Montana, past to present| An issues-based Montana studies curriculum for seventh - tenth grade students

Maureen Edwards

The University of Montana

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MONTANA, PAST TO PRESENT:
AN ISSUES-BASED MONTANA STUDIES CURRICULUM
FOR SEVENTH - TENTH GRADE STUDENTS

by
Maureen Edwards
B.A. Carroll College 1969

presented in partial fulfillment of the requirements for
a Degree of Master of Interdisciplinary Studies
The University of Montana
1996

Approved by:

[Signatures]
Chairperson of the Committee
Dean, Graduate School

Date
4/23/96
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Montana: Past to Present

Introduction:

Montana Studies in middle schools across the state is a curriculum guided by individual teachers. There was no statewide curriculum guide until recently, nor a textbook that adequately met the needs of middle school students. The following curriculum guide is not directed toward those teachers who have established successful Montana Studies programs in their schools. It is intended for those teachers who are beginning to teach Montana Studies and have not yet had the time to compile resources of their own.

At first glance, Montana Studies appears to be easy to teach because of the wealth of historical and current information available. As every teacher knows, however, sifting through information and selecting the most relevant and applicable requires time most teachers do not have. Teachers necessarily have responded to this excess of information by focusing on a particular perspective. Some teachers present Montana Studies from an environmental perspective, some from an historical perspective, still others from a political perspective. This curriculum guide emphasizes the historical nature of Montana development as it affects our decision-making process in current Western issues.

No curriculum guide is definitive nor should teachers view it that way. Good teachers adapt materials to fit their own students’ needs. This curriculum guide has materials that may be used for each unit, but it also has resources listed that will, as time permits, enhance each unit’s viability. Every time we teach a unit, it should change and grow. This curriculum was seven years in the making, and in another seven years it will be different because Montana is always changing. It is a good starting point.
**Rationale:**

Montana Studies is often an elective course, available but not required for high school students. It is viewed as a human interest course, a course designed to let people know about their roots and history, but not as a part of the core curriculum. As more and more requirements are added to the educational curriculum, especially in the field of technology, courses such as Montana Studies slip even lower on the ladder. Given the mobility of today’s society, the history of one state does not seem to be a top priority in education.

It is very hard to argue against this picture of “interesting but not required”. If it were only interesting, there would be no point in advancing its cause. Montana Studies, however, can become the vehicle through which we teach our children to live in the West, to understand and respond to Western regional issues. So often, our coursework responds to urban issues - competition and skills needed in a technological environment. We have no required vehicle in our schools which teaches our children specifically about Western issues - watershed management, energy and mineral production, rangeland care, forest and wildlands designation. We hit and miss these topics in various courses but fail to prepare our children generally for those decisions which determine our daily life in the West and will determine theirs if they choose to stay.

This is not a curriculum guide in Montana history; it is a curriculum guide in Montana Studies. The study of history in our state is of critical importance. It teaches us that historical process created the Montana of today. But what we want for the Montana of the future depends upon decisions that are made today. Therefore, while a part of this curriculum explores Montana’s history, it emphasizes where Montana goes from there.
Combined with elements of a traditional historic perspective, this course uses an issues-based approach. Montana Studies is the ideal program to study issues within an historical context because our major current issues are grounded in the tradition of this state. The value of such an approach is that it mobilizes students to full participation in their world and promotes the understanding that their world grew out of the past.

In a study of current Western issues, students develop ideas based on active analyses of various information sources, diverse political perspectives and their own personal biases. Discussion of issues that are sometimes controversial encourages students to develop logical reasoning for their beliefs instead of depending upon emotionally-charged arguments that cause polarization. This process emphasizes the importance of protecting basic values held by all participants in the resolution of issues.

Western issues need to be identified and faced if students are to become active participants in Montana's future. In the classroom a teacher's job is to present the issues, but not to take political sides on issues. Presenting information on issues and constructing opportunities to think and talk about issues prepares students to make educated, reasonable choices as adults. The Montana they live in today is a result of decisions made in our historic past. The decisions made today will determine the Montana of the future, and full participation in those decisions is the only way to construct a future they themselves choose.
Montana Studies - Course Goals:

The overall goal of this curriculum guide is to provide students with an awareness of Montana’s past, present and future development, and most particularly to stimulate an awareness of the part they play in decision-making as citizens of the future.

Montana Studies - Course Objectives:

*To promote an understanding of Montana’s physical state, its prehuman environment, and the components of its basic ecological systems.

*To develop an understanding of early human history in this area as evidenced by various Native American cultures.

*To recognize the values and goals of European cultures, and promote an understanding of the development of Montana resources as an outgrowth of those cultural values.

*To evaluate the effects of past and present Montana development from an economic and an ecological perspective.

*To develop an individual ideal of resource use and development which best meets the needs of multiple components of today’s society.

*To delineate the roles Montanans must play in the decision-making process to reach the goals which will define Montana’s future.
**Organizational Overview:**

The general outline of this curriculum guide follows the standard topics of most Montana Studies curriculum guides; it is, therefore, adaptable to a variety of current programs. Each unit covers one to two weeks of classroom time, depending upon which lessons a teacher chooses. The course uses student-completed worksheets which combine to produce a Montana Studies research manual at the end of a semester. The twelve unit topics and the issues they represent are:

I. **Montana’s Natural State:** An overview of the physical, geological and ecological systems which determine Montana’s physical character.
   **ISSUE:** How does the rest of the country view Montana’s natural resources? What effect does that view have on Montanans?

II. **Montana’s Native Americans:** A review of the Native American tribes who lived near or in the area now known as Montana, and their progression into present-day Montana.
    **ISSUE:** Can Native Americans realistically mesh their historical cultures with present-day American value systems? Should they?

III. **Montana’s Early Exploration:** A close look at Lewis and Clark’s journals as representative of early exploration of the West in general and Montana in particular.
    **ISSUE:** How has Montana changed from early exploration accounts? How do we evaluate these changes?

IV. **Montana’s Fur Trapping:** A study of early fur trapping individualism and competition, and an investigation of game management policies today.
    **ISSUE:** Can we better protect our wildlife population through game management and control, or by depending upon the natural cycle?

V. **Montana’s Gold:** A pictorial overview of early mining methods, equipment and lifestyles, and an investigation of the controversy surrounding gold mining today.
    **ISSUE:** How do we protect our natural environment without slowing an economically sound mineral development of Montana’s natural resources?

VI. **Montana’s Copper:** A look at the development of early underground mining in Montana, and the role unions have played in changing work conditions.
    **ISSUE:** How do post-mining areas survive? Have unions outlived their usefulness? What political and economic role do unions play today?
VII. Montana’s Coal: An analysis of early railroad town/coal town growth in Montana, and a study of current strip mining and reclamation techniques.
   ISSUE: How has grassroots activism affected the mining industry? Is reclamation a sound alternative to mining controversies?

VIII. Montana’s Rangelands: A romantic journey into the mythical West of Remington’s and Russell’s cowboys, contrasted with a realistic exploration of rangeland practices in native grass seeding and weed control of today.
   ISSUE: How do Montanans cope with the spreading problem of noxious and non-native plants in all of Montana’s ecosystems?

IX. Montana’s Homesteaders: A look at Montana’s agricultural history through women’s diaries and Western authors, and a discussion of the reality of farming today.
   ISSUE: Can the family farms of yesterday survive in a nationally-controlled market? Is corporate farming a reasonable alternative?

X. Montana’s Timber: An exploration of early logging techniques and equipment, with a comparison of logging practices and problems today.
   ISSUE: How do we designate the remaining six million roadless areas left in Montana - wilderness or timber?

XI. Montana’s Tourism: A study of Montana’s first forays into tourist attractions, and an analysis of what role tourism plays in our economy today.
   ISSUE: Is Montana’s economic future tied to a tourism dependent upon retaining our historic and natural condition, or should we attempt to move Montana into more progressive technological development?

XII. Montana’s Government: A look at how Montanans have accomplished change in the past, and a practicum of strategies for causing change today.
   ISSUE: How can Montanans affect decision-making about issues that influence their future in the West?
The Montana State Seal is a physical representation of Montana's historical and natural characteristics. This particular exercise introduces the study of Montana and can form the Title Page of a student-generated book on Montana Studies.

Overhead or large graphic representation of the Montana State Seal
Student Copies of the Montana Road Map
White Drawing Paper

Explain the history of the formation of Montana and the symbolism behind the adoption of Montana's state seal. Then have the students spend time reproducing the seal with colored pencils. If producing a Montana Manual, students may use this page as the title page, upon which the Title Montana Studies, their name as author, the school and the date will be placed in professional lettering. Not all students are proficient at drawing, but this exercise sets the tone for the standards of presentation you expect from student work. If not used as a Title Page, students may design ways to explain the symbolism of the seal around the drawing.

Students finish the State Seal drawing at home. As a concluding exercise, done either orally as a class or in group sketches, have the student redesign the State Seal to include symbols of what they think Montanans would value today as compared to 1889.


(Although there are countless resources for the formation of Montana Territory and the politics involved, Chapter Five of this book is the most readable and interesting).

Montana State Road Maps. Generally class sets are available from the Montana Highway Department when they receive new supplies and have older map issues available.
TEACHING OUTLINE: STATE SEAL OF MONTANA

History of the Formation of Montana

Montana Territory signed into law by Lincoln - 1864
On the map of the U.S., note that all of the western states (except Montana) have straight borders, unlike the eastern states whose borders follow natural rivers and mountain ridges. Boundaries in the West were drawn on paper before many people settled the areas. Montana might have had straight borders as well, but Sidney Edgerton, first Territorial Governor, included the Bitterroot Valley in Montana Territory rather than Idaho Territory because of its agricultural value to the mining communities at Bannack and Virginia City.

Montana achieved statehood - 1889
Montana actually had a large enough population to become a state earlier, but a large number of Confederates moved west after the Civil War, and the Radical Republicans controlling national Congress refused to consider Western statehood because it was a "Confederate stronghold." Montana achieved statehood after Reconstruction ended and the Radical Republicans no longer controlled government.

Montana State Seal adopted - 1889
The Montana State Seal represents what was most important to Montanans in 1889. Have students analyze the seal to determine what they see and what it might represent. Then conclude with the lecture information on the seal.

Symbolism of the State Seal

State Seal lies on a field of blue on the state flag
Blue symbolizes the water resources of the state. Many people believe it symbolizes the "Big Sky" but this nickname for Montana did not come into being until after A.B. Guthrie's book The Big Sky.

Montana's early nickname - "The Treasure State"
The earliest knowledge of Montana in the East was its gold and silver strikes. The slogan on the seal was appropriately named ORO Y PLATA, Spanish for "gold and silver."

Represented on the State Seal:
The three geographic regions of Montana are represented on the State Seal: the Rocky Mountains, the Rocky Mountain Front's Rolling Foothills, and the Great Plains. It also shows Montana's timber resources and the Great Falls of the Missouri. The tools represent the primary livelihoods of the period: the saw for timber, the plow for farming, and the pick and shovel for mining.

