

Track 4

Animals and Habitat



Joe Welker

Directions and Background

If you choose to follow this Track review all of the background stories and activities included. Additional background and activities are available in the Activity Kit (available on the Blackfeet and Salish and Kootenai reservations) under the titles *Beaver Habitat Nature Trail* and *Bears: Imagination and Reality*, a publication of the Science Museum of Minnesota. Review of the other three Tracks is optional. Animals and Habitat begins with some generalized Native American cultural lore about beavers and bears. Review this information and adapt it for your use as you see fit.

You may decide to focus on beavers when doing this track. If so, read the background information, do the activity entitled Animal Research under classroom activities and then go to the booklet called *Beaver Habitat Nature Trail* for further activities. If the group chooses to focus on bears, read the background information, do the Animal Research activity and go directly to *Bears: Imagination and Reality*. A special classroom activity on Native American Habitat called *Painted Lodges* is provided. This activity is appropriate for study of either bears or beavers.

Once you have arranged with a naturalist for a park visit, review the Classroom Activities and practice with the materials in the Activity Kit. Because there are so many Classroom Activities in the beaver and bear programs, you may choose to do only some of them. Tell the naturalist what you have done in preparation for your visit.

For program users that do not have access to a kit, please call Glacier National Park staff for additional materials.

Beavers and bears are important medicine animals to the tribes. In the past, Indians were extremely dependent upon the health of the habitat of beavers, bears, and other wildlife. Immigration by whites and the resulting changes in land use jeopardized the Indians' ability to meet their basic needs for food, water, shelter, and space.

Beavers and bears were by no means the only creatures that felt the pressure of westward expansion. Many other species of animals and plants that were important to local tribes as food, clothing, and medicine were also driven to near extinction. As their more extensive original habitats were altered or destroyed, some species managed to survive in and around the mountains. Today Glacier National Park is a last bastion for some of those species. Although it may be economically inconvenient at times to make room for grizzly bears, gray wolves, and bald eagles (to name only those species with the highest profiles), it has become necessary to protect what remains of their habitat. Without habitat--a place big enough to provide all the space, food and shelter that an animal needs--wildlife will not survive.



The Activity Kit contains classroom activities for examining beaver and bear habitat. The following background information is designed to contribute extra dimension, tone, and a special way of looking at succession and habitat.

Beaver Business

Initially, it might seem strange to make such a fuss about an animal like the beaver. A first question might be, What do beavers have to do with endangered species? They are thriving nearly everywhere. Many people are surprised to learn that beavers were the first endangered species in North America. By the middle of the nineteenth century they were nearly extinct. There is hope for other endangered species!

Next to humans, there is no other animal that has as much obvious impact upon the environment as do beavers. The work they do and role they play in Nature's plan impact their surrounding environment. Sometimes, people don't appreciate the flooding and terrain alterations produced by the largest of all North American rodents. Prehistoric species stood nearly eight feet tall and weighed more than a bear. Full-grown beavers now weigh as much as 60 pounds and can chew through a three inch diameter tree in little more than a minute.

Glacier National Park has been formed by a succession of dramatic natural events. Mountain-building forces have proceeded for more than a billion years. The glaciers that carved the surface topography of the park did their work in about two million years. After valley glaciers receded, a seemingly minor force, beavers, contributed to the finishing touches of what we see today. Beavers have had a significant impact upon the topography of most of the valleys in Glacier National Park. After the glaciers retreated ten to twenty thousand years ago, mountain streams caused erosion along mountainsides and valleys. Beavers worked their way up most streams in the area. They ate the cambium layer or inner bark of trees and cut them down to build dams and lodges. Before long they had cleared most of the trees they liked to eat such as cottonwood, birch and aspen along the stream bed and moved on to find more.

The beaver dams slowed the fast-running streams and backed them into the valleys. Instead of running quickly onto the prairies with their load of sediments, each little pond collected silt and sand. The V-shaped stream bed flattened out with a fertile bottom formed by the sediments. Sometimes the abandoned dams held water back for years after the beaver had moved forming extensive terraces along the sloping valleys. Sometimes the water formed a meander around the dam and slowed the stream even more. As the dams filled and spread, trapping more and more sediment, other water-loving animals built their homes in and around the edges of the ponds. Trees, grasses, and brush estab-



lished footholds in the sediments trapped by the dams. Deciduous trees that could not grow on the thinner, drier soils of lateral moraines were able to flourish along the edges of ponds where they helped stabilize the soil.

