

Wind River Bear Institute Non-Lethal Wildlife Shepherding



“Partners-In-Life” Program Information & Services



Wind River Bear Institute (WRBI) staff, Wildlife Service Dogs and a National Park Service Ranger Shepherding a grizzly bear in the back country of Glacier National Park.

Wildlife Shepherding Consultation and Training
Public & Agency Outreach & Education
Wildlife Service Dog Breeding, Placement, Training, Handling



WRBI staff member, Russ Talmo, and Wildlife Service Dog “Eilu” patrolling a grain spill site to deter bears near Essex, MT.

Community Wildlife Conflict Prevention & Planning
Interagency & International Partnerships
Human to Animal Communication
Preventing Wildlife Mortality, Increasing Public Safety



WRBI Kennel Manager Renee VanCamp and “Gracie” conducting an outreach and education event with wildlife and recreation managers at a conference in Missoula, MT.



Washington Department of Fish and Wildlife Officer, Nicholas Jorg, picking up his new partner “Colter,” as part of Washington’s newly sanctioned Wildlife Service Dog Program, in partnership with WRBI.

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C. L. Hunt. 2003. *Partners-In-Life*® Program, Wind River Bear Institute, Heber City, Utah.



Wind River Bear Institute

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It is my pleasure to introduce the Wind River Bear Institute to you. Our **Partners-In-Life Program®** is an innovative program that is saving the lives of bears by changing the way they are managed and viewed by wildlife agencies and the public. This program can also serve as a model for working with other species. We are certain that our Bear Shepherding® methods will provide you with safe and effective concepts and techniques that will assist you in preventing or reducing human-bear conflicts. We developed this Program, courses and certification with the intent of teaching our methods to any interested parties- bear managers, communities, private land owners in bear country. Our intent is to keep it simple. We hope that if you find our Basic Bear Shepherding training useful, you will seek our services annually and tell others about us! As we continue to develop Bear Shepherding methods, our goal is to meet your needs.

The Partners-In-Life Program is designed to resolve human/bear conflicts by teaching bears to recognize and avoid human boundaries. Our "Bear Shepherding" methods are an effective and humane replacement for the traditional methods of relocation followed by destruction. We have developed a system for teaching safe, meaningful lessons to bears and use a variety of loud noises, rubber projectiles and Karelian Bear Dog (KBD) Wildlife Service Dogs (WSDs) to safely "herd" bears out of off-limit areas such as roadways, campgrounds, developed sites, and back country camps. Because our lessons are based on wild bear behavior, the bears are taught to view us as much like a dominant bear and learn to avoid human developed sites as "our" territory. These methods serve as a template for working with other conflict-prone species of wildlife. To present, Bear Shepherding and WSDs have also been used to work with cougars, moose, big horn sheep, and wolves.

The Partners-In-Life Program also focuses on education. Our "partners" include wildlife, wildlife agencies and the general public. WRBI employs experienced biologists to train wildlife managers and the public in the proper use of WRBI's methods, to assist in maintenance or recovery of bear populations and to plan community conflict prevention programs. While teaching bears, we also teach people on-site to prevent conflicts with bears and other wildlife by eliminating attractants. We also maintain breeding facilities and a selection, placement and training program for handling and training KBDs at our kennels and headquarters in Missoula, MT.

We are partially funded by tax deductible grants and donations. But we seek annual partnerships through work contracts from state and federal agencies and private groups to sustain the Institute. We offer the following options:

