APPENDIX 4. HISTORICAL EVIDENCE AND CURRENT STATUS OF GRIZZLY BEARS IN THE BITTERROOT ECOSYSTEM

Historical Status. **--** Grizzly bears were once common in the Bitterroot Mountains. Historical evidence of their existence and abundance is clear in oral accounts of local Indian tribes including the Nez Perce Indians in the north and Shoban Indians in the southern part of the Primary Analysis Area, as well as numerous written accounts by explorers, hunters, and historians. Nez Perce dictionaries indicate the term for grizzly bear was Xaxat, and the grizzly bear is common in their stories and legends. Merriweather Lewis while traveling through and visiting with Nez Perce Indians wrote that the Indians considered the grizzly bear "tremendious animals to them; they esteem the act of killing a bear equally great with that of an enimy in the field of action". Clark wrote: " The Indians of this country seldom kill the bear they are very much afraid of them and killing of a White or Grizly bear is as great a feet as two of their enimey. The fiew of those animals which they chance to kill is found in the leavel open lands and pursued on horses and killed with their arrows. They are fond of the flesh of this animal and eate imoderately of it when they have a sufficiency to indulge themselves." The local Nez Perce museum in Spalding, Idaho has many artifacts obtained from the local Indians by Reverend Spalding in the late 1800's. Included in these artifacts are necklaces of grizzly bear claws.

Because most versions of the Lewis and Clark Journals are heavily edited for space and content, it is difficult to clearly identify their descriptions of the wildlife encountered. However, the "Original Journals of the Lewis and Clark Expedition, 1804-1806, edited by Reuben Gold Thwaites, LL.D., Antiquarian Press LTD., New York, 1959, were much more complete in their descriptions of wildlife. This version was printed from the original manuscripts and notebooks of Lewis and Clark as well as other members of the expedition. Their journals were for the first time published in full and exactly as written.

While Lewis and Clark were in the "Upper Kooskooske" (Upper Clearwater River) in May and June, 1806, they spent several weeks waiting for the snows to melt before heading back over the Bitterroot Mountains. While camped near present-day Kamiah, Idaho, their hunters spent many days afield attempting to kill game for consumption. The salmon had not yet started their run and game was scarce. The expedition spent many days with the local Indians, and pursued game as far down river as Collins creek (Lolo Creek), and up on the benches above the Clearwater River. During their first few weeks at the camp, they killed many bears, but were confused as to how many different species of bears there were. They attempted to speciate by differentiating the bears by color of the pelage. In exasperation, Lewis indicated on May 15, 1806 that, "...if we were to attempt to distinguish them by their collours and to denominate each colour a distinct species we should soon find at least twenty" (Thwaites 1959). They did however identify the grizzly bear and called it the "grizzly, white, or variagated bear." Their confusion came when trying to identify the black bear and its different color phases common in this part of the west. They felt it different than the common east coast and pacific coast black bear.

On May 31, 1806, their attempts to properly categorize the distinct species made a break through when Lewis recorded the following: “Goodrich and Willard visited the Indian villages this morning and returned in the evening. Willard brought with him the dressed skin of a bear which he had purchased for Capt. C. This skin was an uniform pale redish brown colour, the Indians informed us that it was not the Hoh-host or white bear. That it was the Yack-kah. This distinction of the Indians induced us to make further enquiry relative to their opinions of the several speceis of bear in this country. We produced the several skins of the bear which we had killed at this place and one very nearly white which I had purchased. The white, the deep and pale red grizzle, the dark brown grizzle, and all those which had the extremities of the hair of a white or frosty colour without regard to the colour of the ground of the poil, they designated Hoh-host and assured us that they were the same with the white bear, that they ascosiated together, were very vicisious, never climbed the trees, and had much longer nails than the others. The black skins, those which were black with a number of intire white hairs intermixed, the black with a white breast, the uniform bey, brown and light redish brown, they designated the Yack-kah; said they climbed the trees, had short nails and were not vicious, that they could pursue them and kill them with safety, they also affirmed that they were much smaller than the white bear. I am disposed to adopt the Indian distinction with respect to these bear and consider them two distinct speceis” (Thwaites 1959).

Based on this account and the descriptions of the hides separated by the Indians, and previous and following descriptions in the journals of bears killed, it is apparent that they killed at least 7 grizzly bears while camped near Kamiah, including a female with 2 cubs that Collins killed on May 14. Lewis writes: “ the mail bear was large and fat the female was of moderate size and rather meagre. We had the fat bear fleaced in order to reserve the oil for the mountains. Both these bear were of the speceis common tho the upper missouri” (Ed. Note, they identified the grizzly as the only species of bear in the upper Missouri). Clark writes for the same day, May 14: “Collins returned in the evening with the two bears which he had killed in the morning one of them an old hee was in fine order, the other a female with Cubs was meagure” (Thwaites 1959).

