Living with Bears in Eagles Nest Township

A Plan for Coexisting with Wildlife in a Natural Setting

As a result of citizen concerns regarding numerous "visits" by local bears, a committee of residents was formed to examine the matter of how residents can coexist with bears. Eagles Nest Township offers its residents a wonderful environment to enjoy an "Up North" type of life: fresh air, clean water, and an abundance of wildlife. The task set before the Community Bear Committee (CBC) was to outline strategies that township residents could use to live in harmony with our non-human residents, especially bears that have become accustomed to humans.

The committee adopted several basic tenets:

- 1. Property owners have the right, within the law, to determine how they use and enjoy their property.
- 2. The welfare of wildlife is a concern of residents.
- 3. A community sense of responsibility to neighbors is desirable.

Developing a plan to help residents enjoy our community involved many hours of discussion and thoughtful consideration. It became apparent to the committee members that at least two factors would be essential for success. First, there must be an effective means to disseminate accurate information; rumors are the enemy of everyone. Secondly, cooperation and tolerance will strengthen our community and enable us to deal with issues more effectively. "We" may be a better word than "me".

Interviewing community residents proved to be a helpful tactic to determine how people feel about having bears visiting their property. Attitudes seemed to fall into three general categories. Most people seem to expect to see a bear occasionally pass through their property, and they enjoy the visit, providing it's temporary, and without incident (damage). Many of these people also expect the bear to leave when/if admonished. The other two categories represent the views of a smaller number of residents. One view is "I do not wish to have the bears around. If I don't see them, I'll be happy." The other, opposite view is "I love the bears and like having them visit us." The challenge is to address and satisfy the wishes represented by each of these views.

Certain conditions also entered into the task. Eagles Nest is a growing community. The human population has expanded dramatically over the past twenty years. Many new cabins and year around homes have been built, and in all likelihood we can expect the growth to continue. Two new subdivision plats have opened since 2000. Land that was previously unoccupied, now has a house or cabin on it.

The township is also home to the Wildlife Research Institute, which, since the mid 1990's has actively involved some local bears in the research it is conducting. The Minnesota Department of Natural Resources wildlife management team estimates that the black bear population in the township is about 25 bears. Of this number, the WRI has collared

13 animals. Two collared bears have become frequent visitors, especially to the Walsh Road area. These bears have become accustomed to being in proximity to humans.

The summer population, which also includes visitors to Bearhead Lake State Park, more than doubles the number of local residents. Seasonal residents usually arrive during early to mid-June. Bears typically emerge from dens during mid-April, and consequently experience two months of roaming about in a less dense human population, before a dramatic increase occurs.

With these considerations in mind the CBC set out to establish a plan that would address as many of the community's "people/bear" issues as possible and attempt to satisfy the majority of resident concerns, while also being sensitive to the bear population.

Mr. Tom Rusch, DNR Area Wildlife Manager, and Dr. Lynn Rogers of WRI did meet with the committee several times to provide expertise and act as resource persons. Ms. Susan Mansfield, a graduate student working on a master's degree, was also helpful. Their knowledge and help was a valuable asset to the committee's work.

Basic Bear Behavior: What we know

Wildlife biologists who specialize in studying bears continually add to the base of knowledge about bears. The black bears that inhabit North America, for the most part, are not aggressive by nature. However, bears are wild animals, and their behavior is not totally predictable. It is advisable to respect them and allow them to have their space. Although they tend not to be aggressive, there are situations when they will manifest aggression. These situations include reacting to a threat from another bear, and in some cases, females protecting their young cubs. A bear's usual first choice of defense is to flee. Even a female with cubs will flee from a threat, while the cubs will climb a tree as high as they can to escape perceived danger. Bears will make a charge as a gesture to frighten a perceived threat, but not engage the intruder; this so called "bluff charge" is a defensive tactic. Bears are highly motivated by fear.

A second major motivator of bear behavior is food. Bears in the Eagles Nest area spend about six months in hibernation. As daylight decreases and natural foods dwindle, bears seek a den site for the winter; they emerge from the den around the middle of April. From mid April to mid October the vast majority of a bear's time is spent foraging for food. The annual weight gain-loss margin of a bear may be as much as 150 lbs. The weight gained in the summer will sustain the bear during hibernation; during this period, a bear does not eat, drink, urinate, or defecate. Getting enough food during the summer is crucial to the bear's survival.

Bears are omnivores; they are scavengers, rather than hunters, who eat a variety of plants and animals. Nuts, berries and insects are important staples in a bear's diet. As the life cycle of various plants and animals continues throughout the growing season, bears take advantage of the available food sources. If they find a food source at a house or cabin,

they will utilize it. Whereas they may prefer certain foods, they are easily attracted to all foods.