- On-Site Consultation and Assessments to identify root causes of bear/human conflicts and to develop bear/human conflict treatment plans and prevention programs.
- On-Site Shepherding and Training of bear managers and private personnel in Bear Shepherding concepts and techniques:
 - a. Basic and Advanced Bear Shepherding Courses Can also include Beginning KBD Handling.
 - b. Bear Shepherding Introductory Program Introduction to Program and demonstration of and/or training in the field in concepts and techniques, including presentations to the public, workshops for agency personnel and on-site trap releases, bear conditioning, conflict solving and demonstrations on problem wildlife.
- On-Site Human-Wildlife Conflict Reduction Field Teams working with managers to assess and work with wildlife conflicts:
 - a. Consultation and Conflict Prevention Plans Work with clients to develop conflict reduction strategies.
 - b. On-site Shepherding Teams Assist wildlife managers to implement Shepherding and other conflict reduction measures and develop formal Shepherding programs for a designated area.
 - c. Outreach and Education Conduct presentations, workshops and site-visits with agencies, the public and communities to educate them and to develop appropriate conflict prevention approaches.
- Breeding, selection, and training of WSDs produced by WRBI for bear managers or private individuals and groups.
- Development of Wildlife Service Dog programs for wildlife management agencies and private organizations seeking to formally sanction the use of WSDs.

If any of the above services are of interest to you please contact us and we will provide a proposal and cost estimate specifically designed for your needs. We have enclosed a letter detailing one of the great successes that we have had with our workshops. We would like for you to see the same success with our problem bears. Also, please take a few minutes to visit our web site at www.beardogs.org to learn more about the Program. Thank you for considering our services!

Sincerely,
Carrie L. Hunt, Director

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WRBI Success Story.

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“Bear Shepherds in the North Cascades”

The Stehekin Valley, at the heart of Washington's Lake Chelan National Recreation Area, runs 45 kilometers from the head of Lake Chelan into the heart of the North Cascade Range. The valley floor's elevation ranges from 335 m at the head of the lake to 450 m at the last residence, 14 km up-river. Peaks immediately adjacent the valley range from 2200 to 2500 meters. Access to the valley is limited to small aircraft, boats and hiking trails.

About 100 year-round residents, increased by about another 100 during summer months, live in scattered houses primarily in the lower 8 km of the valley. Most are private landowners living on inholdings; the rest are National Park Service (NPS) employees.

In the springtime American black bears are drawn to the valley's lush riparian vegetation. Some predation on mule deer fawns has been documented, but is not frequent. Service berries (*Amalanchier* sp.), huckleberries (*Vaccinium* spp.) and kinnick kinnick (*Arctostaphylos* sp.) are abundant later in the season. Ants, also abundant throughout the lower valley, are found in most bear scats in this area. Over the past several years the number of introduced kokanee salmon has increased dramatically in the Stehekin River watershed, providing another food source for bears in the lower valley.

Anthropogenic foods are available in a variety of forms, from pies left on windowsills to cool, to an apple orchard managed as a National Historic Site. An enclosed community garbage compactor was installed in the 1970s to replace open-pit dumps, expressly to reduce wildlife attractants.

Given the Valley's remoteness -- a resort hamlet is about 30 kilometers away and the nearest town is nearly 80 kilometers down Lake Chelan -- and the richness of food availability during most years, most bears in the area are unlikely to encounter any other community.

Bear-human coexistence in the valley has been characterized mainly by mutual tolerance during years of high natural food abundance. During drought years, an increased number of bears looking for alternative food sources have led to lower human tolerance and increased bear mortality.

During 1998, severe drought brought an increased number of bears to the Stehekin Valley in search of food sources. A classic example of their behavior patterns was provided by a female bear with two cubs. When the family group was first observed in mid-July, they responded very warily to people. After a few days of foraging in the historic orchard, increasingly near the tourists and Park Service staff visiting or working there, the female's wary behavior quickly diminished. Over the next few weeks the family group's behavior became progressively more bold and aggressive until they became, one might say, regular "patrons" at the local bakery. It was here the family group was shot six weeks after they had first been observed, wild and human-wary, running from cars and bicycles on the single-lane valley road.

Eight other bears were shot in the lower valley that year as well, all in an area of approximately one square kilometer. One was destroyed due to problem behavior; the other seven were hunting mortalities on the periphery of the orchard. All of these bears, as well as a number of other "problem" bears that apparently survived, had become habituated to people at the orchard.