Another interesting excerpt on May 15 by Lewis read: "the most striking differences between this species of bear and the common black bear are that the former are larger, have longer tallons and tusks, prey more on other animals, do not lie so long nor so closely in winter quarters, and will not climb a tree tho’ ever so heardly pressed. The variagated bear I believe to be the same here with those on the missouri but these are not so ferocious as those perhaps from the circumstance of their being compelled from the scarcity of game in this quarter to live more on roots and of course not so much in the habit of seizing and devouring living animals. The bear here are far from being as passive as the common black bear they have attacked and fought our hunters already but not so fiercely as those of the Missouri. There are also some of the common black bear in this neighbourhood" (Thwaites 1959).

Written accounts of grizzly bears are rare during the late 1800's. However, there are various records of grizzly bear hides being sold at the Lolo Creek Hudson Bay outpost near present-day Lolo, Montana (Bud Moore, pers. comm.) during the late 1800's. However, it is not clear how many of

those bears came from the Idaho side of the Bitterroot Mountains.

William H. Wright, a hunter - naturalist wrote about hunting grizzly bears in the Bitterroot Mountains at the turn of the century in a book entitled "The Grizzly Bear", first published in 1909. During his first excursion he stated, "So one spring, having made up my mind to go after them (grizzly bears) and not return until I had one, I started out in May with a few pack-horses and went to the Bitter Root Mountains, which form the dividing line between Montana and Idaho. ...For nearly three months we cruised about this rugged wilderness and enjoyed life to the utmost. We killed plenty of black bears, but up to September had not bagged a grizzly. We found an abundance of their tracks and saw three bears, but they were so wild that we could not get near enough to them for a shot. ...We therefore left the divide we had been following and struck off to the right to reach a stream of considerable size flowing into the main north fork of the Clearwater River. We had been told by an old miner that there was a large lick on this stream about twenty miles from the trail, and he directed us as to where to leave the ridge, and...find the lick." Wright then explains his encounter with a grizzly at the lick while waiting for an elk, and how he proceeded to kill the grizzly following an exciting few minutes after his gun jammed (Wright 1909).

Wright also wrote of watching and hunting many grizzly bears while they were fishing in the Bitterroot Mountains. "In the streams tributary to the Clearwater River in Idaho there are two or three runs of salmon...between the middle of August and the middle of September, what are known as the dog salmon make their way up all the little streams...and the grizzlies gather to feast." Wright explains how they would catch the fish, and also how during one encounter he killed two grizzlies while they were fishing. Wright also wrote of an encounter in 1891 on the Middle Fork of the Clearwater River at an Indian fishing site, where he killed a grizzly with a hunting knife and help from a couple of dogs. While photographing in the Bitterroot Mountains with a Mr. W. E. Carlin, they spent the most of one summer and early fall on one of the divides between the South and Middle Forks of the Clearwater River. There he explains observing a bear feeding in a brushy meadow, and Carlin shot it with his .30-.40 bullet through the shoulders. The bear was a female and had two cubs that they also killed. They remarked that this was, "the first time that either of us had the opportunity of observing the effect of high-power bullets on living targets" (Wright 1909). Wright's book also contains a photograph of the female with cubs with the caption, "In the Bitter roots-the old grizzly and her two cubs" (Figure 6-2). Wright enjoyed hunting, photographing, and camping in the Bitterroot Mountains and detailed many more of his colorful hunts and numerous encounters with grizzly bears during his travels.

The now well-known Carlin party expedition into the Bitterroot Mountains in the fall of 1893 that resulted in the death of George Colgate has been documented in several publications including Conley (1982). Conley indicated that Carlin's party camped at Jerry Johnson flat on the Lochsa River and hunted a nearby mineral lick (now named for Colgate) for game. "Carlin bagged an elk with rocking chair antlers after half-a-dozen shots, but much game was missed or wounded, including a grizzly bear with two cubs."

IN THE BITTER ROOTS—THE OLD GRIZZLY AND HER TWO CUBS

Figure 6-2. A female and 2 cubs shot by Wright and Carlin on a divide between the Middle and South Forks of the Clearwater River in the late 1800's (from *The Grizzly Bear* by W. Wright, 1909).

During the same time that Wright and Carlin hunted the Bitterroot Mountains, and into the early 1900's a famous taxonomist and zoologist by the name of Dr. C. Hart Merriam was classifying grizzly bears and attempting to speciate them. At that time he also developed a distribution map based on his samples and records of dead and live bear locations. Already by the year 1922, the grizzly bear had been reduced in distribution to the mountainous areas of national parks and remote and rugged wilderness ranges. Grizzly bears still existed in the Bitterroot Mountains and to the south of the Salmon River in Idaho (Figure 6-3).