Female bears tend to be "territorial", while males are inclined to be more "free roaming. This is why local residents tend to see two particular collared bears on a regular basis: they have occupied territories that include the Walsh Road corridor. If and when these bears die, two different bears will likely claim their vacated territories. Life expectancy for bears can be 30 years, but that is unusual. Most bears in the Eagles Nest area have a life span of four to six years, due to hunting harvests, accidents, or predation. Bears almost never die of old age. Cubs usually will not stay in the same "home" territory as their mother, especially male cubs. Female cubs may seek a territory near their mothers, if one is vacant. It appears that the size of a bear's territory is linked to food sources that are normally available; it takes a certain sized area to provide enough food to meet a bears food requirements.

In the mammal hierarchy of intelligence, bears are near the top. While much of their behavior is guided by senses and instincts, they exhibit limited problem solving ability and memory. While they may not "think" in the human sense, they are able to form associations. They can be trained to perform a variety of tasks, as evidenced in the motion picture industry, and traveling circuses. Some local residents tell interesting stories of bears figuring out how to get to suspended bird feeders.

Animals that by nature live in a social matrix display a quality that behavioral scientists refer to as "personality". Loosely described, personality is the sum of traits that determine how an individual interacts with its surroundings. As is true with humans, words like dominant, submissive, aggressive, timid, playful, etc., can be used to describe a bear's personality. This is worth considering because a "habituated" bear may manifest similar behaviors as a "non-timid" bear. The essential difference is how that animal got to be the way it is.

Strategies for Living with Bears in Eagles Nest

The vast majority of residents who spoke with CBC members about the bears indicated the major reasons they like being in Eagles Nest are the lakes with clean water, the natural setting, friendly people, peacefulness, and wildlife. Recreational opportunities are numerous throughout the year, and the hunting and fishing are good. Community residents hold a variety of opinions as to how they like to spend their time in the area. For some, the presence of non-timid bears has become an issue of concern. The safety of visitors, especially youngsters, and the security of their property represent areas of potential conflict. Addressing these types of concerns has been the main focus of the CBC, while keeping in mind the three basic tenets mentioned earlier.

The early discussions of the CBC focused on bear behavior. Historically there are stories of unwelcome bears and their "bad" behavior that date back to when our senior-most

residents were children. After interviewing a number of people, and wading through some lengthy discussions, the CBC concurred that the mere presence of a bear in someone's yard does not constitute a nuisance. The behavior that a bear exhibits is what merits it being considered a nuisance animal. Appendix "A" describes what actions by a bear constitute nuisance behavior, and the appropriate responses to it.

Managing Attractants

As bears are intelligent animals, they can learn efficient ways to procure food. There are some basic strategies people can utilize to influence a bear's behavior so that it can avoid becoming a nuisance. Keep in mind that bears' behavior is motivated by a rather constant search for food. How effectively residents manage food "attractants" will help minimize bear interest in visiting decks and cabins. These are typical attractants for bears:

- 1. Bird feeders.
- 2. Pet food.
- 3. Barbeque grills.
- 4. Garbage cans.
- 5. Compost piles.

Since much of a bear's search for food involves its use of its sense of smell, each of the items on this list will serve to attract a bear. Even if a bird feeder is out of reach, a bear can smell the seed, or forage for seeds that have fallen to the ground. To a bear, bird food is also bear food. If a bear, by experience, finds a food source, it will visit that site as a matter of course. Residents who wish to minimize bear visits to decks and cabins should consider keeping all feed (birdseed, deer corn, pet food, etc.) in closed containers, inside a cabin or shed. Food scents are attractants. The U.S. Forest Service recommends that visitors to the Boundary Waters keep food items, including the clothes worn during cooking meals, in a pack or container suspended 12' above ground level.

Grills and garbage cans should also be kept in a garage or shed. Compost piles should be kept in an enclosed container. Other than looking for food, bears have no interest in visiting a cabin of deck. Managing attractants will result in fewer bear visits.

Berries, nuts, and fruits are also bear diet components that will attract bears. These foods are more difficult to manage. Electrified fencing around gardens is effective. Other physical deterrents may also be used successfully. These items are discussed later under "Physical deterrents".