In July 2000, the North Cascades National Park Service Complex (of which the Lake Chelan National Recreation Area is a part) hosted an introductory program presented by the Wind River Bear Institute (WRBI). The focus of

the program was to evaluate the human-bear interface in developed areas throughout the North Cascades parks and to encourage positive change in bear management protocols in northwest Washington.

WRBI director Carrie Hunt identified the historic apple orchard as the probable behavioral "nursery" for most human-bear conflict in the Valley. The setting is ideal for bears' habituation to people: low numbers of people participating in low-key activities -- and for the most part a laissez-faire treatment of any bears present. During poor food years, up to a dozen American black bears exploit the apple crop in late summer. The NPS orchardist is present most days. Busloads of visitors arrive at midday for a brief tour of the area, and at other times Valley residents or visitors may come to pick apples. Bears appear to learn habituation first from the solitary orchardist, then quickly graduate to ignoring the tourists who come at least as much to see bears as the orchard and its homestead.

Fencing the orchard, though it has not been ruled out, has so far not been an option due primarily to various cultural-resource concerns. Another concern is that the NPS not remove "cold turkey" from the bear population a traditional food source in use by bears for nearly 100 years.

In 2000, Hunt developed a strategy for preventing bears using the orchard from becoming habituated to people. It was thought this could influence bears' behavior "downstream", as it were, of the orchard, breaking the cycle observed during years such as 1998. The strategy was simple: any bear allowing itself to be observed away from cover would be "shepherded" by way of yelling and firearm-propelled riot rounds (rubber bullets, bean bags, noise makers). Bears using the far end of the orchard, away from human activity, would be allowed to feed on apples as long as they did not exhibit human-habituated behavior by moving away from cover.

The summer of 2002 was our first real opportunity to test the strategy, when the Valley experienced drought conditions similar to those of 1998. The orchardist reported as many bears using the orchard in 2002 as had during the previous drought. But in 2002, she and other NPS staff followed the WRBI strategy, "shepherding" every bear exhibiting habituated behavior in the orchard (as well as in other areas of the Valley). Bears moving quickly into cover upon detecting people were left alone.

How effective was this strategy? It goes without saying one season's activities do not a "study" make: no definitive conclusions can yet be drawn. Recognizing this, the total known, human-caused mortality for black bears in the Stehekin Valley last year was zero. Further, none of the bears using the orchard were reported to have come into conflict with people elsewhere in the Valley (a first, to my knowledge, especially during a drought year), and bears in other locations also responded well to "shepherding" efforts.

Although our intention was not to affect hunting success, no bears were shot by hunters on the periphery of the orchard. It remains to be seen whether this was an artifact of the "shepherding", whether other factors were involved, or some combination of the two. It does further raise the question of whether the historic feature we manage contributes to an artificially high take in the vicinity of the orchard. Almost all of the American black bear hunter mortality in the 25,500 hectare recreation area occurs within 500 m of the orchard. While we do manage for hunting in the Valley, we do not manage for increasing take over what would occur without this anthropogenic food source.

The program has opened new doors of communication and cooperation between the NPS and private residents regarding bear-human coexistence in the Stehekin Valley. Hunt and the WRBI have provided new options for old problems. When a "non-orchard" bear visited a family's chicken coop in mid-summer, for example, the landowner and an NPS ranger worked together to successfully "shepherd" it away over the course of two days, after which it was no longer observed in the area. We continue to seek funding to provide further community-based bear "shepherding" workshops for all residents of the Valley in the near future. Challenges to maintaining the program include a recent, high turn-over in ranger staff (creating short term personnel shortages and the need for continued, basic training) and tenuous funds for managing the orchard (i.e., ensuring the dedicated orchardist/bear shepherd is continuously available to work with the bears). To be effective the strategy must remain consistent from year to year. But at the least last year's results suggest the "shepherding" strategy holds promise for future years -- and bears.