By the mid 1920's grizzly bears were apparently becoming quite rare in the Bitterroot Mountains. William (Bud) Moore, a longtime resident of the area, wrote a book on the history of the Bitterroot area. Moore was a trapper and hunter, and worked as a sheepherder, and later a USDA Forest Service Ranger in charge of the Powell Ranger Station, nestled in the middle of the Bitterroot area. He lived and worked in the Bitterroot area during the early and mid 1900's and interviewed many trappers, homesteaders, reviewed journals and historical records to obtain information on the Bitterroot grizzly bear. Moore described the typical trapper/hunter routine by describing trapper Wes Fale's routine. "During early March, 1908, Fale lugged his winter's catch marten, lynx, mink, and ermine from his home cabin at Big Sand Lake over Blodgett Pass and out of the mountains to

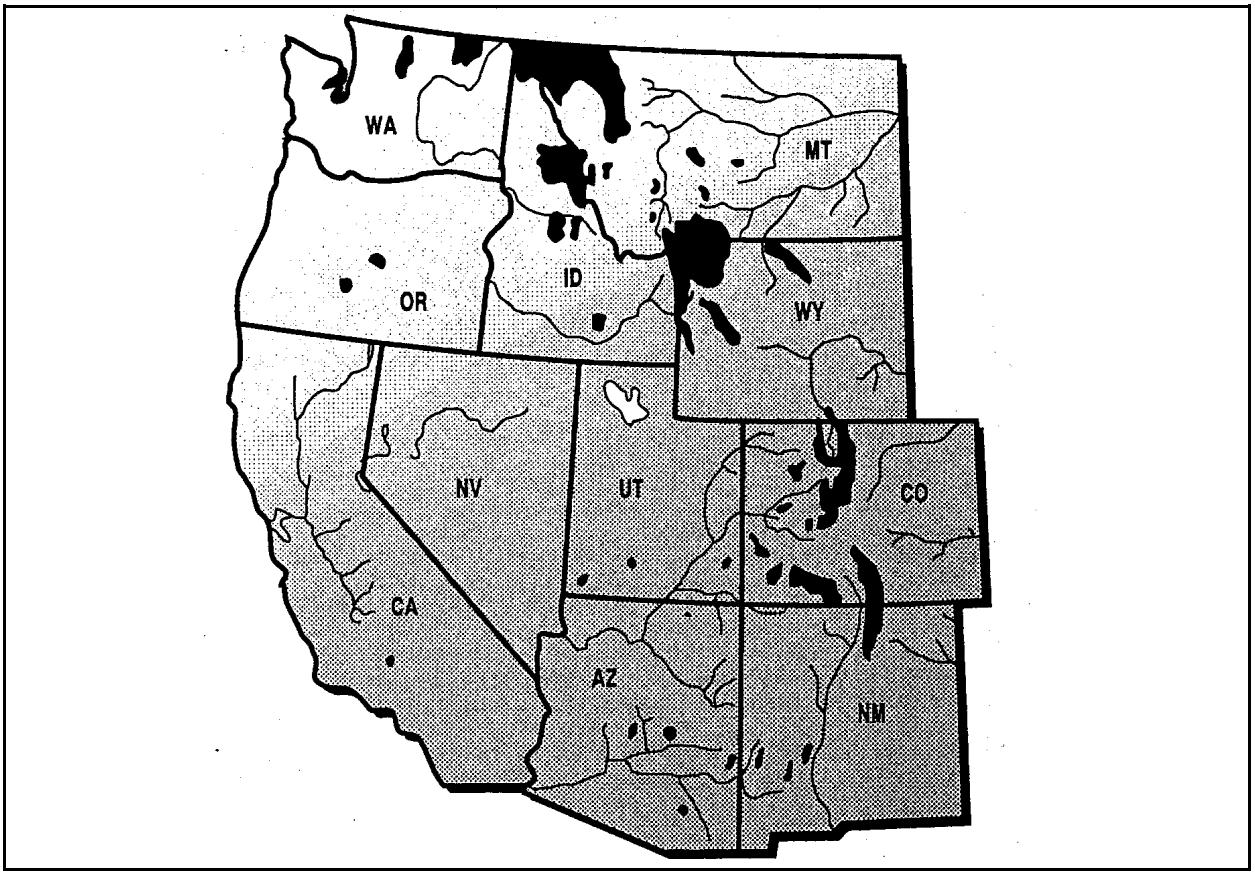

Figure 6-3. Historical grizzly bear distribution in the conterminous 48 States (in black), by C. H. Merriam in 1922 (from *Outdoor Life*, Dec. 1922; reprinted with permission from the Popular Science Publishing Company), *in* Earle F. Layser 1978.

Hamilton. He sold his furs, then returned to Big Sand Lake in late April to set bear traps. In six days he placed 10 sets at promising locations in the surrounding mountains. Some days he caught one bear some days none, and three times he caught two bears in the same day. During late May, on the last round of his trapline, Fales caught a large female grizzly below the Hidden Fork of Big Sand Creek. He wanted a photograph. While he waited for good light, a cub jumped up on a log followed by another and another, then all three ran along the log to the mother who fought for freedom from the trap. He photographed the trapped mother and her cubs" (Moore 1984, 1996). He killed the female and caught one of the cubs. Fales described the killing of five black bears and four grizzlies during the spring of 1908. He implied to Moore that he had killed several more. And he was one of 6 to 10 trappers who combed the Bitterroot Mountains each spring. By conservative estimate writes Moore, “trappers near the turn of the century killed 25 to 40 grizzly bears annually in the Bitterroot Mountains."