Physical Deterrents

As bears are among the more intelligent higher mammals, their behavior can be shaped by environmental experiences; they have some learning capabilities. The basic form of teaching/learning known as conditioning can be employed in shaping the behavior of bears. These techniques have long been used in training animals. Even some human behaviors are conditioned. Simple conditioning involves treating the subject (learner) in such a way so that he/she will form an association between certain cues and appropriate responses. Aversive conditioning uses negative reinforcement to develop "avoidance" behavior. If a bear approaches a deck that is electrified, it will receive a mild shock, and will learn to avoid that particular deck. Bears have excellent long-term memory, and their navigational ability far surpasses the ability of humans. They can be taught to avoid locations.

Electric wire fencing is an effective deterrent that can be used to condition bears. It is inexpensive and it's available locally. Fencing and other physical deterrents have the additional advantage of being constantly vigilant. Even when a homeowner is away from the cabin, the fencing continues to work. Decks, bird feeders, and gardens can all be fitted with electrically charged fencing. Appendix "B" lists examples of several physical deterrents, some of which have been used to drive off bears.

Admonishing Unwanted Bears: Getting Them To Flee

One complaint voiced by some residents concerning the non-timid bears frequenting the Walsh Rd corridor and nearby neighborhoods is that these animals have become "habituated". There is little doubt that some bears learn to feel comfortable living in proximity to humans. The comment "Wild bears should flee when subjected to human presence; these bears don't" has been made by several residents. Whereas the bears in question appear comfortable in the presence of people, they are not tame animals. They should be treated as wild animals, because they are. They will react to admonishment; however, they may require stronger treatment than other bears.

Some citizens may feel frightened or tentative about chasing a bear off a deck or away from a feeder. The CBC recognizes this as a fairly typical feeling on the part of many residents. If you fall into this group of people, call a bear help line member for assistance.

A number of tactics are effective in driving bears out of a yard. Bears, even non-timid bears are startled by loud noises, such as clanging pots together, or rattling a can containing pebbles. Shouting at a bear while waving a black plastic garbage bag will also be effective. Blowing a shrill coach or referee's whistle is another possibility. Loud sounds that are not ordinary should be employed.

In addition to loud noise, other measures have also been used. Spraying bears with a garden hose, or pitching a bucket of water at the bear will let the bear know that it is not welcome.

Pepper spray is a strong means of driving off unwanted visitors. A burst of spray to the snout and eyes is a powerful, yet humane, way of chasing off a bear. The discomfort and irritation are temporary and will not do any lasting harm to the animal, yet the bear will likely remember the unpleasant experience and will be less likely to make return visits.

If a bear should wander into a yard, and it is unwelcome, it's best to drive the animal off immediately. Use whatever deterrent is available and harass the bear before it can become comfortable, or accustomed to being there. The bear is capable of recalling the locations of unpleasant experiences and can learn to avoid them.

Feeding Strategy

The first basic tenet mentioned in this guide made reference to property owners and how they decide to use their land. While some residents may take issue or question some of the contents set forth here, one statement is difficult to dispute: bears are attracted by the availability of food. In speaking with residents, CBC members found out that Eagles Nest has a number of people who feed wildlife. The DNR frowns on the practice. On its website, the WRI discourages feeding. Yet, perhaps because of our nature, many enjoy feeding animals. Deer, bears, coyotes, foxes, birds, ducks, wolves, chipmunks, raccoons, squirrels, and weasels all receive handouts, intentionally.

Not much attention is given to the matter of tactically feeding animals, even though some critters can cause appreciative amounts of damage to buildings and vegetation. As stated earlier, bears will be attracted to a wide variety of foods. If corn is put out for deer, or sunflower seeds are put out for birds, bears are likely to appear at feeding stations. If a resident chooses to feed wildlife, neighbors are likely to experience some effect. Being a good neighbor suggests that residents who feed, especially in higher density neighborhoods, should make conscious efforts that minimize the impact on neighbors who choose not to feed. Consider trying to feed in a thoughtful manner.

Here are some possibilities:

- 1. Locate feeding stations away from the cabin, in a more remote area on the property.
- 2. Do not feed animals from your hands.
- 3. Feed when animals appear, not continuously.
- 4. Animals will become accustomed to feed being in a particular location. If animals (bears) come to a non-feeding area, chase them away
- 5. Modify feeding so as to limit access by non-welcome animals. (See physical deterrents)

The practice of feeding wildlife, or electing not to do so, is a matter of personal choice. Being sensitive to the welfare of our neighbors will make our community a friendlier place for everyone. How we do what we do, defines who we are.