Long after the beavers had moved, other animals that didn't depend directly on trees for their food continued to live in the beaver-built habitat. Eventually silt filled in the ponds or the dams broke and water drained. The creek still ran through the middle of the valley, but it ran slower and the water table and soil profile were altered. Soon tall meadow grasses flourished in the fertile soil left behind. The pond lovers followed the beavers to a new location and made room for a new succession of animals that thrived in marshy meadows. In time, the tall grasses gave way to a new generation of trees and brush. Meadow-loving animals once again moved in behind the departing pond animals, and forest animals found new shelter where the ponds had once stood. Eventually a new pair of beavers would come along, find the little forest stream, and start the cycle over again. This time the little valley had a more mature profile than the one the original beavers had found.

It didn't take many generations of beavers to turn the barren, glacier-scoured land into habitat for other animals and plants. The streams no longer ran straight through the U-shaped troughs left by departed glaciers. Now they meandered over and around terraces covered by a variety of grasses and deciduous and coniferous forests. Many plant seeds were carried in by the wind. Animals entered the newly vegetated areas and helped to spread seeds.

Beaver attracted the ultimate predator--humans. Always curious and never totally content with the bounty of the prairies, humans wandered into the mountains to explore, hunt, and trap.



Cory McLean



Native Americans were interested in hunting some animals, as a source of food and clothing and also for survival knowledge and spiritual power. Indians were aware that animals were in harmony with the rest of nature. Life seemed to come easier to the other animals. They needed no clothing or fire to survive the winter. There were rarely more animals in an area than there was food to feed them. They seemed to have instincts for what to eat and do when they became sick. Humans could reflect, and what they knew was that there were many powers that other animals possessed which humans did not. Humans stalked the animals to observe them and gain what knowledge they could. Indians regarded the animals as superior beings. American Indians went to great lengths to ask those superior beings to share their power.

Local tribes admired the beaver including it in their traditional legends. To the Blackfeet, the beaver is one of the most important medicine animals; it serves as a spiritual medium for the powers of all the other medicine animals. The Beaver Medicine Bundle and the Beaver Medicine Ceremonial celebrate all the animal spirit powers.

A special interest in beavers seems natural considering how complicated their behavior appears. Typical beaver habitat includes dams, lodges, dredged canals complete with terraced locks and slides, elaborate underwater storage pantries, and an incredible amount of logging work. Beaver families spend a lot of time nurturing their young. Early Indians watched beavers with a sense of awe and respect for their family values. An extremely quiet observer who gets close to an active lodge might be fascinated to hear the beavers having subdued but elaborate conversations inside. Beaver language has many different sounds and inflections. What you hear isn't simply muttering and whimpers-- something more complicated is going on in there. No wonder native peoples referred to beavers as Little Indians or Little People.

The tribes on both sides of present day Glacier National Park were aware of the impact beavers had on the land. The Ktunaxa (Kutenai) story summarized in the Mountains and Mountain Building Track called *The Origin of Flathead River* is really a macrocosmic account of what beavers do on a smaller scale. The net result of all the beaver projects is easily equal to that of the monstrous beaver that supposedly dammed the Flathead Valley. At the same time, the Ktunaxa were aware that the beaver story was really a metaphoric *How Story* to account for the work done by glaciers.

The Blackfeet have a number of important stories that support the Beaver Medicine Ceremonial. Very old tradition gives an account of how Blackfeet once lived in domed stick lodges modeled after the beaver lodge until Napi taught them to build skin tipis. The Salish learned to build skin tipis from Bluejay, and the Ktunaxa learned from Coyote. According to the Blackfeet Legend of *Oo-chi-scub-pah-pah* or *Dragging Entrails Full Of Dirt*, twin boys, called Ashes Near The Fireplace Man and Behind The Tipi Wall Liner Man, were raised by beavers. The twins taught their father how to build a sweat lodge and the



proper ceremonies involved in purification rites. The sweat lodge was thus designed after the beaver lodge. *Dragging Entrails Full of Dirt* is a long story in comparison to others referred to in this program.

The most important beaver legend for the Blackfeet was one about two brothers. Nearly all American Indian cultures have origin legends about twin brothers who are instrumental in the heritage of their people. One of the brothers is always bad or mischievous and one is always good and responsible. The following is an abridged version based on several variations of *The Origin Of The Beaver Medicine*:

The Origin of the Beaver Medicine

In the long ago there were two orphaned brothers named Akaiyan and Nopatsis. They lived with the evil-hearted wife of Nopatsis who didn't like having Akaiyan around the lodge. She plotted to make Nopatsis believe that she had been assaulted by Akaiyan so that Nopatsis would do away with him.