Montana means "mountain"
It is difficult to determine who actually gave Montana its name, although one story is that Montana was named after a small town in Colorado by a politician instrumental in getting the boundary of Montana established. Montana is Spanish for "mountain."
OVERHEAD OF STATE SEAL:

THE GREAT SEAL OF THE STATE OF MONTANA

ORO PLATA
MONTANA’S NATURAL STATE

CHAPTER ONE
Outline of Major Concepts to Teach About Montana’s Natural State

THE PHYSICAL CHARACTERISTICS

Topography of Montana: Montana has three distinct topographic and climatic areas:
1. Mountainous western region
2. Rolling foothills of the Rocky Mountain Front
3. Semi-arid plains of the eastern region

Geography of Montana: Land and water forms which are characteristic of Montana are:
1. Rivers and watersheds
2. Mountain chains and groupings
3. Natural landmarks

Geology of Montana: Plate movements in prehistoric times formed two distinct geologic regions:
1. Western region of old rock which contains hard rock minerals like gold, silver and copper
2. Eastern region of younger rock which contains fossils fuels like petroleum and coal

Ecology of Montana: Generally five major ecosystems can be recognized in Montana:
1. Alpine and subalpine ecosystem
2. Lodgepole pine/Douglas fir ecosystem
3. Ponderosa pine/Foothills ecosystem
4. Plains ecosystem
5. Riparian ecosystem

THE ISSUES

Montana’s Resources Today: Montana’s greatest gift but also the subject of major controversies:
1. Montana as a “National Sacrifice Area”
2. Montana for Montanans
Montana has three distinct topographic and climatic regions and this diversity is both a bane and a boon to the state. While it gives us diversity in economy, wildlife and vegetation, it often means conflicting goals and perceptions in statewide decision-making. Students should visualize the basic pattern of these three topographic regions before investigating specific state issues which are deeply affected by these regional differences.

Slides of Various Locations in Montana  
(or)  
Photographs of Various Locations in Montana  
(or)  
Collection of Montana Magazines with Various Photographs of Montana  
Student Worksheet Topography of Montana

In this lesson, students visualize the diversity of topography in Montana and categorize the major characteristics of the three topographic regions. It can be done in a number of ways: using slides with a large group, photographs with small groups of students, or collecting magazine pictures individually. After brainstorming and categorizing the physical characteristics found (land formations, vegetation, climatic indicators, seasonal characteristics), conclude with an overview lecture of the three regions. Students take notes on the lecture, then present the information through lists, short essays, or drawings on the Student Worksheet Topography of Montana.

Slides: State Universities often have slide collections which are usable, tourist gift shops carry slides of local interest, or this may be the perfect excuse for a quick photo trip through different parts of Montana.

Pictures: There are numerous collections of photographs about Montana printed in paperback form which can be CUT UP! and laminated for permanent use by students. A good example is the Montana Geographic Series, published by Montana Magazine, American Geographic Publishing, Helena, Montana, 59601.

Magazines: If you put out a call for old magazines, any of Montana’s tourist, nature or sports magazines will include appropriate photographs.
TEACHING OUTLINE: TOPOGRAPHY OF MONTANA

ROCKY MOUNTAIN REGION

**LINK IN CONTINUOUS MOUNTAIN CHAIN** that runs from Alaska to the tip of Mexico.

**CHARACTERIZED BY CRAGGY, ERODED MOUNTAIN PEAKS** in contrast to the softly rounded mountains of the Appalachian mountain chain in the East.

**HIGH MOUNTAIN PEAKS AFFECT THE FAIRLY MOIST CLIMATE** of this region in two ways:

1. Mountains cause the moisture-laden clouds that move from west to east to drop their heavy rains in the valleys of western Montana before passing up and over to the eastern side of the state.
2. Because of their high altitude, mountains collect and hold deep snow cover, melting continually to keep western Montana rivers flowing even until late summer.

**MORE MOISTURE IN THE MOUNTAINS MEANS HEAVY TIMBER COVER**

Montana’s western valleys and mountain sides are covered with fir, pine, larch and a variety of other species to timber line.

**MOUNTAIN VALLEYS ARE CHARACTERIZED BY MEANDERING RIVERS** and vegetation and because of this became a heavy drawing card for Western Montana population centers.

ROCKY MOUNTAIN FRONT REGION

**HIGH PLATEAUS CHARACTERIZED BY ROLLING HILLS** and occasional groupings of Ponderosa Pine and other forest clusters on the lowlands. Smaller versions of fir and pine occur occasionally, but more common are the areas of cottonwood, alder and brushy vegetation in the low-lying dips of the hills.

**LESS MOISTURE IN THE HILLS** means less timber cover than the Western region, but there is enough moisture to sustain thick clumps of timber in low-lying spots, much more than in the semi-arid region of Eastern Montana.

**AGRICULTURE THRIVES IN THIS REGION** of patchwork crops and vistas of both dryland and irrigated farming.

**CLIMATE IS EXTREMELY COLD IN THE WINTER** because of the arctic winds which blow down from Canada on the edge of the Rockies. Springtime, however, comes with the “chinook,” a soft, warm wind that melts the snow and assures early vegetation.

**HISTORICAL REGION OF SHEEP AND CATTLE RANCHING** during the Homestead Era has led to smaller population centers and a more widespread rural population than in other areas of the state.
PLAINS REGION

CHARACTERIZED BY FLAT, UNBROKEN HORIZONS which upon closer inspection reveal water and wind eroded land formations of incredible beauty. An example of this unique region is the Missouri Breaks formed by the continual eroding of the Missouri River.

CLIMATE IS SEMI-ARID. Moisture levels in this region are low generally, around 14” of rain per year, and are susceptible to recurring drouths.

VEGETATION IS SPARSE as in any semi-arid area, but Montana’s bunch grasses are particularly suited to this climate and grow profusely along with woody shrubs. Riparian areas in this region support the only trees.

POPULATION CENTERS of the Plains Region are generally near rivers, are often smaller than in the other regions, and spread out in terms of distance between towns. Billings, the largest city in Montana, is an exception to the norm.

RANCHING AND FARMING are characterized by large size operations. Native grasses are excellent for cattle grazing but more land is needed to feed fewer cattle than in the other regions. Farming is possible with irrigation projects primarily along the rivers.
Because both river and mountain systems played such a large role in the history of Montana, students should be able to locate the major rivers and ranges. Mapwork is essential, but students get stimulated by first completing a series of games by which they get the information to complete the map. Lesson plans are not necessarily planned for one-day periods; feel free to carry the plans as long as necessary.

**Student Copies**
- Montana Road Maps

**Student Worksheets**
- Rivers of Montana
- Mountain Systems of Montana
- Natural Landmarks of Montana
- Physical Map of Montana

Give each student a personal copy of the Montana Road Map with their names imprinted. Divide students into groups of three to four and have each team open one map for reference. Distribute the first gamesheet and have the teams complete the information required, perhaps with bonus points for the team to first complete it correctly. Repeat this with the next two gamesheets. Students then use the information from the first three worksheets to complete the Physical Map of Montana as their homework assignment.

As a reinforcing activity upon completion of the maps, students enjoy a paired race to locate various rivers, mountains and landmarks. The teacher sets up a pair of students at the back of the room, calls any river, mountain or landmark in the exercise and the students race to find it first on a wall map, (the running time becomes their thinking time). Bonus points are possible but not necessary as students seem to enjoy this regardless of reward.


Montana Educational Maps: Teacher Made, Montana Made. Contact MONTMAPS, P.O. Box 869, Belgrade, Montana 59714 (406) 388-1001 (Mapping is an important part of many of the units; having map resources such as these helps as a source of new ideas although it is better for students to fill in their own rather than be given completed maps).
RIVERS OF MONTANA

SQUASHED SKULL

LEWIS' PARTNER

BEVERAGE FROM COWS

OUTER LAYER OF SEAFOOD

COLORED ROCK

WRITER OF DECLARATION

BIG-TOOTHED MAMMAL SKULL

GIRL IN AFTER CURFEW

OPPOSITE - SWEET FLOWER

FOURTH PRESIDENT

LARGE TUBA

SADNESS - DEJECTION

EBONY APPENDAGE

BABY TALC

PICKLED BEEF PART
<table>
<thead>
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<tr>
<td>SEMI-PRECIOUS STONE (RED)</td>
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<tr>
<td>GRACEFUL BIRD</td>
<td>□□□□□</td>
</tr>
<tr>
<td>GRIZ HAND</td>
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</tr>
<tr>
<td>CIGARETTE TUBER</td>
<td>□□□□□□□□□□□</td>
</tr>
<tr>
<td>INSANE</td>
<td>□□□□□□□</td>
</tr>
<tr>
<td>SUGARY VEGETATION</td>
<td>□□□□□□□□</td>
</tr>
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<td>KITCHEN CUPBOARDS</td>
<td>□□□□□□□□</td>
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<td>CHURCH FARM</td>
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<tr>
<td>ALMOST ANTLERS</td>
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<tr>
<td>INDIAN WORD FOR &quot;BIRD&quot;</td>
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<tr>
<td>HUGE BAA-BAA</td>
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</tr>
<tr>
<td>UNDERGROUND AND SOUR</td>
<td>□□□□□□□□</td>
</tr>
<tr>
<td>FAT PANT'S HOLDER</td>
<td>□□□□</td>
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</table>

MOUNTAINS OF MONTANA
NATURAL LANDMARKS OF MONTANA

Use your Montana Road Map to locate and explain these landmarks famous in Montana history:

POMPEY’S PILLAR:

GREAT FALLS OF THE MISSOURI:

MADISON BUFFALO JUMP:

GATES OF THE MOUNTAINS:

LEWIS AND CLARK CAVERNS:

MEDICINE ROCK:

MAKOSHNIKA BADLANDS:

THREE FORKS OF THE MISSOURI:

PICTOGRAPH CAVE:
### RIVERS OF MONTANA:

<table>
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<tr>
<th>Squashed Skull</th>
<th>Flathead</th>
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<tr>
<td>Lewis’ Partner</td>
<td>Clark Fork</td>
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<td>Beverage from Cows</td>
<td>Milk</td>
</tr>
<tr>
<td>Outer Later of Seafood</td>
<td>Musselshell</td>
</tr>
<tr>
<td>Colored Rock</td>
<td>Yellowstone</td>
</tr>
<tr>
<td>Writer of Declaration</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Big-Toothed Mammal Skull</td>
<td>Beaverhead</td>
</tr>
<tr>
<td>Girl in After Curfew</td>
<td>Gallatin (Gal Late In)</td>
</tr>
<tr>
<td>Opposite - Sweet Flower</td>
<td>Bitterroot</td>
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<tr>
<td>Fourth President</td>
<td>Madison</td>
</tr>
<tr>
<td>Large Tuba</td>
<td>Bighorn</td>
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<tr>
<td>Sadness - Dejection</td>
<td>Missouri (Misery)</td>
</tr>
<tr>
<td>Ebony Appendage</td>
<td>Blackfoot</td>
</tr>
<tr>
<td>Baby Talc</td>
<td>Powder</td>
</tr>
<tr>
<td>Pickled Beef Part</td>
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### MOUNTAINS OF MONTANA:

<table>
<thead>
<tr>
<th>Semi-Precious Stone (Red)</th>
<th>Garnet</th>
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<tbody>
<tr>
<td>Graceful Bird</td>
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</tr>
<tr>
<td>Griz Hand</td>
<td>Bearpaw</td>
</tr>
<tr>
<td>Cigarette Tuber</td>
<td>Tobacco Root</td>
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<tr>
<td>Insane</td>
<td>Crazy</td>
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<tr>
<td>Sugary Vegetation</td>
<td>Sweet Grass</td>
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<tr>
<td>Kitchen Cupboards</td>
<td>Cabinet</td>
</tr>
<tr>
<td>Church Farm</td>
<td>Mission</td>
</tr>
<tr>
<td>Almost Antlers</td>
<td>Pintlars</td>
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<tr>
<td>Indian Word for “Bird”</td>
<td>Absaroka</td>
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<td>Griz Dentures</td>
<td>Beartooth</td>
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<td>Semi-Precious Stone (Blue)</td>
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<td>Huge Baa-Baa</td>
<td>Big Sheep</td>
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<td>Underground and Sour</td>
<td>Bitterroot</td>
</tr>
<tr>
<td>Fat Pants Holder</td>
<td>Big Belt</td>
</tr>
</tbody>
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These lists are from a document titled "Answer Sheet for Student Worksheets." The document contains a series of pairs of words, each pair representing a relationship or similarity, such as "squeashed skull" to "flathead" or "semi-precious stone (red)" to "garnet."
PHYSICAL MAP OF MONTANA

RIVERS OF MONTANA

MOUNTAINS OF MONTANA

NATURAL LANDMARKS
Because Montana forms the headwaters of three major drainages in the United States and Canada, water quality and distribution are crucial to Montana Studies. This overview lesson prepares students for later water issue discussions in ranching, mining and timber units.