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SCOPE OF SERVICES (Cost of Services Negotiable)

Information on the scope of our services is presented below. The following scenarios can be customized and negotiated to meet your needs. If you have further questions, please do not hesitate to contact us. Thank you for your interest and for looking for a safe and effective alternative to relocation or destruction of bears. We hope we will have the opportunity to help you to prevent and reduce your human-bear conflicts. (Selected Courses and Programs are detailed in the following section).

	SERVICES	Personnel	Days
TRAINING: Shepherding & Wildlife Service Dog Handling	One Hour Presentation or One-Day Workshop: Overview of Partners-In-Life Program and “Bear Shepherding” Techniques with power-point, videos, and our Karelian Bear Dog (KBD) Wildlife Service Dogs (WSD), etc.	1+ WRBI Staff	1 day
	2-3-Day “Basic Bear Shepherding® Course”: Techniques and concepts, including KBDs, manuals, video, supplies.	C. Hunt & 2-3 WSDs	1-3 days
	3-4 Day “Basic Bear Shepherding® and Beginning Wildlife Service Dog Handling Course”: Including 2-3 KBDs plus manuals, video, etc. Can include 1- additional day of on-site work with problem bears for practice on actual real bear scenarios.	C. Hunt & 2-3 WSDs	3-5 days
	3 Days to 3 Weeks “Advanced Bear Shepherding® On-Site Training Course”: This Course will provide participants with the opportunity to apply Bear Shepherding techniques learned during the Basic Course and to handle WRBI KBDs to condition actual bears on-site while working with WRBI staff.	C. Hunt & 2-3 WSDs	3-21 days
	“On-Site Introductory Program”: Introduce Program to bear managers and the public and assess the utility of Bear Shepherding for a specific area. Can include the following: demonstration of or training in Bear Shepherding techniques including “hard” bear-trap releases, conditioning of bears, advance telemetry, prevention techniques, 1-day, bear manager workshop for Program overview, 1 hour presentations to public or government officials, or media interviews if appropriate. Minimum 5 days, usually 10 days to 3 weeks. Cost for additional days drops after first 5 days.	C. Hunt & 1-3 WSDs	5-21 days
FIELD TEAMS: On-Site Human- Wildlife Conflict Reduction	“On-Site Consultation: Assessment and Bear Conflict Treatment Plan” or “On-Site Field Work”: Consultation on client’s human-bear conflicts to develop and write a Bear Conflict Treatment Plan; or On-site field work with client’s bear managers on actual bear problems for solving problems and continued training. Can be expanded to additional wildlife species.	C. Hunt & 1-3 WSDs	1+ days
	“On-Site Bear Shepherding Teams”: WRBI Bear Shepherding Teams consult and assist wildlife managers and public, conduct initial site investigations, bear assessments, initial conditioning efforts (if applicable) and determine suitability of a formal, site-specific Bear Shepherding program. Bear Shepherding Teams are available for contract work, ranging from one-time emergency response actions to periodic or season-long sustained efforts, depending on site-specific needs. Can be expanded to additional wildlife species.	C. Hunt & 1-3 Staff & 2-4 WSDs	1+ days
	Public Outreach and Education: WRBI staff and Wildlife Service Dogs conduct outreach with the public, various user groups and communities in and around conflict areas, to educate them about being “bear-aware” and to modify human behavior to reduce wildlife conflict. Can be expanded to additional wildlife species.	1+ WRBI Staff	
KBD WILDLIFE SERVICE DOGS	Wildlife Service Dogs: Breeding, assessment, placement and training of WRBI’s Karelian Bear Dogs for use as Wildlife Service Dogs. Consult and assist in the development of formally sanctioned Wildlife Service Dog programs for agencies and private groups and using WSDs to Shepherd wildlife out of conflict, locate animal sign, track wildlife, and work as wildlife ambassadors for public education.		