Community Action - Making a Plan Work

There are amazing accounts of extraordinary people overcoming difficulties to achieve goals. The stories are magnified when the central player is a community. Making a community a better place to live is not the work of a few people – it is the work of the entire community. Up to this point, most of the information that has been presented is aimed at individual property owners. The community as a whole can play a larger role in this issue, and thereby set the tone for a variety of endeavors to make Eagles Nest a better place in which to live. Essential elements include:

Communication

There needs to be an effective means for residents to be informed, accurately. Rumors do not serve anyone in a positive fashion. Whether it is bears, an event, or an emergency, the township should consider the matter of being able to inform residents, when necessary, in a timely manner. The means could involve using the Lake Association, The Seniors, a town website, or a "telephone tree", or some other procedure.

Bear Help Line

A core group of people may volunteer to assist residents who feel they need help to deal with an unwelcome bear. These volunteers would be trained how to use the necessary tactics to drive off the bears, and to give advice and suggestions about dealing with bears. The names and telephone numbers of these volunteers would be distributed throughout the community. The WRI could also be of service in providing assistance with this group.

Bear Council

Consideration should be given to establishing a bear council. The council would serve as a sounding board to deal with complaints about problem bears and to coordinate communication with the DNR and WRI. In the event that a decision concerning a "bad" or "rogue" bear would be necessary, the Bear Council would play a role in making the decision. Three members should comprise the council, made up of volunteers, approved by the town board. The council could report to the board, when appropriate.

Inter-Agency Cooperation

A higher level of cooperation between the DNR and WRI would enhance the community's attempts to deal with bear issues that arise. Both parties play important, major roles in an assortment of matters that involve the local bear population and how that population is managed. The CBC spent considerable time discussing issues, which involve both the DNR and WRI. Both parties, even though their focus is different, can compliment each other's work and, thus make

each more effective. There are too many instances in contemporary social and political circles, where effectiveness is diminished or shut down due to lack of communication, personal agendas, or self-serving pride. Cooperation would also make economic sense in that utilization of personnel would be more time efficient. Both the WRI and DNR should establish close, working relationships with the Eagles Nest community so that all interests can be better served. Any misgivings that some community members may harbor toward either of these agencies could be reduced, or perhaps eliminated, if the local residents, the DNR, and WRI would become partners in seeking effective ways of dealing with common issues.

The Wilderness Research Institute (WRI)

The WRI has been conducting field studies in the Eagles Nest area since the mid 1990's. The nature of the Institute's work may be unique in the field of animal behavior analysis and research. The WRI has a field study research permit issued by the DNR.

As the WRI is located on Trygg Road, and a number of its collared bears have established home territories in the Eagles Nest area, it, too, is a member of the community. To date, its presence has been visible mainly through the bears it tracks and studies. The CBC recommends that the WRI become a more active member of the community and that it assumes a greater responsibility in informing the residents regarding the nature and extent of its research projects, and in assisting in the implementation of some of these recommendations. The WRI, with the cooperation of residents, should also become more proficient in informing the community of bear activity that impacts property owners.

There are residents that have expressed an interest in becoming involved in some of the activities of the WRI. Perhaps the Institute could create a means for some residents to volunteer and become involved with the Institute. Also, accredited student interns could be recruited by the Institute to help with summer projects. Establishing a database to record and track local bear activity may be another area for students and residents to provide service.

Keeping the community informed is a way the WRI can be a good neighbor. Periodic informational updates about what type of research is going on, plans for future research projects, and other salient developments would be a way for it to show that the Institute is considerate of the concerns local residents may have.

Proactive planning is a matter that should be given thought, as well. The current research bears that use the populated sections of the township as part of their established territory will, at some point in time, perish. Their territory will then be vacant, and perhaps be taken over by other bears. The WRI should plan for these types of scenarios and work to help avoid the development of another generation of bears that become overly comfortable in residential neighborhoods.

The majority of members serving on the CBC believe the work that is being done by WRI is important and that it should continue, but measures need to be taken to help reduce the intrusion of nuisance bears into residential neighborhoods. The presence of the Institute in the Eagles Nest community presents both a unique challenge and a rare opportunity. Efforts by the WRI such as those described herein, as well as others yet to be articulated, may well determine whether the community will accept or embrace the Institute and its work, both now and in the future.

The DNR

The people of Minnesota charge the Department of Natural Resources with a number of tasks and duties. The importance that Minnesotans place on the wise use and preservation of the public forests, waterways, and wildlife is a hallmark of the state. Perhaps the leading reason residents in Eagles Nest have chosen to be here is the natural character of the area.