Student Road Maps
Student Worksheet Watershed Map of the U.S.
Overhead of Watersheds of Montana

Have students locate on their Montana Road Maps TRIPLE DIVIDE PEAK in the southern half of Glacier Park. Give a short lecture on Triple Divide Peak and its importance, then have students trace beginning rivers leading to each of the three oceans. On their student worksheets, have them draw a dotted line around each of the three river drainages (this line should include ALL streams and rivers which drain into each main river) to their ocean destinations. When they finish, ask them to compare what they drew with your overhead. Areas can then be color coded and the key on their maps filled in with their own explanations.

Present the following short scenarios to students, and have them trace the rivers affected and discuss who might be affected downstream. WHAT IS OUR OBLIGATION TO DOWNSTREAM USERS?

*Scenario One: Stone Container has just appealed to the State Board of Health for a lifting of restrictions on waste water dumping into the Clark Fork River near Missoula as their waste ponds are full. The alternative would be to close the plant. Waste water has chemical pollutants higher than the State Standard. WHO WOULD BE AFFECTED?

*Scenario Two: Research Scientists have determined that there is a three-mile dead zone in the ocean near New Orleans in which all living organisms have disappeared due to pesticide run-off. COULD MONTANA FARMERS BE PARTLY RESPONSIBLE FOR THIS?

TEACHING OUTLINE: WATERSHEDS OF MONTANA

TRIPLE DIVIDE PEAK

**LOCATED IN GLACIER NATIONAL PARK.** On the Montana Road Map, this peak is located in the southern half of the Park on the Continental Divide (often shown by a dotted line).

**THE CONTINENTAL DIVIDE** separates the waters which go to the Atlantic from those which go to the Pacific. Triple Divide Peak also marks the point from which water will also travel to the Arctic Ocean.

**TRIPLE DIVIDE PEAK IS NOT THE TALLEST PEAK** on the Continental Divide. Its importance is determined by the fact that water on its three sides travels to three different oceans, the only spot in North America where this happens.

THREE WATERSHEDS OF MONTANA

**COLUMBIA WATERSHED** carries the water from the areas west of Triple Divide Peak to the Pacific Ocean. Major rivers which collect this water are the Flathead River which flows into the Clark Fork River, and the Kootenai River which flows into the Columbia. LOCATE.

**MISSISSIPPI WATERSHED** carries the water from the areas east of Triple Divide Peak to the Gulf of Mexico and eventually to the Atlantic Ocean. Major rivers in Montana which collect this water are the Missouri and the Yellowstone, which join together at the Montana-North Dakota border. LOCATE.

**SASKATCHEWAN WATERSHED** carries the water from the areas north of Triple Divide Peak into the Saskatchewan River of Canada, which empties into the Hudson Bay and eventually the Arctic Ocean. There are no major rivers in Montana from this side, but various smaller streams eventually enter the Saskatchewan River in Alberta.
Basic to the history of Montana, and crucial to Montana today, are the mineral riches discovered within its boundaries. These mineral deposits are the result of geologic processes of past ages, a study of which helps students visualize Montana's natural resource potential.

Guest Speaker on Geology

Student Worksheet Geology of Montana

This is an area where students benefit from expertise. Geologists as guest speakers can be recruited from state Universities, state agencies or mining companies. Guest speakers are given the following outline of topics to discuss:

1. The formation of the Rocky Mountains (Plate Tectonics).
2. Division of Montana into geologic regions (old rock in the western region and younger rock in the eastern region).
3. Presence of minerals compatible with old rock in the west and young rock in the eastern region.
4. Geologic site of interest in the western region.
5. Geologic site of interest in the eastern region.

Students take notes and present their findings in either essay or graphic form on their Student Worksheets Geology of Montana.

Regardless of what geologic activity is provided for the students, the primary lesson to be learned is that eastern and western Montana were formed by different geologic activities. Review “old rock” and “young rock” emphasizing their influence on current “hard rock mining” and “fossil fuel mining” as distinctly regional activities today.

If it is impossible to find a guest speaker, alternative activities are possible as follow-ups to a lecture on Geology of Montana included on next page:

2. A rock ID activity is possible with information from the Mineral Museum at Montana College of Mineral Science and Tech., Butte, Mt.
TEACHING OUTLINE: GEOLOGIC PROCESSES WHICH FORMED MONTANA

PRE-ICE AGE MONTANA WAS TROPICAL AND FLAT
LARGE WATERLANDS AND SEAS COVERED MUCH OF WHAT IS NOW MONTANA. Both land and sea fossils can be found in large quantities in various parts of Montana, indicating a warmer and moister climate in past ages. DINOSAURS OCCUPIED THIS TROPICAL REGION evidenced by paleontologic findings near Choteau, Montana. The Egg Mountain Area is a recently discovered dinosaur nesting ground which has provided information on pre-historic Montana life forms.

CATASTROPHIC GEOLOGIC ACTIVITY ENDED THIS ERA. Scientists are unable to determine exactly what caused the demise of the dinosaurs and ended the tropical vegetation of this region. The remains of animal and vegetative life of this era accumulated to form one of the layers of rock from which we now get fossil fuels.

PLATES OF THE EARTH COLLIDED TO FORM ROCKY MOUNTAINS
THREE SUCCESSIVE PLATE COLLISIONS FORMED ROCKY MOUNTAINS. Scientists believe that the movement which caused Alaska to attach to North America was one of those which also formed the Rocky Mountains by pushing one layer of the earth over the other. The Western Plate was uplifted over the Eastern Plate by the collisions.

TOPOGRAPHIC EVIDENCE OF THE COLLISIONS can be seen in the jagged peaks formed by the upthrust plate, and the rolling hills in central Montana which were caused by a buckling and rippling effect from the core of the collisions. The flat plains of the eastern region of Montana were unaffected visually by the collisions. GEOLOGIC EVIDENCE OF THE COLLISIONS can be found along highway cuts over the Continental Divide. The layers of rock are thrust almost vertically in some places. Old Rock, carbon dated, rose up over younger rock and erosion eventually left these old rocks bare. This older, harder rock is the source of "hard rock" minerals like gold and silver found throughout western Montana.

RESULTS OF THE PLATE COLLISIONS left Montana with exposed hard rocks in the western region, full of gold, silver and copper. In the eastern region, however, where the plates of the earth did not upthrust and cover each other, the younger rock bearing fossil fuels remained close enough to the surface to make fossil fuel mining practical.
BOARD DRAWING FOR LECTURE OUTLINE:
GEOLOGIC PROCESSES OF MONTANA

BEFORE COLLISIONS:

AFTER COLLISIONS:

KEY:
OLDER ROCK LAYERS
YOUNGER ROCK LAYERS
Although this lesson could wait for the mining unit, it fits better into an overview of Montana's geologic processes which directly affected our mineral resources. This is a teacher-directed student map activity emphasizing the effects of geologic processes in the past.

Distribute student worksheets and have them follow the overhead map as you fill it in from the answer sheet. For each mineral listed, ask students to fill in the uses that make that mineral valuable. Then help them locate the places in Montana where that mineral is being mined today. Maps should be color coded so their final display of information is easy to read.

On their maps, ask students to draw a dotted line indicating where they think older rock meets younger rock, based on the distribution of mineral and fossil resources in the state. Review again the geologic reasons for hard rock minerals in the western region and fossil fuels in the eastern part of the state.

Any atlas with mineral distribution information will give you an idea of current mining activity; National Geographic's most recent Atlas of the United States is excellent if available. Montana in Maps, referenced on the Geography of Montana lesson, shows mineral deposits in Montana in 1974, which is not current, but this exercise is more to determine the relationship of deposits to the geology, so any similar deposit map is acceptable.

The information for this particular map was taken from Montana's Natural Resources: Minerals, a series of historical and current information booklets produced by the Montana Department of Natural Resources and Conservation, 1520 East Sixth Avenue, Helena, Montana 59620. It would be worth writing to get the entire set.
OVERHEAD OF TREASURES OF MONTANA

Hard Rock Minerals:
- Gold:
  - bullion
  - jewelry
- Silver:
  - coins
  - medical use
- Copper:
  - coins
  - electrical wiring
- Gemstones:
  - jewelry (sapphires)

Fossil Fuels:
- Coal:
  - electricity
  - fuel
- Natural Gas:
  - heat energy
  - appliances
- Oil:
  - heat energy
  - gasoline
Recent emphasis on the state of the environment in the last thirty years has resulted in a new understanding of ecosystems - communities of plant and animal life which are interdependent. Decision-making of the future necessarily requires that students understand these ecosystems, because it is ignorance, not malice, that destroys them.

Video
Montana Weed Project: Part I
Student Worksheets
Ecosystems of Montana
Schematic of Ecosystems of Montana

It is worth getting the above video because the first part on ecosystems is short, concise and a challenge to the students. Distribute Student Worksheet Ecosystems of Montana to each student and have them fill in the characteristics, animals and plants of each ecosystem as the video plays. (It may take two run-throughs). You can play the video until humans enter the picture (about 15 minutes); after that point it is not pertinent. When the students finish taking their notes from the video, have them compare notes to fill in blank spots; they may add plants and animals they know inhabit each ecosystem from their own experience.

From this information, students can then color code the second worksheet Schematic of Ecosystems of Montana, as a companion page to the list of plants and animals. Visually, the schematic relates elevation to ecosystems as well. The margins of the schematic are used for concise descriptions of each ecosystem.

Montana Weed Project Video. Resource Education Awareness Project, 1989. Contact Gary Swant, 113 North Frontage Road, Deer Lodge, Montana 59722. 1-406-846-2451. (Perhaps you can get the video separately, but the entire Weed Project Manual is worth it and can be used in later lessons).

*If the video is unavailable, the same information can be obtained by brainstorming with students varieties of plants and animals, as well as unique characteristics of each ecosystem. The video is a more exciting way to present this to students, however, and should be pursued.
# Elements of Montana Ecosystems

<table>
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<th>Lodgepole Pine-Fir</th>
<th>Ponderosa Pine</th>
<th>Riparian</th>
<th>Plains</th>
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SCHEMATIC OF MONTANA ECOSYSTEMS
FLORA AND FAUNA OF MONTANA

This drawing activity allows those students with different skills to participate fully in the overall project. For all students, the idea of presenting ideas in a professional way is important. Illustrations are an important part of many publications; how we present material is often more important in its acceptance than the material itself. For students with no drawing ability, other options are computer graphics or magazine cut-outs. The method chosen is not as important as striving for a professional look in whatever they produce.

Variety of books and pictures of Montana Plants and Animals
Student Worksheet Flora and Fauna of Montana’s Ecosystems

Distribute the Student Worksheets to students. Have a variety of books and pictures available to students in the classroom as reference. Students must label each of the five circles with one of Montana’s ecosystems, and then draw (or otherwise represent) one plant and one animal characteristic of that ecosystem in the circle.

Drawing takes a great deal of time, but in closing have students each tell which animal and plant they chose for an ecosystem, to highlight the variety of plant and animal life in each of Montana’s ecosystems.

If you are unable to get an adequate supply of pictures of plants and animals of Montana, two excellent sources are:

U.S. Forest Service agency nearest you. They have access to a series of books called Montana Birds of Prey, Big Game Animals of Montana, and Fish of Montana, to name a few. They may be willing to supply your classroom with a student set.

USDA Extension Service office nearest you. They have access to numerous government publications on native grasses, wildflowers, edible berries and plant life of Montana. These government documents are generally free for classroom use as well.
Montana is at a crossroads where specific decisions need to be made regarding the direction of the state’s future. We have a choice, but Montanans are severely divided on what the choice should be. Every aspect of Montana life reacts in some way to the philosophical differences in our visions of the future. This lesson is an overview exercise to introduce students to some of the controversies that arise in this difference in vision.