Following the 1910 fires, sheep herders and cattlemen grazed their livestock in newly created meadows and open areas high in the Bitterroot Mountains. Although the Selway Game Preserve was

created in 1919, grizzly bears and other predators were not protected. Livestock operators, homesteaders, hunters and trappers continued to kill grizzly bears whenever they were seen. Moore saw a grizzly bear in the upper Lochsa River area in 1930, and he and his father shot a big grizzly near a band of sheep they were tending in 1931. In 1932, Moore found nine bear scalps nailed on a tree at Packer's Meadows, and some of those scalps according to Moore were grizzly bear. This was believed to be the last verified evidence of a dead grizzly bear in the Bitterroots. Moore reported some sightings of bears and tracks and a report of a dead bear during the 1930's but he never saw it. The last track Moore saw was along the North Fork of Spruce Creek in 1946. "The mud had dried around the imprint of the big paw and long claws in what seemed to me an attempt by nature to preserve some sign of the great bear's passing" (Moore 1984). Moore was attributed as having killed the last grizzly bear at Colt Creek in 1956 while stationed at Powell Ranger Station. However, Moore disclaimed that report saying he had killed a large black bear that someone saw and mistook for a grizzly bear.

Current Status **-** Current evidence suggests that grizzly bears no longer exist in the Bitterroot Ecosystem. Idaho Department of Fish and Game, the USDA Forest Service, and the U.S. Fish and Wildlife Service continue to receive sporadic reports of grizzly bears and continuously attempt to verify the sightings. All observation reports received are classified, documented, and investigated, if timely and of high quality. All verification attempts have resulted in either; various colored black bears that were misidentified as grizzly bears, or were inconclusive based on insufficient evidence or information. Verification efforts are typically conducted by trained bear biologists on the ground, with occasional aerial survey efforts following reception of likely reports.

Melquist (1985) conducted a preliminary survey to determine the status of the grizzly bear in the Clearwater National Forest. The survey consisted of ground and aerial searches, soliciting new grizzly bear observation reports, and compiling and evaluating 88 reports of grizzly bears recorded from 1900-1984. The survey failed to provide conclusive evidence of current presence of grizzly bears in the Clearwater National Forest. No sign of grizzly bears were found during aerial or ground searches and no observation reports received during the survey could be verified. In reviewing the 88 records of grizzly bear observations, Melquist reported the last grizzly bear was killed in 1956 along Colt Creek near Powell. Subsequent verification efforts have shown that report to be erroneous.

Groves (1987) continued Melquist's original work by compiling and reviewing a total of 175 historical grizzly bear reports for central and northern Idaho through 1986. Groves compiled 77 reports of grizzly bears from within the Primary Analysis Area including all National Forests except the Sawtooth and Bitterroot National Forests. The majority (62) of reports were received for the Clearwater National Forest. Groves efforts could not document additional evidence to confirm any grizzly bear reports. See Appendix 23 for clarifying information from Melquist of Idaho Department of Fish and Game.

Based on historical reports of sightings, Servheen et al. (1990) and Kunkel et al. (1991) conducted

surveys for grizzly bears in the North Fork of the Clearwater River drainage and a few other locations on the Clearwater National Forest during two consecutive summer field seasons (May - September). These surveys consisted of placing remote infrared sensitive cameras over bait, to photograph wildlife as they walked in front of the cameras and triggered the shutter. During a total of 480 camera days, 559 photographs of wildlife were taken, 265 of them were of bears. None of the photos were of grizzly bears.

The failure of all current verification efforts to produce a confirmed grizzly bear observation indicates that no grizzly bears are presently in the Bitterroot Ecosystem. Grizzly bears may occasionally travel through the area. However, the evidence strongly suggests that grizzly bear presence is nonexistent or so rare that despite thousands of visitors, hunters, management and research biologists in the Bitterroot Ecosystem annually, grizzly bears have not been verified either by a photograph, track, or hair sample since 1946.

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APPENDIX 5. PUBLIC ATTITUDES ABOUT GRIZZLY BEARS: A REVIEW OF RECENT SURVEYS

Research Overview

Many research studies have focussed on American's attitudes, beliefs and values of bears, few of them entail grizzly bears alone except in site-specific studies. The majority of American site-specific studies of people's relations with grizzly bears have been done in the pacific northwest states and Alaska. Several other studies of a similar scope have been done in Canada.

First, the attitudinal, belief, and value studies relevant to grizzly bears from the broader public perspective will be summarized. Then the same kinds of research done for site-specific populations of grizzly bears in the United States and Canada will be reviewed. Finally, a more detailed summary of the available information that is directly related to the U.S. Fish and Wildlife Service's proposal to augment or reintroduce grizzly bears in the northern Rocky Mountains will be covered. Locations include the Cabinet-Yaak ecosystem in northwestern Montana and the Selway-Bitterroot ecosystem in east central Idaho and west central Montana.