Nopatsis convinced his brother to build a raft and float out to an island where many birds nested so that they could gather feathers for arrows. Akaiyan was a trusting soul and was always pleased to do things with his brother. When he returned to the shore with a load of feathers, he was shocked to see his brother far out in the lake on the raft. He yelled to Nopatsis to come back for him. Nopatsis replied that Akaiyan deserved to be abandoned because he had insulted his brother and abused his sister-in-law. He promised to come back for Akaiyan's bones in the spring.

Akaiyan wept in despair, but he prayed to the animals and the underwater spirits for help. He also prayed to the Sun, Moon, and Stars; and after a time he felt a little better. He went to work preparing himself for winter. He made a lodge of sticks, clothing from feathers, and killed many of the island birds for food. He was fairly well prepared, but still he was hurt and lonely.



One day he came across a beaver lodge and sat watching it and feeling sorry for himself. Before long, a little beaver came out and asked Akaiyan to come into the lodge with him. Inside Akaiyan found a huge white beaver whom he knew to be the chief of all beavers. The Chief Beaver listened to Akaiyan's tale of woe and invited him to winter with his family. He told Akaiyan that the beavers would give him great power and knowledge with which he would become a leader of his people.

So Akaiyan spent the winter with the beavers. They cuddled him to keep him warm and treated him like one of the family. They taught him to live according to their simple and harmonious relationship with nature. They taught him the uses of roots and herbs for medicine. They taught him where to find sacred paints and how to use them in healing ceremonials and as protection for their bodies and dwellings. They gave him the first tobacco seeds to take to his people and taught him the ceremonials of smoking. They taught him to measure time, what to call the various Moons, and how to keep a calendar. Most important, they taught him the proper dances, songs, and procedures to do ceremonials so that he could heal his people when they became ill. Finally the Chief Beaver instructed Akaiyan to make the sacred Beaver Medicine Bundle to be used in the ceremonials when he returned to his people.

When seven moons had passed and the ice began to breakup, the Beaver Chief offered his adopted son a choice of anything in the lodge to take with him. Akaiyan, who had grown very fond of the youngest beaver, who had invited him into the lodge, asked if he could take the youngster with him. The Beaver Chief was reluctant to part with his youngest child, but Akaiyan repeated his request four times. The Beaver Chief taught him that four times is the sacred number of repetitions for any ceremonial. The Beaver Chief could not refuse the request. Soon after this, the Beaver Chief spotted Nopatsis searching the shores for Akaiyan's bones and hurried to the lodge to tell Akaiyan. Akaiyan put the young beaver under his arm and dashed to the raft. When Nopatsis finally saw him he was far out on the lake.



Akaiyan and the beaver returned to his people and told their story. Together they assembled the Sacred Beaver Bundle as they had been instructed to do by the Beaver Chief. They spent the following winter teaching The People the sacred songs, dances, and ceremonials. They cured many people using their new powers. In the spring they went out into the forests and prairies and asked all the animals to contribute their mysteries and power to the Beaver Bundle. The animals were honored to take part and offered their skins to be included in the bundle. They also taught Akaiyan and Little Beaver their own power songs and dances to be shared with the people.

After a year, Akaiyan returned to the island to give Little Beaver back to his family and to visit his friends. On the shores of the island he found the bones of his brother Nopatsis. The beavers had not helped him. So pleased was the Beaver Chief to see his adopted son and to have his child back, that he gave Akaiyan a sacred pipe in which to smoke the sacred tobacco he had given him. He taught him more smoke prayers and instructed him to add the pipe to the Beaver Medicine Bundle. Every year Akaiyan returned to the island to visit his father the Beaver Chief. Every year his father taught him more of The Way to live and to heal. Every year something new was added to the sacred bundle. Akaiyan became the leader and the teacher of his people. He lived in the Sacred Beaver Lodge and he taught his son the great mysteries and powers of The Beaver Medicine Ceremonial. Akaiyan's son passed the knowledge on to his son and so on until this very day.



There are many Blackfeet legends involving beavers including an account of how beavers taught the Blackfeet to kill and take scalps rather than counting coup in war.

Ironically, it was the beaver, the special medicine animal of the Blackfeet, that was instrumental in bringing about the decline of the Indians. The first white visitors to the area came in search of beaver pelts to satisfy a European craving for the warm and beautiful fur used to make waterproof felt for fashionable top hats and other finery. So valuable were the pelts that trappers and traders risked their lives in the relentless quest for beaver. They trapped many creeks in the west and offered the natives trade goods in exchange for beaver pelts. Eventually the beaver were near extinction.