Debate Issue Cards in a Box  
Overhead Public Lands in Montana or Map of Public Lands in Montana  
Student Worksheet Montana as a National Sacrifice Area  
(or) Montana for Montanans

Show students either a large map of Montana which designates the public lands controlled by federal and state governments, or the overhead included. Explain that FIFTY PERCENT of Montana’s land is owned by the public in general, which means it is to be used for the public good - the best good for the most people. And this is not just limited to Montanans; it means the best good for the people in the whole country. Unfortunately, controversies arise over just what the BEST GOOD is. Have each student select a card from the box with one of the issues on it. Students then group by issue and are instructed to prepare mini-debates for the issue they selected. They begin by brainstorming BOTH SIDES of the argument, then select a representative to debate each side from the ideas generated by the whole group. Debates can be scheduled for the next class.

Set up a formal debate schedule for each group’s presentation (example: two minute pro-presentation, followed by two cross-exam questions from the audience; then a two-minute con-presentation, followed by two cross-exam questions.) You can have the audience vote on each issue at the end, although the point is that there are values which are important to recognize on both sides of every issue. WHAT ARE THE VALUES BEING DEFENDED? List at conclusion of debate activity.

Explain the two dilemmas facing Montanans, and give students a choice for their writing assignment, emphasizing the need to clarify what values they are defending.
FEDERAL LANDS IN THE STATE OF MONTANA:
held in trust for all the citizens of
the United States.

FEDERAL LANDS
(as a percentage of each county)

PRIVATE AND STATE LAND

*information from MONTANA IN MAPS, 1974
ISSUE CARDS FOR DEBATE

CARD ONE: WOLVES IN YELLOWSTONE
Wildlife organizations across the country want to protect and reintroduce endangered species like the wolf. Yellowstone Park has been designated as one of the spots to begin wolf reintroduction, but neighboring ranchers object because of the danger to their livestock. WHO HAS THE GREATER RIGHT, THE PUBLIC TO PROTECTION OF ITS WILDLIFE, OR THE RANCHER TO PROTECTION OF HIS LIVELIHOOD?

CARD TWO: OIL EXPLORATION ALONG THE ROCKY MOUNTAIN FRONT:
Geologic activity along the Rocky Mountain Front, where jobs are hard to find, indicates the possible presence of petroleum. Application for leases on Forest Service land to lay a series of exploratory dynamite charges have been made, but are being opposed by grizzly study groups who claim that the noise and activity will disrupt crucial grizzly habitat in the nearby Bob Marshall Wilderness. WHO HAS THE GREATER RIGHT, THE PEOPLE WHO NEED JOBS FROM THE PETROLEUM POTENTIAL, OR THE PUBLIC TO PROTECTION OF THE ENDANGERED GRIZZLY?

CARD THREE: GOLD MINING NEAR YELLOWSTONE PARK:
New gold discoveries on the border of Yellowstone Park have led Crown Butte Mines to apply for a lease to operate a gold mine at the New World site. Opponents claim the gold leaching process will contaminate water going into the Park and cause landscape destruction that is incompatible to tourists traveling through Yellowstone Park. WHO HAS THE GREATER RIGHT, THE PUBLIC TO A PRISTINE WILDERNESS EXPERIENCE, OR PEOPLE TO JOBS AND BENEFITS PROVIDED BY MINERAL RESOURCES IN THE STATE?

CARD FOUR: RAFTING ON THE SMITH RIVER:
The Smith River is one of Montana's best for river rafting. Recently, farmers through whose land Smith runs put up NO TRESPASSING signs and fences to stop the rafters because of damage to the banks and pollution in the river. Groups of rafters who cannot now get through have taken the farmers to court. WHO HAS THE GREATER RIGHT, THE PUBLIC TO RECREATION ON STATE RIVERS, OR THE FARMERS TO PROTECTION FROM VANDALISM ON THEIR LAND?
People from outside Montana view the state as natural, free and uncluttered by modern technology. Animals roam free and protected; scenery is breathtaking. AND THEY WANT IT TO STAY THAT WAY AS THE "LAST BEST PLACE." Many Montanans have jobs which depend upon industries which change the environment: mining, logging, farming, and ranching. These are traditional Montana industries but are coming into more and more conflict with environmental concerns. Montana has been called the "National Sacrifice Area." This idea indicates that since so much of Montana is public land (owned by the entire country), many of the decisions made in Montana should reflect what is best for the whole country, not just Montana. Should Montanans, for example, reduce those industries which provide a good living, but hurt the environment, or should Montanans be able to move into the technological age without being concerned about the environmental effects which have already occurred in other areas.

**What do you think of Montana as a "National Sacrifice Area"?**
Many Montanans have grown to love the rural nature of much of Montana. They like the slower pace, the relative absence of crime, the neighborliness. Because Montana has become so popular in the tourist literature, more and more people are choosing to move to Montana, with the result that areas of Montana are mushrooming in population and its attendant problems. People who have made their money in states where income levels are much higher move to Montana, driving up real estate prices beyond what the average Montana income can afford. Many wealthy people are buying up large ranches and wild areas for private use, adding no trespassing signs where none existed between neighbors before. All of this growth is changing Montana's character.

*How can Montanans control growth in the state, and more importantly, do Montanans have the right to control it?*
Outline of Major Concepts to Teach About Native Americans

THE HISTORY

History of Native Tribes of Montana: Generally Native Americans who inhabited the area of Montana are divided into:

1. Mountain Tribes:
   - Salish (Flathead)
   - Kootenai

2. Plains Tribes:
   - Siksika/Pikuni (Blackfeet)
   - Absarokee (Crow)
   - Atsina (Gros Ventres)
   - Assiniboine

Cultural History of Native Tribes of Montana: Different tribes held different beliefs, but generally Native Americans shared these:

1. Native Concept of Land
2. Native Concept of Spirituality
3. Native Concept of Family

Transition to a Reservation Society: Regardless of the origin of change, lifestyles for Native Americans differed under a reservation system:

1. Cultural Changes for Men
2. Cultural Changes for Women
3. Cultural Changes for Children

THE ISSUES

The Reservation System Today: Historical traditions of both Native American society and European cultures combined to produce modern reservations:

1. Cultural Values of Native Americans Today
2. Inherent Problems of the Reservation System
3. Innovative Ideas Operating Within the Reservation System
It is a temptation to lump all Native Americans together when teaching children the culture and history of native peoples. In Montana, several distinct tribes contributed to our native history. This overview lesson emphasizes the uniqueness of each tribe in its geographical and cultural setting, while noting some regional similarities due to adaptation and alliances.

Student Worksheet Native Territories in Montana
Overhead of Native Territories in Montana

In this particular lesson, students work on companion mapping exercises while an overview of tribal activity in Montana is given. (Before beginning note-taking with students, it is important to emphasize these points: 1. Native Americans did not believe in private ownership of land. It belonged to the Great Spirit and was given to humans for their use. No tribe actually owned particular areas of land, but they did dominate certain areas by right of use. 2. Native Americans traveled where they needed to follow food supplies. There were no actual boundaries between tribal territories, but rather “buffer zones” where it would be more likely to encounter natives of other tribes in their travels. While a tribe might define itself by its territory, there were no boundaries to it or any claim to exclusive use of it except through superior force.) Students take notes on information about each tribe which will be used to write a summary paragraph on the space allowed on the worksheet. They then outline the paragraph with color coding to match the appropriate tribal area on the map. Use an overhead to label tribal areas as you teach.

This exercise will probably take more than one class lesson, so it is possible to build in some class time for students to transfer their notes to paragraph form on their worksheets and do the accompanying color coding. Explain to students that Sioux and Cheyenne generally used this area for hunting but not as homeland areas so are not specifically discussed.

There are several sources of information for native histories, many of which disagree in particular details. The source for this information was generally, but not exclusively, from:

TEACHING OUTLINE: NATIVE TERRITORIES IN MONTANA

PLAINS REGION: These tribes relied on plains animals, largely the buffalo, as their staple resource, and formed strong warring factions for control in the Plains area.

Absarokee Tribe: (now known as Crow)
- Absarokee means “bird people.” When non-Indian explorers met members of the Absarokee, the tribe made motions indicating their name. White men thus identified them as the “Crow” people.
- Evidence of native life along the Yellowstone River, which is the center of Crow territory, is as early as the last Ice Age, more than 11,500 years ago.
- Evidence of the use of spears by the Absarokee occurred more than 2000 years ago, which propelled humans from dependency upon small animals caught in snares to ability to secure food from a distance and with larger size animals.
- Some evidence exists which point to the Absarokee as the inventors of the pushkin, or buffalo jumps, used to secure food in large quantities for winter storage. This later became a popular method of buffalo hunting for many of the Plains tribes.

Siksika/Pikuni Tribe: (now known as Blackfeet)
- Blackfeet obtained their current name after a first encounter with non-Indian fur traders in Canada. The meeting location required that the tribe travel through an area recently burned by a prairie fire, thus the name “black moccasins” and eventually “blackfeet.”
- The Blackfeet are a loose confederation of three tribes: the Kainah (now called the Bloods who live in Canada), the Siksika (now called the Blackfeet who reside in Northern Montana), and the Pikuni (now called the Piegan who reside in both areas).
- The Blackfeet were the earliest tribe of Montana to obtain guns through trade with fur companies in Canada. This gave them military superiority and they became the dominant tribe in Montana during the early part of the nineteenth century, successfully guarding the prime buffalo hunting grounds around the Three Forks of the Missouri, where many tribes converged to get their winter supply of meat.
TEACHING OUTLINE: NATIVE TERRITORIES IN MONTANA (CONT).

PLAINS REGION (cont)

**Atsina Tribe: (now known as the Gros Ventres)**
- The Atsina gained their current name from a group of French fur traders in Canada who met them after a successful buffalo hunt. The practice of eating large quantities of meat (8-10 lbs) earned the tribe the nickname of “big bellies” or “Gros Ventres.”
- The Atsina were originally part of the Arapaho tribe and were pushed west by their traditional enemies, the Sioux. The tribe split into two parts, the Minnetaree of North Dakota and the Atsina of Montana.
- The Atsina allied themselves to the Blackfeet for protection against the warring Sioux to their east and became known as “The Fourth Tribe of the Blackfeet.” They maintained close relations with all branches of the Blackfeet, intermarrying and maintaining alliances against other tribes.

**Assiniboine Tribe**
- The Assiniboine were originally part of the Yankton Sioux but split apart as new groups formed to find new sources of food. They inhabited the area north of the Missouri between the Milk River and what is now the border between North Dakota and Montana.
- The name Assiniboine, which meant “stone boilers,” was in reference to an ancient method of cooking food by dropping heated stones into a skin of water.
- The Assiniboine, as Sioux, were traditional enemies to the Crow to the South, and to the Atsina-Blackfoot coalition to the west.
TEACHING OUTLINE: NATIVE TERRITORIES IN MONTANA (CONT).

MOUNTAIN REGION: The tribes in this area of Montana were generally poorer, with only occasional access to the quantity of animals on the plains due to the enmity of the stronger Plains tribes.

Salish Tribe: (now known as the Flathead people)
- The Flatheads were named by mistake. When Lewis and Clark met the Salish in the Bitterroot area of their journey, they recorded their name correctly as "Saleesh" but also recorded a coastal tribe of the same name which used the headboard to flatten babies' heads. Later transcribers of the journals equated the two tribes and mistakenly called the Montana Salish "Flatheads" when in fact it was never in their tradition to flatten heads as a mark of beauty.
- The Salish originally came from Salish people of the coastal region, moving into the Bitterroot Valley area of Montana several centuries ago.
- The Salish subsisted primarily on roots and berries of the mountain valleys. Flatheads, allied with Kootenai, Shoshone, Nez Perces and a variety of smaller mountain tribes, attempted occasional hunting forays through "Hellgate Canyon" to the Three Forks area to get buffalo, but it was costly due to enmity with the Blackfeet.
- When Lewis and Clark met the Salish, they deemed them "the cleanest and friendliest tribe we have encountered." From an original size of about 600, the tribe was down to about 325 when it met the expedition, due to wars with the Blackfeet.

