an easy flow, rhythm, and cadence. Sentences are well built, with strong and varied structure that invites expressive oral reading.
 - **A.** Sentences are constructed in a way that underscores and enhances the **meaning**.
 - **B.** Sentences **vary in length as well as structure.** Fragments, if used, add style. Dialogue, if present, sounds natural.
 - C. Purposeful and varied sentence beginnings add variety and energy.
 - **D.** The use of **creative and appropriate connectives** between sentences and thoughts shows how each relates to, and builds upon, the one before it.
 - **E.** The writing has **cadence**; the writer has thought about the sound of the words as well as the meaning. The first time you read it aloud is a breeze.
- The text hums along with a steady beat, but tends to be more pleasant or businesslike than musical, more mechanical than fluid.
 - A. Although sentences may not seem artfully crafted or musical, they get the job done in a routine fashion.
 - **B.** Sentences are **usually constructed correctly**; they **hang together**; they are **sound**.
 - C. Sentence beginnings are not ALL alike; some variety is attempted.
 - **D.** The reader sometimes has to **hunt for clues** (e.g., connecting words and phrases like *however*, therefore, naturally, after a while, on the other hand, to be specific, for example, next, first of all, later, but as it turned out, although, etc.) that show how sentences interrelate.
 - **E.** Parts of the text invite expressive oral reading; others may be stiff, awkward, choppy, or gangly.
- The reader has to practice quite a bit in order to give this paper a fair interpretive reading. The writing reflects more than one of the following problems:
 - **A.** Sentences are **choppy, incomplete, rambling or awkward**; they need work. **Phrasing does not sound natural**. The patterns may create a sing-song rhythm, or a chop-chop cadence that lulls the reader to sleep.
 - **B.** There is little to **no "sentence sense"** present. Even if this piece was flawlessly edited, the sentences would not hang together.
 - **C.** Many **sentences begin the same way**—and may follow the same patterns (e.g., *subject-verb-object*) in a monotonous pattern.
 - **D.** Endless connectives (and, and so, but then, because, and then, etc.) or a complete lack of connectives create a massive jumble of language.
 - E. The text does not invite expressive oral reading.

CONVENTIONS

- The writer demonstrates a good grasp of standard writing conventions (e.g., spelling, punctuation, capitalization, grammar, usage, paragraphing) and uses conventions effectively to enhance readability. Errors tend to be so few that just minor touch-ups would get this piece ready to publish.
 - **A. Spelling is generally correct**, even on more difficult words.
 - **B.** The **punctuation is accurate**, even creative, and guides the reader through the text.
 - C. A thorough understanding and consistent application of **capitalization** skills are present.
 - **D.** Grammar and usage are correct and contribute to clarity and style.
 - E. Paragraphing tends to be sound and reinforces the organizational structure.
 - **F.** The writer **may manipulate conventions** for stylistic effect—and it works! The piece is very close to being **ready to publish.**

GRADES 7 AND UP ONLY: The writing is sufficiently complex to allow the writer to show skill in using a wide range of conventions. For writers at younger ages, the writing shows control over those conventions that are grade/age appropriate.

- The writer shows reasonable control over a limited range of standard writing conventions. Conventions are sometimes handled well and enhance readability; at other times, errors are distracting and impair readability.
 - **A. Spelling** is usually **correct or reasonably phonetic on common words**, but more difficult words are problematic.
 - **B.** End punctuation is usually correct; internal punctuation (*commas*, *apostrophes*, *semicolons*, *dashes*, *colons*, *parentheses*) is sometimes missing/wrong.
 - **C. Most words are capitalized correctly**; control over more sophisticated capitalization skills may be spotty.
 - **D. Problems with grammar or usage are not serious** enough to distort meaning but may not be correct or accurately applied all of the time.
 - **E.** Paragraphing is attempted but may run together or begin in the wrong places.
 - **F.** Moderate editing (a little of this, a little of that) would be required to polish the text for publication.
 - Errors in spelling, punctuation, capitalization, usage, and grammar and/or paragraphing repeatedly distract the reader and make the text difficult to read. The writing reflects more than one of these problems:
 - A. Spelling errors are frequent, even on common words.
 - B. Punctuation (including terminal punctuation) is often missing or incorrect.
 - C. Capitalization is random and only the easiest rules show awareness of correct use.
 - **D.** Errors in grammar or usage are very noticeable, frequent, and affect meaning.
 - **E.** Paragraphing is missing, irregular, or so frequent (every sentence) that it has no relationship to the organizational structure of the text.
 - F. The reader must **read once to decode**, then again for meaning. **Extensive editing** (virtually every line) would be required to polish the text for publication.

PRESENTATION

(optional)

The form and presentation of the text enhances the ability for the reader to understand and connect with the message. It is pleasing to the eye.

- **A.** If handwritten (either cursive or printed), the **slant is consistent**, letters are clearly formed, **spacing is uniform** between words, and the text is easy to read.
- B. If word-processed, there is appropriate use of fonts and font sizes which invites the reader into the text.
- **C.** The use of **white space** on the page (spacing, margins, etc.) allows the intended audience to easily focus on the text and message without distractions. There is just the right amount of balance of white space and text on the page. The formatting suits the purpose for writing.
- **D.** The use of a **title**, **side heads**, **page numbering**, **bullets**, and evidence of correct use of a style sheet (when appropriate) makes it easy for the reader to access the desired information and text. These markers allow the hierarchy of information to be clear to the reader.
- **E.** When appropriate to the purpose and audience, there is **effective integration of text and illustrations**, **charts**, **graphs**, **maps**, **tables**, **etc**. There is clear alignment between the text and visuals. The visuals support and clarify important information or key points made in the text.

The writer's message is understandable in this format.

- **A.** Handwriting is readable, although there may be discrepancies in letter shape and form, slant, and spacing that may make some words or passages easier to read than others.
- **B.** Experimentation with fonts and font sizes is successful in some places, but begins to get fussy and cluttered in others. The effect is not consistent throughout the text.
- **C.** While margins may be present, **some text may crowd the edges.** Consistent spacing is applied, although a different choice may make text more accessible (e.g., single, double, or triple spacing).
- **D.** Although some markers are present (titles, numbering, bullets, side heads, etc.), they are not used to their fullest potential as a guide for the reader to access the greatest meaning from the text.
- E. An attempt is made to integrate visuals and the text although the connections may be limited.

The reader receives a garbled message due to problems relating to the presentation of the text.

- **A.** Because the letters are irregularly slanted, formed inconsistently, or incorrectly, and the spacing is unbalanced or not even present, it is **very difficult to read and understand the text.**
- **B.** The writer has gone wild with multiple fonts and font sizes. It is a major distraction to the reader.
- **C.** The **spacing is random and confusing** to the reader. There may be little or no white space on the page.
- **D.** Lack of markers (title, page numbering, bullets, side heads, etc.) leave the reader wondering how one section connects to another and why the text is organized in this manner on the page.
- **E.** The visuals do not support or further illustrate key ideas presented in the text. They may be **misleading**, **indecipherable**, **or too complex** to be understood.