General Research

Views. -- Kellert (1994) wrote that attitudes toward bears, and more generally wildlife, result from, "4 interrelated factors including: basic wildlife values, perceptions of particular species, knowledge and understanding of wildlife, and people-animal interactions." Kellert describes several "demographic distinctions" regarding how people view or value wildlife species, and in particular their perspective of bears. These demographic distinctions include: 1) "human dependence on land and natural resources as reflected in rural residency, property ownership, and agricultural and other resource-dependent occupations"; 2) "socioeconomic status as measured by education and income"; and 3) "age and gender."

The first distinction is that people who can be described this way tend to have highly utilitarian and dominionistic wildlife values (e.g., would likely endorse bear exploitation and subordination for enhancing human interests and needs), while expressing little support for moralistic and humanistic wildlife values. The second distinction is that people who are highly educated and earn more than most, tend to express highly naturalistic and ecologistic wildlife values (e.g., would likely endorse bear conservation and protection and have a pronounced interest in the outdoor recreational experience of bears). The third distinction is that younger and female respondents tend to have pronounced moralistic and humanistic wildlife values (e.g., would likely express strong affection for bears as well as strongly oppose consumptive use).

Kellert (1994) further asserts, "that knowledge and understanding of wildlife represents an additionally important influence on people's attitudes toward animals, although perhaps to a less degree than often assumed...greater knowledge is often more a basis for reinforcing and rationalizing attitudes than a cause for attitudinal convergence or change."

The bear's actual "conservation status" (i.e., threatened standing as defined by the Endangered Species Act) has greatly affected North American attitudes (Kellert 1994). In a national survey (Kellert 1985), a significant majority of respondents expressed their willingness to protect millions of acres of national forests, despite job and timber losses to protect grizzly habitat. However, only a minority of elderly, rural, and lower socioeconomic Americans supported that degree of sacrifice nationwide.

An example of the application of Kellert's work comes from Alberta, Canada, where to determine the value of bears held by the population of Waterton National Park visitors, Maw (1989) took the responses to two questions and assigned each respondent to one of ten attitude groupings described by Kellert (1979). These questions were: 1) "In your opinion of what value, if any, is a bear?"; and 2) "What do you like most about bears?" The results of this assignment are reported in Table 6-1. The most common value indicated for bears was ecologistic, which shows a strong concern that the bear is a part of the environment, and is related to other ecosystem parts. For the purposes of the analysis, Maw combined scientific with ecologistic and also humanistic with moralistic.

Table 6-1. The value of bears as stated by visitors to Waterton National Park

Value Grouping	Number	Percent
Ecologistic	127	34.4
Aesthetic	81	21.9
Naturalistic	62	16.7
Moralistic	43	11.6
Utilitarian	28	7.6
Negativistic	21	5.7
Humanistic	3	0.8
Scientific	2	0.5
Dominionistic	0	0
Neutralistic	0	0
Unknown	3	0.8
Total	**370**	**100.0**

MacCracken et al. (1994) address "value and cultural barriers" in regard to grizzly recovery in Idaho. They make an interesting observation: “Although federal agencies are required to listen to...competing views of how natural resources should be managed, their own professional value and bureaucratic cultural systems are sometimes disproportionately represented in policy decisions due to the lack of a public consensus on management direction or action.”

But at the local level in Idaho; “fears of loss of livelihood and property, as well as possible attacks, can lead to deliberate killings of grizzlies. In addition, poaching grizzlies for valuable parts...may

be viewed as a means to offset perceived job losses or decreased economic opportunities from protection and recovery actions" (MacCracken et al. 1994).

These authors also point out that within one generation, some local populations living near or in Idaho's grizzly country have seen the emphasis shift from trying to eradicate grizzly bears to their augmentation or reintroduction. Furthermore, in certain areas, religious teachings are used to justify promoting human welfare over other animals. They assert that; "information that would allow recovery teams to predict how cultural attitudes might influence the success of recovery efforts would be valuable, as it would suggest specific groups that could be targeted for education programs or enforcement efforts."

Additionally, MacKracken et al. (1994) say that some people may resent grizzly bear protection and recovery as a means to restrict traditional land uses akin to what they perceive the designation of wilderness to be. Others believe the mining, logging and grazing of public lands are causing long term harm to natural systems and thus support grizzly protection and recovery because of the habitat management implications.

Values. -- Swanson et al. (1994) examined the economic value of grizzly bears in the greater Yellowstone area. They argued that two categories of economic value need to be defined when looking at the value of grizzly bears in the Yellowstone Recovery Zone (6 national forests and 2 national parks), namely economic impact and net economic efficiency. The former refers to expenditures and other economic activity generated in a region because the grizzly bears are there. Whereas the latter refers to the benefit received beyond the expenditures related to a resource - in other words, what would individuals be willing to pay beyond current expenditures if costs associated with bear-related activities increased or access fees were charged to view bears (Swanson et al. 1994).