Kootenai Tribe
- The Kootenai tribe was also a branch of a coastal Salish tribe which moved into Canada, and subsequently Montana. They banded with other small mountain tribes of the region (Pend'Oreilles and Spokanes as well as the Flatheads) to survive.
- The Kootenai was a small tribe, never numbering more than 300 in recent history. The presence of few animals in the mountains forced them to subsist primarily on roots and berries.
OVERHEAD OF NATIVE TERRITORIES IN MONTANA:

- Kainah (Blood)
- Siksika/Pikuni (Blackfeet)
- Assiniboine
- Atsina (Gros Ventres)
- Absarokee (Crow)
- Shoshone (Snake)
- Nez Perce
- Salish (Gather)
- Kootenai
- Shoshone (Gather)
- Cheyenne
- Cheyenne (Hunting Grounds)
- Cheyenne (Crow)
- Sioux
- Sioux and Cheyenne Hunting Grounds
NATIVE CONCEPT OF LAND

While each native tribe held differing beliefs and practiced different customs, there are some common beliefs that Native Americans in general held about the land. Native peoples defined themselves in terms of their landscape. The land was their tie to the Great Spirit and provided knowledge of the Great Spirit. Thus land was sacred, and defined areas became particularly sacred to individual tribes because of their own historical connection to the Great Spirit.

Student Copies of Arapooish's *My Country*
Student Worksheets Arapooish, Chief of the Crow
Student's Completed Worksheets Native Territories of Montana

The purpose of this lesson is two-fold: 1) to demonstrate to students a native perception of land, in terms of both its physical and its spiritual significance to a tribe, and 2) to emphasize the physical geography of native tribes of the region which was introduced in the previous lesson. Students can be given their own copy of Arapooish’s “My Country” or a class set can be laminated for continued use every year. Students read the essay, then answer the questions on the student worksheet Arapooish, Chief of the Crow. It is important to emphasize to the students that their answers need to be IN ARAPOOISH'S OWN WORDS using quotation marks. This demonstrates their ability to select appropriate quotations for their research work and emphasizes native concepts of land, not their own translations of native concepts. They will use their recently completed Native Territory Maps to help answer the questions.

When answers are completed, either individually or by groups of students, lead a class discussion about the significance of the answers. Ask students to answer the same questions from an anglicized, current point of view. Answers can be fascinating but will also underline the differences in native concept of land.

There are several emerging Native American speeches emphasizing the importance of sacred land. *Brother Eagle, Sister Sky*, an illustrated volume of Chief Seattle's words published by Susan Jeffers, Dial Publishing, 1991, is a possible example to use in a similar way. The source of this lesson is:

The Crow country is a good country. The Great Spirit has put it exactly in the right place; while you are in it you fare well; whenever you go out of it, whichever way you travel, you fare worse. If you go to the south, you have to wander over great barren plains; the water is warm and bad and you meet with fever and ague. To the north it is cold; the winters are long and bitter and there is no grass; you can not keep horses there but must travel with dogs. What is a country without horses?

On the Columbia they are poor and dirty, paddle about in canoes and eat fish. Their teeth are worn out; they are always taking fish bones out of their mouths; fish is poor food.

To the east they dwell in villages; they live well, but they drink the muddy waters of the Missouri - that is bad. A Crow's dog would not drink such water.

About the forks of the Missouri is a fine country; good water, good grass, plenty of buffalo. In summer it is almost as good as Crow country, but in winter it is cold; the grass is gone and there is no salt weed for the horses.

The Crow country is exactly in the right place. It has snowy mountains and sunny plains, all kinds of climates and good things for every season. When the summer heats scorch the prairies, you can draw up under the mountains, where the air is sweet and cool, the grass fresh, and the bright streams come tumbling out of the snowbanks. There you can hunt the elk, the deer and the antelope when their skins are fit for dressing; there you will find plenty of white bears (grizzlies) and mountain sheep.

In the autumn when your horses are fat and strong from the mountain pastures you can go down into the plains and hunt the buffalo, or trap beaver on the streams. And when winter comes on, you can take shelter in the woody bottoms along the rivers; there you will find buffalo meat for yourselves and cottonwood bark for your horses, or you may winter in the Wind River valley, where there is salt weed in abundance.

The Crow country is exactly in the right place. Everything good is to be found there.

There is no country like the Crow country.
ARAPOOISH, CHIEF OF THE CROW
“MY COUNTRY”

1. How can you tell that Arapooish believes the land to be sacred?

2. What resources do Native Americans value in the land?

3. What fault did Arapooish find with the Blackfeet country?

4. What weakness did Arapooish find in Nez Perce country?

5. What did Arapooish think about Sioux country?

7. Native Americans believe in a circle of life. How is this demonstrated in the land?

8. What words did Arapooish use to describe how deeply he loved the Crow country?
NATIVE CONCEPT OF SPIRITUALITY

Everything on the earth is tied to the Great Spirit, therefore everything on the earth is sacred and part of the Great Spirit. Things of the earth are considered alive; there is no real difference between trees, rocks, animals and humans. They are all part of the sacred circle of life and all must be respected. Humans are no better or worse than the rest of creation, only a part of the whole.

Video Windwalker
Student Worksheet Native Spirituality

Windwalker is a production emphasizing the circle of life between humans, animals and the Great Spirit. It is about the Crow and Cheyenne, enemies in Montana, and is produced in the Cheyenne language with subtitles in English. It gives viewers a compelling view of native spiritual beliefs and defines the role humans play in the larger landscape. This needs to be shown in a larger block of time (2 hours), or in a series of lessons. The movie is entertaining and educational in itself, but the worksheets focus students on the topic at hand - how native spiritual beliefs define their everyday life. You may give students worksheets to fill in as they view the movie or as a concluding exercise at the end.

Answering the questions on the worksheets gives students a chance to describe their own interpretations, but the real value of this is to provide a time for students to share their observations with each other in order to expand their ideas. Group sharing of worksheets or a general class discussion can help students get a more complete idea of native spirituality.

The basic idea of the Circle of Life was described in a University of Montana workshop on Native Spirituality given by Robert Campbell, U of M, and Ron Therriault of the Flathead Community College, U of M workshop. 1991.

Windwalker can be rented in most video rental stores.

For higher achieving students, additional reading may be assigned:
1. What do Native Americans believe about the afterlife? What happens to you when you die?

2. Why did the Old Man believe he was kept alive? What was the Great Spirit’s purpose for him?

3. There are different spiritual ceremonies for events in everyday life. Describe the ceremonies for:
   - Birth:
   - Death:
   - Sickness:
   - War:

4. Animals are a part of the Sacred Circle of Life. What relationship did the Old Man feel with:
   - Wolves:
   - Grizzly Bear:
   - White Horse:
In Native American cultures, family structure was crucial to survival. The tribal family extended beyond the nuclear family, sometimes to the female side of the line, sometimes to the male side, but always structured to ensure survival of the tribe. Relationships between members of the tribal community were well defined by understood roles. Disruption of those roles caused disruption of the family and threatened the survival of all.

Student Worksheet: The Tribal Family

There are a few basic beliefs about traditional family structure that define the tribal entity:

1. All relationships in the tribe are described in terms of the children. All boys and girls of one generation are “brother” and “sister.” The parents generation are “mothers” and “fathers.” The next generation are called “grandmothers” and “grandfathers” regardless of immediate blood ties.

2. There are no orphans in tribal families. Children call all adult women in their family “mother” and all adult men “father.” If a child loses its parents, others fill in the spot with no traumatic transition.

3. The tribe is held together by its sense of tradition and the process by which this is passed to the children. One “father” might teach a boy how to hunt, another to make arrows, etc. The education of children is not the responsibility of one set of parents but of the whole tribe.

4. Elders are highly valued by the tribe. They are responsible for helping a child find its identity, its place in the tribe, and its purpose for life. The elders hold the ceremonies that mark life’s changes for children.

Discuss these traditional concepts of family in small groups and then share ideas:

What are the advantages of this kind of family structure? Would these ideas work in today’s society? How do these ideas fit with your own family structure? What would be the same and what would be different in today’s families, Indian or non-Indian? What problems occur without a family structure?

Have students fill in the schematic The Tribal Family from points made in the discussion.

Information was taken from lectures by Ron Therriault, Flathead Community College, in the Native Spirituality Workshop, 1991 at the University of Montana.
THE TRIBAL FAMILY

Elders:

Parents:

Children:
RESERVATION LANDS

Through a series of treaties with the American government, each native tribe in the area of Montana was allotted specific reservation lands. The reservations were generally placed within the original region of occupancy of each tribe but, of course, were substantially smaller than their original homelands and did not always include the lands considered sacred by the Native Americans.

Student Worksheet Reservation Lands
Overhead of Reservation Lands

In the same way that the tribes were unique in their lifestyles and geographical location before white men arrived, so too were the methods by which each tribe found itself on reservation land. Students take notes on the particulars from each tribe and complete their worksheet maps in the same way that they created the Native Territory worksheets. Emphasize that the color coding should reflect the same information on the first map as on this one, i.e. the Blackfeet territory should be colored red on both maps, etc.

After completing the Reservation maps, have students discuss the difference in location and size for each tribe when comparing this map to their Native Territory map. Discuss particulars like combining the Salish and Kootenai people together on one reservation. What would be the advantages and disadvantages of this? Another important consideration is the proximity of the Crow reservation with the Cheyenne reservation. From “Windwalker” what do we know of the traditional relationship between these two tribes? Would this be likely to affect the future success of neighboring reservations?

Any textbook on Montana should have a recent map of Reservation Lands. The information for this physical map was taken from.

TEACHING OUTLINE: RESERVATION LANDS

PLAINS TRIBES: Most tribes of the Plains area were placed on reservations by the Fort Laramie Treaty of 1851, with the exception of the Blackfeet, who had their own treaty with the government.

Crow Tribe: (originally known as Absarokee)
- The Crow were friendly to non-Indians and allied with them against other Montana tribes. For example, Crow warriors served as scouts with Custer against the Sioux and Cheyenne in 1876.
- The Crow were placed on the reservation by the Fort Laramie Treaty of 1851 despite their history of friendliness to the non-Indian settlers.

Blackfeet Tribe: (originally known as Siksika/Pikuni)
- The earliest encounter between the Blackfeet and non-Indians was recorded by Meriwether Lewis when he engaged in a gun battle with some Blackfeet on the Marias River. This began a history of enmity between the Blackfeet and the non-Indians.
- Smallpox epidemics decimated the Blackfeet between 1835 and 1848, and caused the Blackfeet to agree to reservation allotments.
- The Judith River Treaty of 1855 placed the Blackfeet on the original reservation lands, but two succeeding treaties, concluded in 1865, diminished the size of the reservation to its current size.

Gros Ventres Tribe: (originally known as Atsina)
- The Gros Ventres were placed on the Fort Belknap Reservation by the Fort Laramie Treaty of 1851, despite their ties to the Blackfeet.

Assiniboine Tribe:
- Despite the historical enmity between the Assiniboine and non-Indians, the tribe accepted their reservation allotment in the Fort Laramie Treaty because they received a fairly large portion of their lands, now called the Fort Peck Reservation.
MOUNTAIN TRIBES: The tribes of the mountain area were placed on reservations by the Council Grove Treaty of 1855.