Like many governmental agencies, the DNR is limited in the financial resources it receives from the legislature. The agency's Tower office is faced with the task of overseeing a large area with a limited staff. The CBC believes that forming a working relation with the Eagles Nest community would enhance the effectiveness of the DNR, enabling the agency to better serve the public. Residents could become a resource, providing information and support concerning matters of common interest.

It seems logical for the DNR and the WRI to cooperate with each other as well, especially in regard to the local bear management issue. The exchange of information could be mutually beneficial. The ability of all "players" to achieve the best possible outcome for the community will be elevated by cooperation. What is best for the residents? What is best for the bears? What is best for the overall picture? The CBC believes it's better to be a model of "how to do it" rather than an example of "business as usual".

"Bear 101"

In order the provide information to the public, the township should consider hosting a series of "classes" on bear behavior and human-bear interaction. Classes would not be aimed at getting people to like bears, but to provide factual data and answer questions. Some of the suggestions that are presented in this report might also be included as topics. Judging by the turnout at the general town meeting that was held in August, community members seem to be interested in bears. Such classes may even be expanded to include other animal species, such as loons, moose, birds, or wolves if there is interest.

Final Thoughts

The petition that called for township officials to "do something" about the matter of habituated bears present in the community led many people to perceive that a bear problem exists in Eagles Nest Township. Perhaps there is some credence to that perception. However, after several meetings, the CBC became convinced that a more accurate perception would be that people as well as bears are at the core of any problem that exists. People CAN solve problems; bears cannot.

If people within Eagles Nest Township can thoughtfully come together and address this issue as a community, a sense of pride and accomplishment will prevail and our attitudes about living here will become more positive. Differences in how or what we think will always exist, but our sense of community will strengthen the relationships we have with each other, and our ability to deal with troubling matters will increase. The choice is ours.

The Community Bear Committee (CBC)

The committee consisted of 14 residents of the township. The six meetings were held at the town hall throughout September, October, and November. Not all members were able to attend all the meetings, but at least eight members were present at every meeting. Mr. Tom Rusch, Area Wildlife Manager with the DNR office in Tower, and Dr. Lynn Rogers, and Ms. Sue Mansfield of the WRI served as technical advisors. They attended the first two committee meetings. Even though committee members had varying thoughts and opinions concerning the topics that were considered and discussed, all meetings were marked by a high degree of respect and thoughtful exchanges. Committee members were: Larry Anderson, Curt Conn, Gary Criter, Lowell Erdman, Robert Frykman, Jim Hart, Ron James, Jeff Kelley, Ann O'Hara, Charlie Ragan, Kurt Soderberg, Andy Urban, and Beverly White. Carole Kelley served as recording secretary.

Dan Humay, CBC Chairman

December 11, 2007

Appendix "A"

Nuisance bear description/definition:

In order for a bear to be considered a nuisance animal, the bear must manifest certain behavioral criteria. The mere presence of a bear in a residents' yard, even if repeated presence, does not constitute nuisance behavior. Also, behavior should be indigenous to the animal, not induced by human residents of the township.

Appropriate response to nuisance bear behavior should be determined by the scope of the nuisance behavior. As there is a spectrum of possible bear/human interaction, the definition of nuisance behavior should be encompassing; that is, include different levels of behavior:

Bad bears

- □ Manifest a threat to human/pet safety by aggressive behavior.
- □ Breaking/entering buildings.
- □ Not invited by attractants.
- □ Repeated manifestations of this behavior.

Nuisance bears

- □ Not a threat to life or property.
- □ Consistency: repeats behavior.
- □ Invades human spaces such as decks and porches.
- Does not react to usual bear deterrents: noise, missiles, dogs, water, etc.
- Repeats behavior, even after use of stronger deterrents such as pepper spray.
- □ Not invited by attractants.
- □ Minor property damage.

Collared/research bears

- □ Habituated to human interaction.
- □ Repeated presence in residential areas.
- □ Drawn by attractants.
- □ Reluctant to flee deterrent actions.
- □ Minor property damage.

Bad bears, when identified, need to be destroyed by the proper authorities. Nuisance bears, when identified, need to be subjected to community-wide deterrent conditioning. This will involve informed, coordinated responses by residents. Education and communication are important elements in the reduction of nuisance bear activity. Collared bears, like nuisance bears will also require intervention by the community. However, because humans have habituated these animals, additional action may be appropriate. Parties responsible for the habituation will need to assume a greater role in orchestrating the deterrent intervention.

Regarding nuisance bears, both collared and non-collared, appropriate deterrent actions and the means to employ them, needs to be brought to the attention of the township residents. This will be the responsibility of the town board. The board will decide the most suitable way to present necessary information to residents.