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DESCRIPTION OF SELECTED SERVICES OFFERED

- The Wind River Bear Institute (WRBI) is offering 2 Service Courses in Bear Shepherding®, intended to provide annual training for agency bear managers involved with the conditioning of bears. These training courses are designed to promote consistent, safe and effective, conditioning techniques (termed “Bear Shepherding”) to reduce agency, public and WRBI liability risk, reduce injuries to bears, public and staff and provide training in conditioning of bears that is effective in reducing human-bear conflict.
- We will continue to offer our traditional On-Site Introductory our On-Site Consultation: Assessment and Human-Bear Conflict Treatment Plan Programs that continues to be one of our most well received and effective Programs.
- In addition we are offering a series of Wind River Karelian Bear Dog® (KBD) Programs to all owners of KBDs including KBDs not produced by WRBI: These include KBD Temperament and Working Dog Assessments, Training Consultations and Board and Train Programs.

Training - “Basic Bear Shepherding®” Course:

This 2-Day Basic Bear Shepherding Course is designed to provide agency staff with the basic concepts, systems, indices, protocols, and on-site situation training for safe and effective decision-making and conditioning of bears using WRBI’s techniques. Goal of the course is to provide agency staff with information and applied training that will allow staff to proceed forward through the season in a consistent, effective manner that does not create harassed or aggressive bears and is safe for the public, bears and staff. Use and handling of Karelian Bear Dogs can be incorporated into the course.

Day 1: Classroom - Teach the WRBI system of Bear Shepherding including Basic Concepts, Key Bear and Site Factors, Bear and Site Indices, Conditioning Protocols and how to create Site and Bear Profiles using Key Factors and Indices developed by WRBI to determine courses of action to take in specific situations.

Day 2: Field- Simulate a variety of conflict types or Visit a variety of prioritized local conflict sites to discuss and apply techniques learned during Day 1 to local situations. This will provide staff with consistency in decision-making and application of conditioning over the season. Use and handling of Karelian Bear Dogs can be incorporated into the training.

Training - “Advanced Bear Shepherding® On-Site” Course (3 – 10 Days):

This Course will provide participants with the opportunity to apply Bear Shepherding techniques learned during the Basic Course and to handle WRBI KBDs to condition actual bears on-site while working with WRBI staff.

Training - “On-Site Bear Shepherding® Introductory Program” (5 – 21 Days):

This Program is intended to introduce the Wind River Bear Institute (WRBI) Partners-In-Life Program to area wildlife biologists, law enforcement officials, bear managers and publics, and to evaluate whether the Program methods can be used to reduce human/bear conflicts in the area. It allows area bear managers and publics to become familiar with and evaluate the program, while providing an avenue for WRBI to become familiar with the area, its publics and bear problems, and evaluate whether the Program methods would be effective if implemented. The Program can include any or all of the following and is usually completed over a 5-day to 3 week period: 1-2 hour public presentations, 1-day overview workshops for bear managing agency personnel, tour the landscape with area biologists and wildlife officers to review past and current bear problem scenarios, and talk on-site with land-owners and other interested publics to explain the Program goals and its methods. If a bear problem is underway, WRBI will assess the problem and determine if the bear can be taught effectively using the Program methods. Final decision as to whether the bear is to be worked will rest with the bear managing agency.

Field Teams - “On-Site Consultation: Assessment and Bear Conflict Treatment Plan” or “On-Site Field Work”: On-site consultation and assessment of client’s human-bear conflicts to develop and write a Bear Conflict Treatment Plan; or On-site field work with client’s bear managers on actual bear problems for solving problems and continued training. Includes: tours of the landscape with staff to review past and current bear problem scenarios, including treatments and attractants; consultation on reducing and/or targeting attractants on-site and a review of “bear proof” efforts; talking on-site with land-owners and other staff to understand problems and to explain the Program goals and its methods to determine if the program conditioning phase would be appropriate; and

Following the above assessment a **Strategic Bear Conflict Prevention and Planning Report** will be prepared to summarize the Community review and to outline a recommended plan for the future. Report will target and prioritize steps for reducing bear-human conflicts by increasing public safety, decreasing property damage and bear mortality.