**Flathead Tribe:** (originally known as the Salish)
- The Flatheads send east for “Blackrobes” thinking they would protect them from the Blackfeet. This led to the establishment of Jesuit missions for the Flatheads in the Bitterroot and Mission valleys, which provided a measure of agreement with non-Indian settlers.
- The government needed a railroad through the Bitterroot Valley, the original homeland of the Salish, and sent Captain Stephens to conclude a treaty with the Flathead to open the way to Bitterroot settlement.
- The Council Grove Treaty of 1855 designated the Confederated Salish and Kootenai Reservation near Flathead Lake, but was not signed by Chief Charlo of the Salish, who refused to leave his Bitterroot home.
- Encroachment by settlers over the years finally forced the last of the Flatheads to leave the Bitterroot Valley and move to the Salish and Kootenai Reservation in 1890.

**Kootenai Tribe:**
- Settled in their own tribal area near Flathead Lake by the Council Grove Treaty of 1855. The only drawback was that the Salish were assigned to this reservation as well, and the two tribes did not feel they were united as one people.
Overhead of Reservation Lands:

- Blackfeet Reservation
- Rocky Boy Reservation
- Fort Berthold Reservation
- Fort Peck Reservation
- Confederated Salish and Kootenai Reservation

★ Established for Cheyenne after Fort Robinson Massacre
* Established for the Cree and other tribes without Reservation Designation
RESERVATION LANDS IN MONTANA

BLACKFEET RESERVATION  CROW RESERVATION  FORT BELKNAP RES  FORT PECK RESERVATION

SALISH/KOOTENAI RES  ROCKY BOY RESERVATION  CHEYENNE RESERVATION
LESSON PLAN

TRANSITION TO A RESERVATION LIFE

Native American history consists of an extensive and often romanticized study of native lifestyles prior to non-Indian contact. This ends with the Indian wars and placement of tribes on reservations. The history of Native Americans continues, however, and their transition to a reservation life is much more important as a topic of study if we want to understand the condition of Native Americans in today’s Montana.

Collection of Native American writings from a particular tribal history
Student Worksheet Transition to a Reservation Life

This lesson is a reading for information lesson. In historical reading, it is best to choose selections that are as close to primary sources as possible. Because Native American history is an oral rather than written history, we are limited in our selection of materials. There are several books and essays by Indians which contribute to an understanding of their transition to a reservation society, but all have been translated by non-Indians of the period, making them somewhat suspect in interpretation. Nevertheless, we use the best we have available, making note of the part white interpreters may have played in the writings. Because there is such a wide variety of possibilities, it may benefit students to narrow the topic to the tribe of Native Americans who reside on the reservation nearest their school. They complete their worksheets from the information they encounter in the writings.

Either as a preview exercise to their reading, or as a discussion base after they complete their readings, review specific changes for men, women and children found in the Teaching Outline for this lesson. Not all writings will have evidence of each change, but students should be able to relate specific references to some of the changes listed.

Because of the quantity of possibilities, a literary reference page has been included in this lesson. Select appropriate readings according to a specific tribe or combine those materials that would be most accessible and appropriate. If you have only one reference available, make it:

The Last Best Place: A Montana Anthology (cited earlier) which includes several native essays appropriate for this lesson.
TEACHING OUTLINE FOR TRANSITION TO RESERVATION LIFE

Cultural Changes for Men in a Reservation Society
1. Native men had distinct roles in their tribal life:
   - warriors trained in warfare
   - spiritual leaders who led the family
   - providers of food from the resources of the earth
2. On the reservation, their roles changed:
   - not allowed to practice warlike activities, not allowed to leave the reservation to challenge other tribes, could no longer hold ceremonies relating to war activities.
   - no longer the spiritual leaders, were replaced by Christian missionaries and Catholic priests, not allowed native spiritual ceremonies
   - no longer able to hunt buffalo, wildlife on reservation lands soon hunted out, not able to leave to hunt in other areas, had to depend on government beef to prevent starvation.
3. Unless the native men became like white men and started farming or businesses, there was no legitimate role for the men of the tribes:
   - they lost their traditional roles in life and the dignity that accompanied those roles. Many turned to alcohol to replace their sense of self, and tribes are still dealing with the effects of alcoholism as a result of the loss of their traditional roles.

Cultural Changes for Women in a Reservation Society
1. Native women had distinct roles in their tribal life:
   - collecting fruits, roots and berries
   - curing and drying meat for winter storage
   - dressing hides for clothes and shelter
2. On the reservation, their roles changed:
   - fences across land prevented collection of traditional foods
   - government supplies of flour, baking powder and beef replaced their traditional meat supplies, and they did not know how to use this food. FIELD MATRONS, white women hired by the government, taught native women to cook and sew like white women, and gradually the old ways were lost, as well as valuable knowledge of native customs.
   - hides became more scarce, so gradually the traditional teepee homes were replaced by cabins, and clothing was made from loomed cloth.
Cultural Changes for Women (cont)
3. Women had less of a role change than men, as they were still responsible for providing food and shelter, even thought the way they did it changed. As a result, women gradually assumed the role of leadership of native family life. Today native people are trying to readjust their roles to a more traditional balanced standard of family life, after being disrupted for nearly one hundred years.

Cultural Changes for Children:
1. In a tribal society children were taught:
   - Family and tribal history through stories from their grandparents and the elders of the tribe.
   - Skills for survival from their parents, aunts and uncles.
   - Spirituality and ethics from the ceremonies of the tribe.
2. On the reservation, children were sent to boarding schools and taught:
   - European history and language instead of their own history. The use of native dress and language were punished.
   - Homemaking and farming skills used in a white society.
   - Spirituality and ethics from priests and missionaries.
3. Children were raised in a different tradition from their parents, and the nucleus of the native family began to break up. This in turn destroyed the traditions of tribal life, which had revolved around the education of their children.
LITERARY REFERENCES: TRANSITION TO A RESERVATION SOCIETY

Note: Because so many of our sources for native writers were translated by white men of the period, they have become suspect in terms of cultural legitimacy. For a perspective on the value of these writings, teachers would find it worthwhile to read Chapters Five and Six of:


BLACKFEET RESOURCES:
1. "Starvation Winter," personal account from James Willard Schultz, Montana fur trader, describing the winter of 1883-1884 when more than six hundred Blackfeet died under the reservation system, found in The Last Best Place, p. 341 (cited earlier).
3. "What Harm Our Sun Dance?," a defense of native ceremonies forbidden by the government, found in Native American Testimony, p. 224 (cited above).

CROW AND CHEYENNE RESOURCES:
3. "Iron Teeth, A Cheyenne Old Woman," as told to agency physician, Thomas B. Marquis in 1926, recounts the transition to a reservation system. Found in The Last Best Place, p. 233.
LITERARY REFERENCES: TRANSITION TO A RESERVATION SOCIETY

FLATHEAD RESOURCES:
3. "Indian Wars of the Northwest," an excerpt from Granville Stuart's Forty Years on the Frontier, which gives a sympathetic account of the removal of the Flatheads to the reservation system. Found in The Last Best Place, p. 383 (cited earlier).
4. To understand the historical perception which prompted the boarding school policy in the reservation system, read Indian and White in the Northwest, by Father L.B. Palladino, S.J, John Murphy & Company: Baltimore, 1894. This defines the missionary purpose from an 1894 perspective. (An outdated edition likely to be found in University archives only).

Non-literary sources which supplement the sources cited for the Crow, Flathead and Blackfoot are worth checking out:

"Warriors Chiefs in a New Age," a supplementary portrait of Chief Plenty Coups and his legacy to the Crow People, is available to teachers through the Montana Committee of the Humanities, VHS 30 min. For information and catalog, call (406) 243-5976.

"The Drum is the Heart: Enduring Values of the Blackfeet" is also available to teachers through the Montana Committee of the Humanities, and through the University of Montana's IMS library, VHS 29 min. Use above number for information.

"The Place of Falling Waters" Part I is a relevant look at the changing values in Flathead use of the land. VHS 30 min., also available through the Montana Committee for the Humanities.
TRANSITION TO A RESERVATION LIFESTYLE

CHANGES FOR MEN:

CHANGES FOR WOMEN:

CHANGES FOR CHILDREN:
Historically culture has played a dominant role in the formation of Native American value systems. Even through a stringent assimilation process carried out by missionaries and government policy, cultural values that are different from the European tradition have survived and are resurfacing to form a new cultural perspective of Native Americans today. An understanding of these values promotes an acceptance of cultural distinctions within our society and enhances our ability to work across cultural lines.

Worksheets Understanding Value Systems

Distribute the two-page survey of value systems to the students. Explain that every individual develops a set of values that determine how they feel about things around them. Have them mark, on a scale of 1-5, where they would place themselves on a continuum of each value.

When the surveys are finished, go through the values listed and discuss each set. How did students interpret the values? What are real life examples that demonstrate the values? How do their answers fit with what they think American society in general feels about the values? EMPHASIZE the importance of recognizing the right of individuals to believe differently about value systems.

At the end of the discussion, explain that GENERALLY SPEAKING the values listed on the left side of the continuum are those ascribed to mainstream Americans. GENERALLY SPEAKING the values listed on the right side are those ascribed to Native Americans. Is it possible to say exactly which values belong to one group or another? Is there overlap? Is there room in society for more than one perspective? Can we learn from other viewpoints?

This activity was loosely based on a list of “Differences in Native and Anglo Values,” taken in part from Cultural and Historical Perspectives in Counseling American Indians, by Darrell W. Sue, 1981, and distributed to schools for teacher use.
**UNDERSTANDING VALUE SYSTEMS**

Complete the survey below, circling the number which BEST describes how close you feel to one value or its opposite. A "3" circled means you believe in both values equally.

<table>
<thead>
<tr>
<th>The future of our country lies in our youth. Their dreams lead society.</th>
<th>The future must be built on the past. Older members' experiences lead society.</th>
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<tr>
<th>Get things done on time. “Don’t put off til tomorrow what you can do today.”</th>
<th>Don’t get so hung up on time. You will get what you want eventually.</th>
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<tr>
<th>Work for the future. Stick to a job even if you don’t like it.</th>
<th>Work for the present. When you have met your goals, quit and enjoy things.</th>
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<tr>
<th>Look forward. Progress is the future. “Tie your wagon to a star.”</th>
<th>Look to the past to understand the future. Appreciate tradition.</th>
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<tr>
<th>Spirituality is a private affair. Each person chooses his or her own way.</th>
<th>Spirituality is universal. We are all part of one spirit, even if we don’t know it.</th>
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<tr>
<th>You know where you are in life by the house and job you have.</th>
<th>You know where you are in life by the world around you; look to the land.</th>
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<tr>
<th>The most important thing in life is to be successful at what you do.</th>
<th>The most important thing in life is to be happy at what you do.</th>
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<tr>
<th>Work with your mind. It is how we distinguish ourselves from animals.</th>
<th>Work with the land. Touching the earth fulfills a human need.</th>
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<tr>
<th>Children are the responsibility of their parents. Don’t tell them how to raise them.</th>
<th>Children are a gift to be shared by everyone in the community. We all share responsibility.</th>
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UNDERSTANDING VALUE SYSTEMS (cont).

The law is the law. If you break it, you pay the consequences. Law is relative. It depends on the circumstances for each individual.

Science is the basis for all knowledge. Don’t believe what you can’t see. The world is full of mysteries. We must be open to new information.

The bigger the better. The more you have, the better off you are. The best things in life are the tiny things we appreciate for free.

When you finish the survey, add all your points. Then divide the total by 12 to see where you fit on the overall continuum.
There are seven reservations systems in Montana. Socially, economically and politically these reservations are in the process of becoming fully participative in Montana life. Consequently, Montana students need to be educated about the reservation system today: the problems of the reservation legacy and the hopes for reservation life of the future.

Copies of news articles about recent Montana tribal activity
(or)
Copies of Special Report on Montana’s Indian Education
Student Worksheet Reservation Life Today

If you diligently collect news articles from Montana newspapers on issues which affect Native Americans for a period of a month or two, you will have a reasonable source of information for current events on the reservations. For a broader view of reservation life in general, try to get copies of the Special Report on Montana’s Indian Education, as it is an excellent and reusable resource for this activity. Have students read a variety of articles during a class period, noting and listing those events on the reservations which indicate problems needing to be solved. Have students then look for and list innovative ideas that are being tried on the reservations to alleviate some of the inherent problems.