Several different types of values are associated with the concept of net economic efficiency for grizzly bears, including use value, option value, existence and bequest values. Such values can be negative as well as positive, in that some people may be willing to pay to receive benefits derived from the absence of grizzly bears.

In 1983 a study of Wyoming hunters' willingness to pay for the future continuation of grizzly bear hunting (option value) and how much they'd pay to maintain grizzlies even if they could not hunt them in the future (existence value) was conducted (Brookshire et al. 1983).

Overall, Swanson et al. (1994, p. 579) contended that, " (t)here is virtually no information on the economic impact associated with threatened or endangered species".

Site-specific Studies

Waterton National Park. -- In a random sample survey study of people's attitudes toward and knowledge of grizzly bears in Waterton National Park, Alberta, Maw (1989) describes several major findings:

- Nearly 80% of visitors thought grizzly bears were dangerous animals.
- More than half (54%), of these 80% who identified grizzlies as dangerous, failed to take precautions regarding possible encounters with bears.
- Half of the visitors perceived that the reason why people were injured by bears was due to their own fault or carelessness.
- "The value that the visitor held for bears was found to be related to the visitor's: 1) level of biological bear knowledge; 2) age; 3) educational level; 4) population size of current home area; and 5) type of user."
- "There was a relationship between higher levels of biological bear knowledge and ecological, aesthetic, and naturalistic values for bear, while the lower levels of biological bear knowledge were related to utilitarian and negativistic values."
- "In contrast to perceived opinions among park staff, there was strong support for bears to receive management priority for the use of a valley in the park. Many visitors indicated a willingness to give up their use of a valley in order to preserve bear populations."

Yellowstone National Park. -- Trahan (1987) conducted a mail survey in 1985 of backcountry hikers who had self-registered at trailheads in Yellowstone National Park. A total of 210 questionnaires were returned, yielding a 49% response rate.

When asked if having grizzly bears present had any effect on their decision to hike Yellowstone backcountry, 53% said no. Of those who said yes, their comments included they took more care with the choice of trail, they asked for or looked for more information, or they took precautions. Fifteen percent of all respondents said they felt "very safe," 67% felt "safe," 11% "did not think about" it, 12% felt "unsafe," and 1% felt "very unsafe." Fourteen percent felt that the amount of danger grizzly bears present to backcountry hikers was "significant" to "very significant." Two-thirds (66%) felt "some" danger, whereas 20% felt "insignificant" to "very insignificant" danger was presented.

Even though a two-thirds of respondents felt "some danger" was presented by grizzly bears to backcountry hikers, over half (56%) would still like to "view a grizzly from a great distance." A fifth (22%) wanted to "never encounter" one and another fifth (22%) wanted to be "close enough to get a good look." No one wanted to get "quite close." More than three-fourths (78%) felt that they were at least well informed versus 5% who felt that they were at least poorly informed about potential grizzly bear dangers in the backcountry of Yellowstone.

Trahan (1987) reported some interesting relationships occurred among several of these variables that may be relevant for this review. Inexperienced hikers were more likely than experienced hikers to want to get close enough to "get a good look," although these inexperienced hikers were more likely

to admit uncertainty as to what to do if they encountered a grizzly. Experienced hikers were more likely to report feeling very well informed than the less experienced ones.

Other studies dealing with possible courses of action to insure the safety of both visitors and wildlife, including grizzly bears have been conducted in the Yellowstone area (Compton 1993).

Glacier National Park. -- Braithwaite (1989) surveyed backcountry campers who visited Glacier National Park and Jewel Basin in 1987 about their perceptions of how social influences affected their backcountry behavior. She found that informational and social influences do affect certain types of backpackers. Those affected include groups composed of family members or family and friends, and relatively inexperienced or novice backpackers.

McCool and Braithwaite (1989) reported that Jewel Basin backpackers showed strong negativistic beliefs toward grizzly bears. Yet those backpackers with ecologistic beliefs tended to participate more in appropriate behavior than those with negativistic beliefs. These authors then asserted that by sensitizing Jewel Basin visitors through written communication to an ecologically oriented perspective of the grizzly, behavioral compliance may have increased.

Mission Valley. -- Frost (1985) undertook a study in May 1984 of 154 Mission Valley (in northwestern Montana) residents' attitudes toward grizzly bears and many of the findings have relevance for consideration in the Bitterroot Mountains reintroduction proposal.

When asked if their neighbors had seen grizzly bears on their property, 88.5% of the population said yes, 56% of the population had observed grizzlies on their own land. When asked if neighbors or friends manage their property to maintain and protect grizzly bear habitat, only 4% answered a definitive yes, whereas 20% of the respondents said that they were managing their own property in this way. Seventy percent said that some of their local neighbors, friends, or relatives have had a problem which was caused by grizzly bears, while only 17% of the respondents indicated that they themselves had a problem with grizzlies. Forty percent said their nearby neighbors left food items around that could attract grizzly bears onto the property.