By the time the craving for beaver fur subsided, the beaver had nearly disappeared. It was not profitable to pursue the few isolated pockets of beaver that remained. The lack of demand for beaver pelts was critical for beaver population recovery. Also farmers and ranchers began to notice a decrease in vegetation along stream valleys and the surrounding water tables began to drop. Cattle began to erode the soil along the streams. The streams were stripping away the topsoil faster than it could build up. Some folks made the connection and efforts to protect existing beaver populations and to import beaver pairs into some areas were started.

The good news is that people were able to recognize the value of the beaver before it became extinct. Today there are beavers over most of North America. The beaver story should serve as an example that all species should be respected and preserved. It is difficult to know what will happen when a species becomes extinct. It is impossible to bring a species back after the last one dies. The beaver story is a positive story. Beavers came full cycle. Once so numerous that we never dreamed we could wipe them out, they nearly disappeared. Now they are plentiful again. Could we do the same with animals as imperiled as the Gray Wolf? What do we know about the fate of an ecosystem without bears, wolves, and eagles? What do all the threatened and endangered species with lower profiles mean to our environment? Will we have to wipe them out to find out?



Grizzly Matters

Bear habitat is not immediately recognizable. Bears are solitary animals and require a lot of territory to make a living. All of Glacier National Park is bear habitat. Everywhere you go in the park you are sharing bear habitat. Share it thoughtfully. Look carefully. Like the early Indians, bears make little impact upon the land.

For a number of reasons, humans have long been fascinated by bears. Bears, in general, and grizzly bears, in particular, have been exceptionally strong medicine for American Indians in the vicinity of the Rocky Mountains. The grizzly bear is venerated by the Blackfeet as an animal that gives power and courage in battle and healing power to medicine people. The Salish, Kalispel, and Ktunaxa honor the bear as a guardian and tutelary spirit, as a prophetic power, and as a food source. The Ktunaxa practiced elaborate Bear Ceremonials to pray for the bear spirit's mercy and protection during the hunting and gathering seasons, for its guidance and blessing in finding food, and for its ability to predict the fortunes of the tribe. They also asked that the bear offer itself as food and they observed appropriate rituals and care in thanksgiving.

According to tradition, the bear was always an animal that valued privacy and space and was reluctant to share its medicine with the Indians. Most other animals were pleased to offer their spirits to deserving humans. Tribes persisted in asking the bear for his blessings until he could no longer refuse. The bear's mysteries were to be taken very seriously; to do otherwise meant a punishment of death.

The bear was singled out for its exceptionally humanlike qualities. Bears were venerated because of their intelligence and because they were omnivorous and could walk upright leaving tracks like a human. The bear's excrement was similar to that of a human; they exhibited a range of reactions that reminded the Indians of human behavior, and the skinned-out carcass of a bear resembled a human. Indians were also amazed by the bear's ability to hibernate through the winter without having to eat, drink, or defecate.

The ability to hibernate gave rise to many legends about the bear's annual cycle of apparent death in the autumn and rebirth in the spring. The central importance of Ursa Major (The Big Dipper) in American Indian cosmology and symbolism is due in part to these legends and the bear's gift of the sky clock. An observer watching the changing position of Ursa Major could tell the time of night and the precise season of the year. The sheer size and strength of bears inspired awe; humans tend to show great respect for that which they fear.

The grizzly bear has always been the focus of much attention among all people. Interest in grizzly bears has increased as their habitat and numbers have declined. The grizzly is listed on the Threatened and Endangered Species List, legal recognition that we want



to preserve the bear. Since bears might do physical damage to humans, some people feel they should be eliminated. Many people, however, feel that the grizzly has a right to some of its ancestral territory. Glacier and Yellowstone National Parks provide some of the last remaining grizzly habitat in the contiguous United States. American Indians generally respect the grizzly's right to its territory. The National Park Service is struggling to protect the ecosystem within which grizzlies can thrive. This is a constant juggling act of dealing with special interests, protecting the existing population, and keeping bears out of trouble.

Some people believe there is no room in modern civilization for animals like the grizzly bear. It may be difficult to convince people that preservation of bears and wolves is essential to the well-being of our environment. The grizzly benefits from the feeling that we are somehow kindred souls with the bears; an intuition that if grizzlies disappear from the land, something wild and special will have been lost.

Among the Blackfeet legends dealing with bears is the story of *The Friendly Medicine Grizzly* who feeds, heals, and cares for a wounded warrior given up for dead. There is also the legend of *Sokumapi and the Bear Spear* in which a young boy is taken into the den by a great Medicine Grizzly. The bear feeds and cares for the boy, teaches him bear survival lore, gives him healing powers and the sacred Bear Medicine Pipe along with its appropriate ceremonials. Most important, it gives him the sacred Bear Spear and its power in order to make the Blackfeet indomitable warriors. Sokumapi became a great leader and shared his power with his people. His Sacred Bear Lodge, Bear Spear, Medicine Pipe, and the appropriate ceremonials were handed down through his descendants. All of these stories can be found in Walter McClintock's *The Old North Trail*, which is included in the Activity Kit.