Key in on a reservation nearest to your area and discuss student knowledge about and relationships to the reservation. Analyze each problem and relate its applicability or nonapplicability to your reservation area. Discuss whether most non-reservation students in Montana understand the life of reservation students, and whether this is necessary in order to work together in the future.

The most valuable resource I have found for modern reservation life and its attending problems is the Special Report on Montana’s Indian Education, because it relates specifically to problems which affect the student age group. It is a collection of investigative stories by Honors Students in a class directed by Patricia Reksten and Carol Van Valkenburg at the University of Montana. Although no longer in print, this 1992 report might be available by calling Patricia Reksten at the U of M School of Journalism (406)243-2191.
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<th>RESERVATION PROBLEMS</th>
<th>INNOVATIVE IDEAS BEING TRIED</th>
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SUMMARY OF REMAINING CURRICULUM UNITS
Outline of Major Concepts to Teach About Montana Exploration

THE HISTORY

Montana Exploration Journey: Lewis and Clark Expedition as a prototype of early exploration:
1. Goals of exploration
2. Conditions of the journey
3. Accomplishments of the expedition

Exploration as a Source of Information: Determining Montana’s natural state through early journal accounts:
1. Learning to read journal entries
2. Analyzing journal entries for information
3. Samples of journal writings from Lewis and Clark as well as other early Montana explorers

THE ISSUES

Exploration as a Base for Evaluating Change: Selecting specific information for evaluating changes in Montana wildlife:
1. Wildlife sightings on the Lewis and Clark Expedition
2. Graphing wildlife sightings for a comparison of early plains wildlife and early mountain wildlife
3. Evaluating comparable wildlife populations in the plains and mountains today
4. Evaluating wildlife information when determining current issues such as wilderness designation and resource use
Outline of Major Concepts to Teach About Montana Fur Trade

### THE HISTORY

**Early Mountain Men in Montana:** Understanding early Montana living conditions through a study of mountain men:
1. John Colter as the first mountain man
2. Diet of early mountain men
3. Trapping beaver in early Montana
4. Speech and vocabulary of the mountain men
5. The rendezvous

**The Fur Trade Economy:** The earliest economic endeavor as part of the United States:
1. Fur trapping companies
2. Relationship to native tribes
3. The decline of the fur trade

### THE ISSUES

**Fur Trappers Today:** A little discussed but widespread profession for many Montanans:
1. The mountain man mystic endures
2. Trapping wildlife with modern equipment
3. Trapping regulations
4. Fur trapping as a part of game management

**Wildlife Management:** Managing wildlife to satisfy many different goals can be a challenge:
1. Game management philosophy
2. Wilderness philosophy
Outline of Major Concepts to Teach About Montana Gold Mining

<table>
<thead>
<tr>
<th>THE HISTORY</th>
<th>Early Montana Gold Mining: The great Montana Goldrush of the 1860’s:</th>
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<tbody>
<tr>
<td></td>
<td>1. Trails and strikes</td>
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<td>2. The miners</td>
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<td>3. The methods</td>
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<td>4. The mills</td>
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<td>5. The towns</td>
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<td>6. The politics</td>
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<tr>
<th>THE ISSUES</th>
<th>Gold Mining to Hardrock Mining: What is happening today?</th>
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<td></td>
<td>1. Review hardrock mining vs. fossil fuel mining</td>
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<td>2. Modern methods of hardrock mining and milling</td>
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<td>3. The role of hardrock mining in Montana’s economy</td>
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<td>4. Hardrock mining regulations</td>
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<th>Hardrock Mining Issues:</th>
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<td>1. The legacy of hardrock mining in Montana</td>
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<td>2. Environmental Protection Laws</td>
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<td>3. TO MINE OR NOT TO MINE : The Debate</td>
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<td>4. Establishing an environmental ethic consistent with responsible resource development</td>
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Outline of Major Concepts to Teach About Montana Copper Mining

THE HISTORY

**Early Montana Copper Mining:** Early gold mining methods become more sophisticated and a new era begins:
1. Placer mining to quartz mining
2. Boom towns to company towns
3. The quartz mine: methods and miners
4. The appeal and the dangers of mining life
5. The union movement

THE ISSUES

**Montana Copper Mining Today:** Butte becomes the standard for Montana mining towns:
1. Butte’s mining legacies: good and bad
2. Butte’s future as a post-mining city

**Unionism Today:** Perhaps mining’s most enduring legacy:
1. Unionism as a political entity historically
2. Unionism as a political reality today
Outline of Major Concepts to Teach About Montana Coal Mining

THE HISTORY

Early Montana Coal Mining: Early coal mining followed the railroad lines and resulted in a series of coal towns in eastern Montana:

1. Review of fossil fuel geology
2. Historical accounts of coal in Montana
3. Coal mining in underground mines
4. Development of coal towns around ethnic groups

THE ISSUES

Coal Mining Today: Montana coal provides a crucial part of Montana’s economy today:

1. Coal terminology
2. Strip mining techniques
3. Coal products: electrical production
4. Coal reserves for the future

Environmental Considerations: Coal mining is strictly regulated by Montana law to protect environmental considerations:

1. Environmental protection laws
2. Reclamation in action
3. A possible model for mining reform for hardrock mining
## Outline of Major Concepts to Teach About Montana Timber Industry

### THE HISTORY

**History of Timber Harvest in Montana:** An early corollary industry to mining:
- 1. The jobs
- 2. The men
- 3. The tools

### THE ISSUES

**Trees to Lumber:** The basics of the wood industry today:
- 1. Parts of the tree
- 2. Lumber cuts from the tree
- 3. Species of trees appropriate for lumber
- 4. Timber economy
- 5. Move to diversified products
- 6. Lumber mills, plywood plants, paper mills

**The Politics of Timber Today:** An on-going controversy about why, how and where to cut:
- 1. Timber harvest methods: the economics
- 2. Best management practices: the environment
- 3. Wilderness issues: the controversy
- 4. The place of environmental ethics in resource management
# Outline of Major Concepts to Teach About Montana Ranching

## THE HISTORY

**Montana's Colorful History:** From cowboys to artists to rodeos, the myth of the West lives in our tradition:

1. History of ranching in Montana
2. A day in the life of a cowboy
3. Ranching terminology
4. Cowboys according to Remington and Russell
5. Cowboy philosophy through cowboy poetry

## THE ISSUES

**Ranching on Today's Range:** A difficult task to renew and retain the rangelands that are Montana's chief eastern resource:

1. Montana's native grasses
2. Range degradation in the past
3. Principles of range management today
4. Weed control on the range

**Range Management of the Future:** Exploration of a variety of range management techniques:

1. Joining our Canadian neighbor in range practices for adjoining shortgrass prairie management
2. Evaluating a variety of management techniques
Outline of Major Concepts to Teach About Montana Farming

**THE HISTORY**

**The Homesteading Era:** Although homesteading was a reality in all parts of Montana, the biggest impact was the homesteading rush in the second decade of 1900 in eastern Montana and the Front:

1. History of homesteading in Montana
2. Homesteading as a national movement: literature
3. The myths of Montana farming: the immigrant’s dream
4. Robert Sutherlin vs. dryland farming
5. Homesteading from a woman’s point of view: diary accounts

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**THE ISSUES**

**Montana Farming Today:** A look at what part farming actually plays in Montana’s economy today:

1. Farming regions
2. Farming products
3. Farming as a part of Montana economy

**Challenges for Farming of the Future:** Farming, as many other traditional industries in Montana, is undergoing change as a result of environmental and economic pressures:

1. The challenge of family farming in a corporate economy
2. Farming and environmental coalitions
3. National farm policy
Outline of Major Concepts to Teach About Montana Tourism

**THE HISTORY**

**Historical Tourism:** Montana was one of the earlier destinations for enthusiasts of sight-seeing tours:
1. Early Montana attractions for tourists
2. Effect on Montana development
3. Tourism as a new industry in the 1920’s
4. The effect of tourism on state landmarks

**THE ISSUES**

**Tourism in the Montana Economy:** Tourist dollars have become one of the four major industries supporting the Montana economy:
1. The economic picture
2. The benefits of tourism to the state
3. The costs of tourism to the state
4. Management of a viable tourist industry

**Montana as a Tourist Attraction:** What draws people to Montana today?
1. The value of natural tourist attractions
2. The value of man-made tourist attractions
3. The demands of tourism on other economic concerns

**Tourism as a Rationale for Leisure Activity Development:**
1. Ski resorts
2. Hiking trails
3. Outfitters and guides operations
4. Hunting and fishing tours
5. Whitewater tours
6. The Old West
Outline of Major Concepts to Teach About Montana Government

**The Structure of Montana Government:** In order to participate as citizens, we need to understand the structure of our state government:
1. The political structure of state government
2. Political action by state citizens

**The History of Political Action in Montana:** Examples of political action in the state, both within and outside the governmental structure, give a picture of Montana’s political history.
1. Examples of government action in the past
2. Examples of citizen social action in the past
3. Evaluation of changes made by each

**Recognizing the Issues:** Piecing together Montana’s economic picture to develop sound policies in:
1. Mining
2. Agriculture
3. Timber
4. Tourism
5. Developing a Plan for the Future

**Participation in Montana Government:** Whether directly involved in Montana government, or as participants in grass-roots activism, citizens of the state direct the course of Montana’s future. Social action strategies:
1. Telephoning
2. Letter Writing
3. Interviewing
4. Speeches
5. Surveys
6. Petitions
7. Proposals
8. Organizing Groups
9. Media Coverage
10. Campaigning
TEACHER RESOURCES FOR REMAINING CURRICULUM UNITS
RESOURCES FOR EXPLORATION IN MONTANA:

Literary Resources:
The most crucial resource for exploration is, of course, The Journals of Lewis and Clark. The following edition was selected because it is edited for clarity in reading, but includes the normal punctuation and spelling of the time period, which is important for students to recognize in future readings. I would recommend purchasing one book for every 5-6 students in the classroom, as it will be well worth the investment.


There are several other stories of exploration in the Montana region, but to find the most information for the least investment, you will find alternative journal selections for student analysis in:

1. George Catlin’s “Letters and Notes on the Manners, Customs and Condition of North American Indians” p. 177. (1832)
3. Nicolas Point’s “A Journey on a Barge Down the Missouri” p. 205. (1841)

Other Applicable Resources:
The base information for the graphing activity on wildlife sighting by Lewis and Clark was taken from Chesarek and Brabeck’s book but was originally published in Montana Outdoors, July/August 1978.


The focus of this chapter was the natural environment at the time of Lewis and Clark, particularly as it pertains to wildlife. For a different focus on the Lewis and Clark Expedition, the Montana Heritage Foundation recently distributed a series of pertinent lesson plans:

Headwaters of the Missouri River, produced by the Montana Heritage Foundation, Chere Jiusto, Project Director. Contact the Montana Historical Society, Helena.
RESOURCES FOR FUR TRAPPING IN MONTANA:

**Literary Resources:**
The best all-around source for teachers to introduce students to fur trapping endeavors in Montana is *Give Your Heart to the Hawks*. This fictionalized account of the early mountain men is interspersed with documentary accounts of particular customs of the profession. It is readable, riveting to students, but also responsible in the quality of its citations. It links exploration and the fur trade as one movement, which is a valuable perspective for students as well.


Generally, the early mountain men were more doers than writers. More information is published about them than by them. Some examples of writings left behind by a few of these fur trappers can be found in:


There are a couple of fictional possibilities a teacher may wish to pursue for background as well as recommendations for student reading. Read first Bevis' *Ten Tough Trips* to decide if the other two will fit what you wish to teach about fur trapping in Montana.