Other findings about respondent knowledge of grizzly bears and their behavior include:

- ! Only 34% knew that the Montana grizzly is "threatened."
- ! Their knowledge about the size of the grizzly population was poor - only 18% of the population was correct (between 16-32 bears).
- ! Three-fourths (74%) properly identified grizzly bear exploratory behavior correctly; 14% incorrectly interpreting it as a sign of imminent attack.
- ! Three-fifths (61%) properly identified huffing and teeth clacking as threat behavior, however, 39% were unaware that this was a threat display.

Findings about grizzly bears adding to the quality of life include:

- ! Over one half (55%) of respondents felt that having grizzly bears in the Missions added

to their quality of life; 32% felt the presence of grizzly bears did not add to their quality of life, and 13% didn't know.

! Respondents who felt grizzly bears added to their quality of life had a higher overall knowledge of grizzlies and their behavior than those who felt the species didn't add to their quality of life. These respondents were also more likely to be younger, and were more likely to at least have seen a grizzly bear (the more encounters with grizzlies the more likely an individual felt the species added to their quality of life).

Overall, 61% of the respondents agreed that they liked grizzly bears; 27% disagreed, and 12% were uncertain. Those individuals who agreed were more likely to have higher grizzly bear scores. Those who disagreed that they liked grizzlies were more likely to: disagree that grizzlies are in danger of disappearing, agree that the disappearance of the grizzly bear is unavoidable if human needs are to be met, have had less encounters with grizzly bears, and be older in age.

Frost (1985) concludes that, "nurturing the active involvement of resident landholders is a necessity, to obtain a holistic protection of grizzly habitat on private, as well as federal, lands", especially in regard to the three grizzly bear ecosystems designated as "recoverable" in Montana.

Grizzly Bear Augmentation and Reintroduction Efforts

Cabinet-Yaak Augmentation Effort. -- In 1988, the FWS held a 60 day public comment period (2/1-3/31) for public response to the Draft Environmental Assessment (DEA) for grizzly bear population augmentation in the Cabinet-Yaak ecosystem. A total of 892 comments were received: 90% originated from Lincoln and Sanders Counties; 8% came from the rest of Montana, all of northern Idaho, and eastern Washington; 2% came from across the U.S. Ninety-five percent of the comments (843) were from individuals, 2% came from industry/ business, 1% from community/civic organizations and 1% from environmental/ conservation groups (FWS 1988). Overall response to the augmentation proposal was negative, people were not in favor of increasing the grizzly bear population in the Cabinet-Yaak ecosystem.

The number of comments per issue and a summary of the comments by issue follows:

1. The effects on public safety - 131 comments.

   Fear comments outweighed other comments almost 2 to 1 and ranged from not wanting bears in their back yards to not wanting to give up trips to the wilderness area due to fear of bear attacks.

2. The effects on recreational opportunities, public land uses, and public attitudes - 146 comments.

   One-fourth of the comments made said that an increased bear population would decrease wilderness activities because of more road closures. A little more than a third of the comments made indicated that respondents lacked trust in land management agencies, their policies, and practices.

3. The effects on local economies - 62 comments.

   Nine-tenths of the comments perceived adverse effects on the local economy with any increase in grizzly bear numbers. Responses indicated that no logging or mining would occur with grizzlies present in larger numbers which would both jeopardize jobs and prohibit these industries from expanding.

4. The expense, coordination, complexity, and potential success of an augmentation program - 33 comments.

   All comments were opposed to the immediate and long term costs of the project.

5. Biological/ecological effects of moving bears from one area and placing more bears in the Cabinet Mountains - 265 comments.

   A fourth of the comments indicated that not enough area/habitat was available for more bears in the proposed augmentation area. The balance of the comments were related to concerns that were indirectly related to the augmentation.

The Public and Grizzly Bear Reintroduction in the Bitterroot Ecosystem

The USFWS and the Idaho Fish and Game Department (IDFG) authorized a survey of public opinion regarding the reintroduction of grizzly bears into the Bitterroot Ecosystem (Duda and Young 1995). The contractor, Responsive Management, conducted the random digit dial telephone survey in June, 1995. Nine hundred interviews were administered to randomly selected people selected from national, regional, and local samples. Tables 6-2 through 6-6 summarize the responses to several questions received from completed interviews. The type of response is further tallied by the three geographically defined groups. The balance of Duda and Young's (1995) findings are summarized within this section.