The legend that best embodies the tradition behind the Ktunaxa Bear Ceremonial rituals involves a small boy who is cared for by a grizzly family in much the same way that Akaiyan was cared for by the Chief Beaver and his family. In the Ktunaxa story it is the grizzly who teaches the boy *The Way*, how to heal, and how to properly and sincerely perform Bear Ceremonials. When the boy has been educated, he is sent back to show his people *The Way* and share the power. Just as the Chief Beaver did with Akaiyan, the grizzly gives the young boy the gift of tobacco, a sacred pipe, and ceremonials to go with it:



The Grizzly Chooses a Stepson

Once in the old days, when a band of Ktunaxa were moving camp, a young boy was inadvertently left behind. He tried to catch up with his family but soon gave up and laid down on the trail in his despair and loneliness. Soon a large grizzly and two cubs happened across the miserable boy who immediately gave himself up for dead. "Move off the trail!", commanded the great sow, but the young boy held his head down and refused to move. "Oh well", said the great grizzly and moved on around the boy. The smaller cub, however, begged his mother to keep the human for a playmate. The kind mother complied. She cuffed the boy lightly on the stomach with her left paw and said, "Come along now, I'll teach you to live like us".

In the Moon When Leaves Fall and the Geese Fly South, the mother bear instructed her children to empty their stomachs and prepare to den for the time of snows. With each new moon she awakened the three little ones and told them to roll onto their other side. One night the young boy awoke to the sound of a chinook wind outside the den. The mother grizzly sat on her haunches and sang softly along with the wind.

"Arise, my little ones", she whispered, "The People are asking for our help. "She explained that the People in their encampment were gathering with their medicine bundles and pipes to pray to the bears that they might be granted food, safety, and good fortune in the upcoming hunting and gathering season. During their ceremony the People sang their power songs to the accompaniment of a deer-hoof rattle staff. "We must go now and listen to their prayers", said the great grizzly. She and the cubs left the boy alone in the den.

Early in the morning the bears returned laden down with the stems from the sacred medicine pipes of the People. One by one they examined the stems. From their smells, the bears could tell whether an individual was sincere and truly in need or merely going through the motions and making a mockery of the bears. The stems of those with good hearts were placed in a large pile to the left; the stems of those who were insin-



cere were isolated on the right. The insincere would have bear trouble during the coming year. Then the four of them laid down to sleep until awakened by the first thunder of the new season.

Mother grizzly instructed the young ones to mend their moccasins and to fill up on the fresh green shoots of grass along the snowbanks. All that season, the young boy continued to make the rounds with the grizzly to learn their ways and absorb their power. When the snows came again, he returned with them to the den. When the bears awoke and went to attend the ceremonial, the boy found that he now had the power to hear the singing and dancing of the People. When the bears returned with the stems, he was able to help in reading them. It was with great pleasure that the boy recognized his own father's stem and saw that the great grizzly placed it on her left with those of the sincere.

This time, when the bears were awakened by the First Thunder When the Grass Begins to Grow, the great grizzly told him that it was time to return to his people. "Now you know the truth of these ceremonies. Tell the People to pray hard in order to please us. Some of them are not sincere." The boy was told that he would become a great leader of his people, that he would live in the Sacred Bear Tipi, and that he should raise his son to carry on the ceremonial tradition for the People. Before he returned to his people, the bear gave him a special root to chew in order to control his wild nature. As the boy chewed, he walked down from the mountains and toward the valley where he knew the People to be encamped.

For many years, as he grew up, the young boy kept his experience to himself. When he finally married, he painted the Sacred Bear Lodge as the grizzly had instructed him. The People then recognized his supernatural power and came to him for instruction. He told them "I have this power from the grizzly. I will show how to properly take part in the ceremonial. Take care that you are sincere in your need and in your prayers. If you are sincere the bear will help you, but woe to him who has no faith."



Just as it was the beaver that drew the white culture to the west and accelerated change, it was the prophetic power of the grizzly that led to acceptance of the new ways. In a version of a story from the Ktunaxan and Salishan cultures, the spirit of the grizzly foretells the coming of white men and proclaims the power of their medicine. In Ella Clark's rendition of *Things Are Changing*, Sowatts, the leader of a Ktunaxa band, hunts fresh meat for his people. Because of an offense to the bears by one of his people, he is attacked by a grizzly and torn to pieces.