Other Applicable Resources for Fur Trapping:
Any of Montana’s history books will have a chapter on the Fur Trapping Era, but beyond this the one other source which might be especially appropriate for teacher background information is an account of the relationship between the fur trappers and the Indian wives upon whom they depended. For a different perspective on the fur trapping industry as documented in the Canadian West read:


Additional sources used in lesson plan


The Fur Trade, educational trunk provided by the Montana Historical Society, 225 North Roberts, Helena, Montana 59620. Call (406) 444-4789.
RESOURCES FOR GOLD MINING IN MONTANA:

**Literary Resources:**
For information about the methods and the miners in early Montana, general Montana history books and textbooks are adequate. To experience the reality of daily life, however, stories about the boom towns by its own inhabitants are unexcelled:

*Frontier Woman: The Story of Mary Ronan,* as told to Margaret Ronan and edited by H. G. Merriam. University of Montana Press: Missoula, Montana, 1973. (I think this may be out of print, but it needs to be revisited, especially for the wealth of information in Chapters 1-3 about Alder Gulch and Last Chance Gulch.)

Several short excerpts and essays can be found in:

*Focus:*


**The Last Best Place: A Montana Anthology.** Focus:

Two other accounts are worth reading for student selections, but go beyond Montana borders:


Other Applicable Resources for Gold Mining:
To complete a pictorial history of gold mining, students use information from textbooks and comparable resources like:


Natural Resources in Montana History, publication produced by the Montana Department of Natural Resources and Conservation, 1520 East Sixth Avenue, Helena, Montana, 1987. P. 6-7.

For current information on gold mining, and particularly information pertinent to controversial issues such as the New World Mine near Yellowstone, preview


“Mine From Hell” Threatens Yellowstone, advertising brochure produced by the Greater Yellowstone Coalition, P.O. Box 1874, Bozeman, Montana 59771. (406) 586-1593. FAX (406) 586-0851. E-Mail gyc@desktop.org.

Minerals and Mining Information Packet, produced by the Gem Program of the Society for Mining, Metallurgy and Exploration, Inc. 8307 Shaffer Pkwy, Littleton, Colorado 80127. There is also a Teacher Training Packet available for elementary use and another for high school use which contains projects, games and other learning exercises about minerals and mining.
RESOURCES FOR COPPER MINING IN MONTANA:

Literary Resources:
There are many general sources available for teacher background on Butte’s copper mining, especially as it led to unionism. Literary sources for student use are more rare:

The Last Best Place: A Montana Anthology, edited by William Kittredge and Annick Smith. Focus: Chapter Four - “Writings About Butte” especially:
2. “I Found My Likings in the Mines” by Dennis Murphy as told to Teresa Jordan (especially good for mining techniques). p. 501.


Once students have learned the equipment and jobs of the quartz mine, the following poem is excellent for discussion, especially in investigating the results of unionism:


For a general description of the variety of ethnic groups which supported the quartz mining era:

“The Melting Pot” by Robert Laxalt. Published in Tony Hillerman’s The Best of the West, 1991. (Description of variety of ethnic groups in the copper mining industry in Nevada).

Other Applicable Resources for Copper Mining:
Historically, this topic is unequaled in material available. For general copper mining history, refer to any historical text, but especially:


**Other Applicable Resources for Copper Mining:**
For information specifically identifying the methodology of quartz mining and the ensuing union activities to regulate it, refer to:

**Hard Rock Epic: Western miners and the Industrial Revolution 1860-1910,**


For a more political review of the copper mining industry, read the classic:

**The War of the Copper Kings: Builders of Butte and Wolves of Wall Street,**

The legacy of a mining town after the boom can be found in current articles:

“Floods or a Quake for Butte?” by Dave Alt of the University of Montana.


“Butte Comes Out of the Pit,” a look at life after mining by Bruce Farling.

For a very good anthology of the best of writings about Butte, check:

RESOURCES FOR COAL MINING IN MONTANA:

Literary Resources:
Coal mining has not found a home, not in Montana history books nor in the Montana literary tradition, except perhaps in occasional references to the development of the railroads who depended upon it. Coal mining is an old phenomenon in the state, but its romantic side stayed back East in the underground mines of West Virginia and Pennsylvania. What we have for historical flavor of the fossil fuel industry in Montana is

Against the Darkness: A Tribute to the Montana Coal Miner, VHS 30 min.
Developed by the Montana Office of Public Instruction, Jan Cladouhos, Project Director. Produced by the Montana Department of State Lands and Silvertip Productions, 1989.

(A surprisingly interesting book about the fossil fuel industry’s captivating moments from a member of the profession).

Other Applicable Resources for Coal Mining in Montana:
The best source of information of an industry is from the organizations of the industry itself. Available from the Montana Power Company, free to teachers, are the following pamphlets.

Factsheet: Coal.
Factsheet: Surface Mining of Coal in Montana
Factsheet: Surface Mine Land Reclamation
Produced by the Montana Power Company (six-page informational brochures with maps from Montana Bureau of Mines and Geology). Write: Ms. E. Wing Spooner, Director, Consumer Educational Services, 40 E. Broadway, Butte, Montana 59701.

For information on the current issues produced by coal mining in the state of Montana, refer to publications by the Northern Plains Resource Council, a grassroots organization of ranchers and environmentalists who joined forces to confront the development plans of huge energy corporations in the area:

Annual Report of the Northern Plains Resource Council, produced every year to outline major issues investigated by the organization. Write: Northern Plains Resource Council, 2401 Montana Avenue #200, Billings, Montana 59101. (406) 248-1154.

RESOURCES FOR THE TIMBER INDUSTRY IN MONTANA:

Literary Resources:
Early day logging paralleled the mining industry, so much of its history is tandem to that of the mining industry. For specific information on logging:


There are many essays about the preservation perspective which are available for use in the study of the current logging controversies, but the best for students is:


Other Applicable Resources for the Timber Industry:
For use in the classroom:

“Early Logging in Western Montana” by Jeff Sanders. A research paper, unpublished, written in 1990 from interviews with old loggers. Copies available upon request from Maureen Edwards, Lolo Middle School, Lolo, Montana 59802.


The Life of the Forest, Champion International Corporation, One Champion Plaza, Stamford, Connecticut 06921. Copies available upon request from this address.

Montana Forestry Best Management Practices, by Bob Logan and Bud Clinch. Published by Montana Department of State Lands. To order, contact: Department of State Lands, 2705 Spurgin Road, Missoula, Montana 59801.
Other Applicable Resources for the Timber Industry:
For continuing information on the controversies surrounding the timber industry and disputed use of our timber resource, you can obtain these:

**Inner Voice**, newsletter published quarterly by the Association of Forest Service Employees for Environmental Ethics (Employees speaking as concerned citizens of the United States). For copies, write: AFSEEE/Inner Voice, P.O. Box 11615, Eugene, Oregon 97440.

**The Northern Rockies Ecosystem Protection Act**, pamphlet explaining a proposed comprehensive plan for wilderness protection. Contact: Alliance for the Wild Rockies, P.O. Box 8371, Missoula, Montana 59807.

**The Networker**, newsletter published quarterly by the Alliance for the Wild Rockies. Contact them at P.O. Box 8371, Missoula, Montana 59807 for back copies for student use.
RESOURCES FOR RANCHING IN MONTANA:

Literary Resources:
There are innumerable resources about early Montana ranching and cowboys. The “classics” of western ranching are these books.


The Last Best Place: A Montana Anthology, edited by William Kittredge and Annick Smith. These selections are appropriate for ranching memories:


4. “Sheepherding on the Sweetgrass” by Matthias Martinz, from reminiscences donated to the Montana Historical Society in 1983.

5. “Pages From my Notebook” from Today I Baled Some Hay to Feed the Sheep the Coyotes Eat, by Bill Stockton, published in 1982. (Edit for students if you think necessary).

My personal favorites for use with students in the classroom are:


To get the perspective of women on the early ranching frontier, read:


RESOURCES FOR HOMESTEADING IN MONTANA:

Literary Resources:
There are several excellent accounts of the homesteading era, by prairie women especially, which give us a unique perspective of the movement to farm a resistant Montana.

A Harvest Yet to Reap: A History of Prairie Women, researched and compiled by Linda Rasmussen, Lorna Rasmussen, Candace Savage and Anne Wheeler. University of Nebraska Press: Lincoln 1976. (I think this is out of print, but needs to be revisited for its unique contribution to the history of this era).


The novels of Montana authors are becoming the sounding board for the “real Montana.” Good possibilities for advanced students or for selected student reading about early homesteaders:


For a broad view of the eastern Montana homesteading movement of the early twentieth century, the best short version for student use is:

RESOURCES FOR TOURISM IN MONTANA:

**Literary Resources:**
Although tourism was popular in the late nineteenth-century Montana, it rarely finds a place in an historical review of Montana development. Given the role that tourism plays in Montana’s current economy, it is well worth studying what drew people to Montana in the past and what draws them today. The accounts of exploration may be used to view early Montana with “a tourist’s eye” but there are two resources which focus on Montana tourism in its historical sense and should not be overlooked:


**Other Applicable Resources for Montana Tourism:**

Tourism as an important part of the Montana economy:


Tourism as a haven of new experiences for the out-of-state vacationers:


Tourism as a framework for investigative research on specific leisure activities - examples:


RESOURCES FOR GOVERNMENT IN MONTANA:

**Literary Resources:**
The purpose of government is to effect change for the betterment of society. We teach students how to effect change within the governmental framework as voting citizens, but we also teach students how to effect change outside a governmental structure as well, through grassroots political activism and appropriate political strategies. Literary readings for examples of both kinds of political activity can be found in numerous writings; the following two are examples:

**Traditional Governmental Activity:**


**Grassroots Activism:**


**Other Applicable Resources for Government in Montana:**
For an understanding of the structure of state government, and particularly a listing of key concepts which should be taught to secondary schools students, and from which key concepts for middle school students can be drawn, see:


For a general analysis of issues facing the people of Montana today, OBTAIN A FREE COPY OF THIS OUTSTANDING REPORT:


For a well-written description of appropriate political strategies for participating citizens of the future as well as lessons for student use see:

**Final Comments:**

There is no single source of material that will provide students with the wealth of information available about Montana history. Nor is there a single perspective which will give students a comprehensive view of why Montana is the way it is. This condition makes it difficult to teach a comprehensive Montana Studies course, but it also creates an environment which can stimulate both teachers and students to continual research and investigation. Perhaps the best gift teachers give to their students is the curiosity to continue the search for a more complete understanding of what it means to be here in Montana, both in the past and today.

There has been a steady source of published historical accounts of Montana life since the early 1800's. *The Journals of Lewis and Clark* were augmented by *Indian and White in the Northwest* by L. B. Palladino, which in turn was enhanced by Merrill Burlingame’s *The Montana Frontier*. Joseph Kinsey Howard produced his classic *Montana: High, Wide and Handsome*, K. Ross Toole his *Montana: An Uncommon Land*, and Rex Myers and Harry Fritz their *Montana and the West*. The list of Montana history writers continues to grow and proves that history is alive, that it is continually being renewed by new perspectives and new approaches. History is forever young and constantly fights our attempts to think of the past as “over and done with.”

In addition to this constantly refurbished view of the history of Montana, our literary heritage has also given Montana a personality with which we can identify in all its moods and changes. Old authors like D’Arcy McNicholl and Mildred Walker enjoy a new surge of popularity producing pictures of life in Montana different than our classic novelist, A.B. Guthrie, but equally important to a full understanding of life in the past. Ivan Doig and
James Welch continue to produce new interpretations of old Montana, and Mary Clearman Bleu gives depth to our sense of place and being in Montana.

The Montana of the past is an integral part of our Montana of the present. Only in understanding the depth of reality it has in our lives, through diverse historical and literary perspectives, can we hope to direct our state toward an equally vivid Montana of the future.