Attitudes. --

Table 6-2. In general, do you support or oppose reintroducing grizzly bears to the Bitterroot Mountains? (N = 919 respondents)

RESPONSE	LOCAL (%)	REGIONAL (%)	NATIONAL (%)
Strongly support	33	39	42
Moderately support	29	34	35
Neither	8	10	10
Moderately oppose	8	5	5
Strongly oppose	18	5	3
Don’t know	4	7	4

Table 6-3. What is the main reason you support grizzly bear recovery in the Bitterroot Mountains? (N = 650 respondents)

REASON	LOCAL (%)	REGIONAL (%)	NATIONAL (%)
Save from extinction	34	28	41
Part of ecosystem	33	37	24
Aesthetic	6	5	4
Were here before we were	17	18	17
Preserve for future generations	3	4	6
Other	7	8	7

Table 6-4. What is the main reason you oppose grizzly bear reintroduction in the Bitterroot Mountains? (N = 137 respondents)

REASON	LOCAL (%)	REGIONAL (%)	NATIONAL (%)
Bears are dangerous	48	40	54
Will kill pets / livestock	7	7	8
No need for them	16	13	8
Reintroduction wouldn't work	9	7	N/A
Costs too much	3	3	4
Land restrictions	7	10	4
Other	10	20	23

Table 6-5. I would derive satisfaction from just knowing grizzly bears are present in the Bitterroot Mountains. (N = 919 respondents)

RESPONSE	LOCAL (%)	REGIONAL (%)	NATIONAL (%)
Strongly agree	30	37	33
Moderately agree	40	41	49
Moderately disagree	10	12	8
Strongly disagree	16	4	3
No opinion	5	7	7

Table 6-6. I dislike the idea of grizzly bears being present in the Bitterroot Mountains. (N = 919 respondents)

RESPONSE	LOCAL (%)	REGIONAL (%)	NATIONAL (%)
Strongly agree	15	6	3
Moderately agree	9	8	5
Moderately disagree	26	29	32
Strongly disagree	45	52	53
No opinion	4	6	8

Management Options. -- A range of management options for the reintroduction of grizzly bears were presented for consideration by the respondents. These options included: no special accommodations in land use were made for grizzly bears, such as logging or recreation; if grizzly bears were released only in areas already designated as Wilderness; if a State or Tribal wildlife manager was stationed in the area to help track bears, inform and educate people, and resolve conflicts; if costs for capture, release and monitoring were tightly controlled and kept at a minimum; if non-government groups covered some of the costs of the program; if local communities around the Bitterroot area had more input in grizzly bear management decisions; if a Citizen Conservation Council with local and national representatives of various interests, such as logging, ranchers, and conservationists were granted management responsibility; and if grizzly bears that lingered in areas of high human use, acted aggressively toward humans, or killed livestock were removed promptly.

Six of the eight ways resulted in a majority of local, regional and national respondents to state that they would be more supportive of bear reintroduction. Less than a majority said that they would be more supportive from all 3 samples; “if a Citizen Conservation Council with local and national representatives of various interests, such as logging, ranchers, and conservationists were granted management authority and no special accommodations in land use, such as logging or recreation were made specifically for grizzly bears” (Responsive Management, 1995).

Social Assessment of the Bitterroot Valley (of western Montana). -- In this study, 51 residents shared their opinions about important issues relative to natural resources management. Interviewees were classified based on their primary relationship with forest management and so were identified as the "amenities", "commodities", or "neutral" groups (Bitterroot Social Research Institute 1994).

Interviewees who were oriented to amenities most commonly mentioned; “their affinity for the forest and outdoors, observing that they spent a lot of time in the forest recreating and being close to nature.” Those who are commodity oriented related forest management to their business and livelihood and commonly had; “concern for the Bitterroot Valley's economic stability, wilderness prescribed fire escapes, soil conservation, and water storage.” Those interviewees with a neutral outlook on amenity or commodity interests tended to have no particular interest in ecosystem

management (EM) and fire management or they had a variety of personal interests in the way the forest was managed.

These three groups had specific comments about grizzly bears which were shared by respondents under the topic "threatened and endangered species." The amenity group's response regarding grizzly bears follows: “Some support reintroduction because they want to know everything is in the system for now and the future. Supporters of reintroduction differed among themselves relative to the potential threat of grizzly bears to forest visitors. They acknowledged opponents of reintroduction feel personally and economically threatened by the proposed reintroduction” (Bitterroot Social Research Institute 1994).

Additionally, some specifically felt that the well-being of humans needs to be considered as much as the well-being of grizzly bears. The commodity group had several members who were willing to accept grizzly bears living in their current habitat, but didn't want their range expanded to the Bitterroot Ecosystem.

Many believed that direct conflicts would result from the reintroduction of a large number of bears (e.g., up to 250) into the Selway-Bitterroot Wilderness with visitors to the Bitterroot Forest which has had use increasingly encouraged by the USDA Forest Service over the past several decades. Furthermore, when an area, like the Bitterroot Valley has had agriculture for more than 100 years, respondents in this group wondered why the FWS was so determined to reintroduce grizzly bears.

Half of the neutral group (neither commodity nor amenity oriented) felt grizzly reintroduction was wrong and commented, "I can't see the benefit of reintroducing grizzlies". These individuals believed that in the presence of grizzlies, stockmen were more likely to practice "the three S's rule" where one “shoots, shovels and shuts up”. Some neutralists, who perceived that the economic influence of agriculture in the Bitterroot Valley was declining, thought that if grizzly bears were reintroduced, the economic effect would be minimal. An argument was also presented, "...where humans ought to be the ones having to adapt to grizzlies..." (Bitterroot Social Research Institute 1994).

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