After three days his people find him and carry the pieces back to camp. To their surprise Sowatts is able to relate a vision that was given to him by the grizzly. He tells his people that the times are changing and that the animal spirits can no longer help them as powerfully as they had in the past. He also says many people were coming from the east and a powerful man in a black robe would be among them. Finally, Sowatts tells his people it is as time to make peace with the Blackfeet. As proof of the authenticity of the vision, Sowatts sent his dog into the brush to flush out the grizzly. The grizzly rushed into the encampment and sacrificed itself to the arrows of the Ktunaxa. That year they made peace with the Blackfeet and several years later Father De Smet arrived to build a mission.

This and related stories may help to account for the openness with which the people of the Salish and Kootenai Confederation were able to adapt their own culture to an acceptance of white religions. This was more difficult for some than for others. Many held on to the old ways until a time when others were able to open their minds to traditional ways. Others found the white religion to be a confirmation of their own way of life. No matter how they adjusted, everyone knew that things were changing and would never be the same. Few have resigned themselves to the idea that the old ways can be allowed to be lost.



Classroom Activities

Classroom Activity 1

Painted Lodges

Objective:

Students will learn to think about themselves as individuals and members of a social group of animals sharing an environment with other species. Students will recognize that traditional American Indian shelter was as much a part of the surrounding environment as a beaver lodge. Students will also recognize and explain the personal and traditional culture behind the design and decoration of tipis.

Background:

This activity helps students identify themselves as significant members of an important culture.

Much of the background information provided has been gleaned from generalized readings on lodges and the traditions behind painted lodges. Symbolism and design varies significantly from tribe to tribe, band to band, and from individual to individual. Some people take offense when they come across randomly designed tipis and sacred designs that have been inappropriately copied out of ignorance or arrogance. This activity has no intent to do such a thing.

It would be a mistake to think that all tipis in the Plains culture and the adjacent Plateau culture were painted tipis. In fact only about ten percent of lodges were painted and the design was considered to be something deserved by the individual who used it. Often the design was given to a deserving and distinguished individual through a vision from a medicine spirit. Just as often, the design was passed on by a distinguished individual through his family. It was sometimes possible to purchase a tipi or design from one who had earned it, but the purchaser had to be worthy of the design and had to honor the responsibilities and ceremonials that came with it. Never did someone casually say, "I guess I'll paint the tipi today, Honey. What color do you like?"

The pigments for the paints used on the tipis were obtained by gathering, manufacturing, and trading with tribes from all over the west. One tradition tells how the Chief Beaver gave the knowledge of the locations, methods of preparation, and symbolism behind all of the pigments to the people. Clearly each substance, hue, and shade did have special meaning. The paint itself was valuable and significant.

Every painted lodge reflected a harmony with the surrounding environment even when individual themes and totems predominated. Some lodges made a clear and simple statement about their particular significance. The Blackfeet Thunder Tipi, for instance, was painted sky blue with a Thunderbird on the back. Most tipis, however, reserved the central surface for individual themes. All lodges were decorated according to a consistent and logical formula. The bottom of the tipi was encircled by a dark earth toned-band. The design of the bottom band of the tipi often depicted familiar



terrain, mountain peaks, rolling foothills, or gently undulating prairies. Sometimes the bottom band would include one or two rows of bright circular shapes called dusty stars. These represented the puffballs that sprang up overnight like magic on the prairies. Some believed that the puffballs were fallen stars. Some saw them as a kind of manna sent down from the Above Ones.

The broad central portion was reserved for portrayal of sacred medicine animals, medicine objects, or other protective spirit powers that were important to the family that occupied the lodge. Sometimes family history and important exploits or events were depicted on the central band.

A dark band around the top and including the ear flaps represented the night sky. Within that band, the Sun, the crescent Moon, the Morning Star, and important constellations were depicted. For the Blackfeet, the Morning Star was represented by a symbol resembling a Maltese cross. The cross looked like a butterfly or a buffalo vertebra. Both the butterfly and the vertebra were considered to have the power to bring protected sleep and powerful dreams. Occasionally a buffalo tail was appended to the center of the cross.

The Great Bear (Ursa Major or the Big Dipper) was an extremely important constellation to all Indians because it served as a daily clock and a year-round calendar. The legends of the constellation varied a great deal from tribe to tribe. For the Salish and Ktunaxa, it usually represented a hunted bear. Legend tied in with death and rebirth of the seasons. To some Blackfeet, the Big Dipper represented the Seven Sons of Creator Sun being pursued across the sky by their vengeful mother, the Moon.

The Pleiades or the Lost Children were also frequently depicted in the sky band - a reminder to the people to always take special care of children who are orphaned or not as privileged as others in the community.

Whatever the decorations might be on a lodge, one could be assured that they were of extreme cultural and probably spiritual importance to the occupying family.

There was a great deal of protocol with regard to the placement of tipis, the internal arrangements, how they were put up, taken down, and transported. The tipi was circular at its base. Within the community, the lodges were arranged in a circle. At large gatherings like the Sun-Dance Ceremonial, the tipis of individual bands would be arranged in circles which collectively made up a larger circle. In the center of that circle stood the Sun-Lodge. All doorways were positioned to face the east where the sacred circle, the Sun, rose each morning.

It was the Sun that gave all life and set all cycles in motion. All of the spirit animals received their power directly from the Sun. American Indian life and habitat was centered on the Sun and its cycles.



Materials:

Art paper
Theme Paper
Colored Pencils

Procedure:

1. Provide the background information and any other you might want to add for the students. Stress the individual importance of each person in the world and their potential and responsibility to be and become someone who is genuinely and positively influential upon the future of the Earth and its creatures. Stress the fact that we are all very important people and deserving of our own sacred lodge.
2. With the background information provided and with respect to American Indian culture, have each child design and draw a lodge that depicts those things of special importance to them and their families. Encourage the students to include traditional symbols of importance to their tribe or band and to use the central band of the tipi for their personal histories, values, and ambitions. Students who have trouble getting started can be reminded to think about personal hobbies like music, dance, or athletics. They could picture important symbols having to do with their avocations (i.e., musical instruments, books, or basketballs). Ask students if there isn't some special animal with which they identify. Perhaps that animal could be a theme on their special lodge. Remind them to place their lodges in an appropriate setting emphasizing their harmony with the Earth.
3. When the students have finished their drawings, have them write short essays explaining the significance of the traditional and personal symbols they have included on their lodges.
4. Encourage the students to show and explain their lodges to the rest of the class.
5. If students are willing, collect the pictures and essays, put them into a binder or book and bring them along on your visit to the park to share with the naturalist.

Follow Up:

Some students may be interested enough in this idea to build a three-dimensional diorama, putting tipis and other kinds of lodging in a natural setting. It would be interesting to see local topographical features and indigenous plants and animals included.



Classroom Activity 2

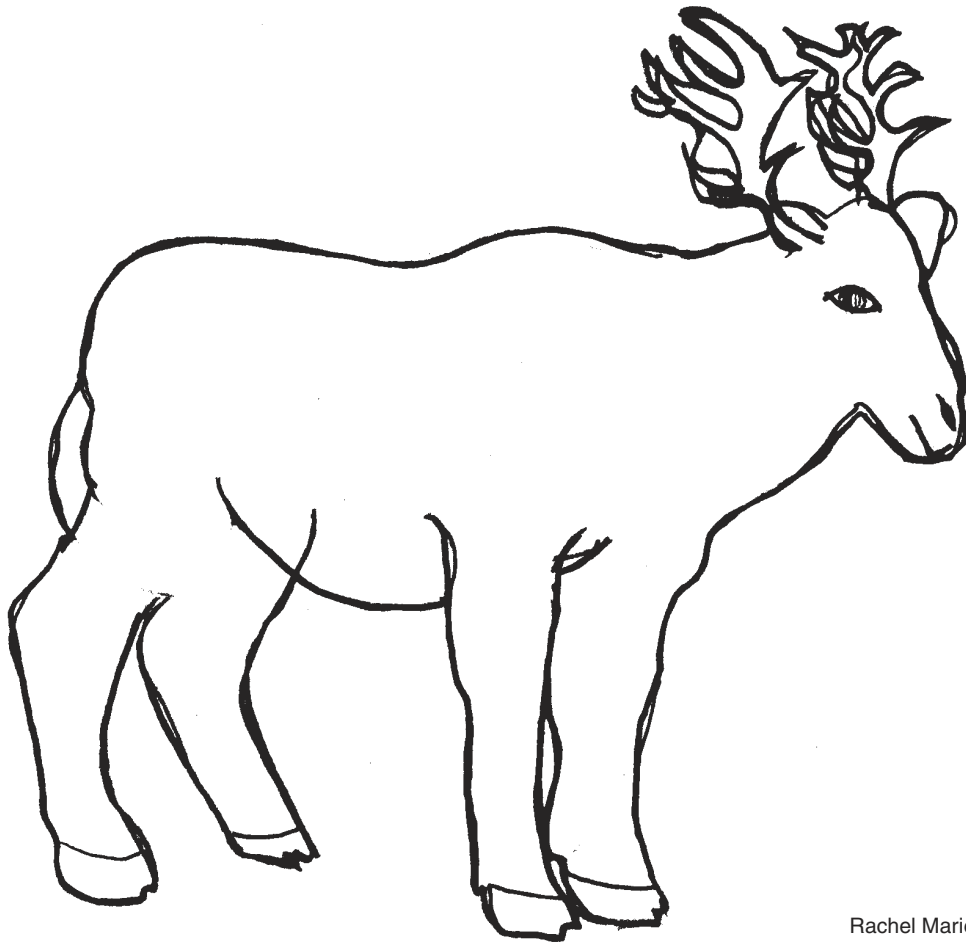
Animal Research

Objective:

Students will conduct effective research about animal species living in Glacier National Park. During the course of their research, students will answer the questions provided in the background section of this activity.

Background:

After students have been presented with the specific information from this track concerning beavers, bears, and buffalo, the instructor can explain to them that it is also important to know basic information about all animals who share the habitat. There are certain basic questions which help us gain a useful understanding of any animal. The following questions are a guide in doing and organizing animal research writing:



Rachel Marie Deming



Questions for Animals Research

1. Give the common name and, if you wish, the scientific name of the animal you have chosen to research. Give a physical description of the animal.
2. How does this animal reproduce? Are the young born alive? Are they hatched from eggs?
3. How does this animal care for its young? Do parents supply food directly? Do they nurse them? Are the young taught to find food or are they left on their own?
4. What does this animal eat? Does it eat plants and animals (omnivorous)? Does it eat plants (herbivorous)? Does it eat animals (carnivorous)?
5. How does this animal move about? Does it fly, walk, crawl, etc.?
6. In what kind of environment does this animal live? Does it live on the ground, in the air, in water, or in a combination environment?
Does this animal prefer special terrain such as alpine tundra, marsh, open meadow, forest, stream, etc. ?
7. What other interesting observations can you make about this animal?
8. Draw the animal in an appropriate environment on a separate sheet of art paper.

Materials:

Theme Paper, Art Paper, Pencils, Colored Pencils, Encyclopedias, wildlife books, and particularly books about the animals of Glacier National Park

Procedure:

1. Ask each student to research a favorite animal that they are certain lives in Glacier National Park and that they would like to see on their visit. Be sure that they have a second choice so that there are not duplicates. The instructor may wish to specify animals that would frequent beaver habitat, or that would live on the alpine tundra, or conform to some other precondition.
2. Help the students to find resources in the library, list the guide questions, and help them to begin their research.
3. Ask students to illustrate their writing on a separate piece of art paper. Some find research more to their liking if they are allowed to draw the picture first.
4. When writings have been edited and drawings are completed, have the students present their reports and pictures to each other in order to share knowledge of all the animals they will be looking for on the trip.
5. Choose a title and help students assemble their reports and art in a book to be taken along on the park trip.

Follow Up:

Play the Animal Story Guessing Game. After students have presented their stories, have them take turns telling animal stories that give vital information, except name and physical description, about some animal that lives in the park. The other students ask for clues and guess which animal is being described.

Play an animal pantomime game. Have students take turns doing a silent imitation of animal behavior until the other students successfully guess which animal they are imitating. Both of these activities are fun for students and provide a good review.



Park Visit Activities

The *Beaver Habitat Nature Trail* packet lists specific activities the park naturalist may use during your visit to Apgar or St. Mary. Activities for *Bears: Imagination and Reality*, include a Habitat Hike and Skins and Skulls talk. Movies and slide presentations can be shown on request.

There are a variety of Park Visit experiences that can be tailor-made for classes. When arranging for a park visit, be sure to discuss available options.



Anita & Heather



Back in the Classroom

Take the time to reinforce the Park Visit experience. Discuss the field trip with the students and decide what worked and what didn't. Be sure to fill out the trip evaluation form and return it to the park. Some follow-up activities for the Animals and Habitat Track include:

1. Have each student write a report on the trip. Ask students to share their report with classmates.
2. Have students work in cooperative learning groups to develop class reports on the trip and park wildlife. The Activity Kit contains some wildlife slides and narrative. Have the students use these materials in report preparation.
3. A copy of Glacier National Park's Bear Management Plan is included in the Activity Kit. Have the class look over the plan and discuss it.
4. Have each student write a letter to the park naturalist that conducted the Visit Activity. Have the student tell the naturalist one fact that was learned during the trip.
5. Invite someone from the local community or tribal government to discuss wildlife management on the reservation. Compare local management objectives with the National Park objectives.
6. Invite an elder to your class to talk about wildlife experiences he/she may have had in the past.