Field Teams - "On-Site Bear Shepherding Field Teams": WRBI's Bear Shepherding Teams can be stationed in target conflict areas to consult and assist wildlife managers and public with mitigating human-wildlife conflict. Bear Shepherding staff conduct initial site and bear assessments and initial conditioning efforts and determine suitability of a formal, site-specific Bear Shepherding program. Bear Shepherding Teams are available for contract work, ranging from one-time emergency response actions to periodic or season-long sustained efforts, depending on site-specific needs.

Wildlife Service Dogs (WSD): Breeding, Assessment, Placement and Training: WRBI breeds, raises, assesses, and trains Karelian Bear Dogs for use as WSDs and for placement with area bear and wildlife managers, wildlife managing organizations, private organizations and individuals. Owners and KBDs are matched as to temperament and work needs, and trained by WRBI. WRBI's WSD program evaluates KBD temperament and conducts working dog assessments. Training, consultations and board are offered to all owners and KBDs, including those not produced by WRBI. They include training consultations and problem solving, and training for specific jobs.

THE PARTNERS-IN-LIFE® PROGRAM: OVERVIEW

Bear Shepherding® Guidelines For Safe and Effective Treatment of Human-Bear Conflicts

I. PROBLEM AND NEED:

Human bear conflicts continue to grow as human populations and activities expand further and further into traditional bear habitat. Today, only about 1,000 grizzly bears remain in the lower 48 states. Bear habitat, including critical ranges in Montana, Idaho and Wyoming, is shrinking every year. Traditional habitats in Western Montana, for example, have seen human population increases over the last ten years of 20 percent. In turn, human/bear conflicts are on the rise as well.

The grizzly bear is now listed as a “Threatened” species under the Endangered Species Act and is under the management authority of the U.S. Fish and Wildlife Service. Nonetheless, the majority of grizzly bear fatalities are bears destroyed because they pose a threat to humans. If one of the public’s conservation goals is to preserve intact ecosystems for future generations to experience and appreciate, something must be done to reduce or prevent human/bear conflicts.

Traditional bear management techniques are limited to the removal and relocation of problem bears. Generally, these methods treat symptoms and do not eliminate the root causes that create a bear’s problem behaviors. When these traditional methods fail, as they do in 80 cases out of 100 in the West, the bear is destroyed.

To maintain viable populations of bears for future generations, bear managers and an educated public must implement practices that promote coexistence between bears and humans.

Knowledge of bear ecology and behavior can provide a basis for solutions to prevent human-bear conflicts. Most conflicts stem from situations where bears have been using human food sources such as garbage, livestock bone yards, pet and livestock foods, orchards, and/or when natural foods are in low abundance. Most attacks on humans have involved bears that have been habituated to humans or food conditioned by receiving "handouts"; these bears generally have lost their fear of people. Current methods of controlling “problem” bears, such as relocation or destruction, have proven costly, time consuming, and ineffective as long-term solutions to the problem.

Most problem bears that are relocated, return and must ultimately be destroyed, or end up dead due to increased vulnerability to hunter harvest. Importantly, relocation often works against bears as it falsely conveys to the public that something beneficial has been done for the problem animal. Generally, the public does not understand that relocated bears usually continue to be a problem and end up dying. Sadly, relocation takes the focus off cleaning up the attractants that caused the problem and when the bear becomes a repeat offender it causes poor public relations for all bears.

II. PARTNERS-IN-LIFE® PROGRAM GOAL:

The Wind River Bear Institute, Partners In Life Program’s goal is coexistence of humans and bears by preventing and reducing conflicts. WRBI is developing a model, through research and field work, for changing the behavior of bears, other wildlife species and humans that share spatial boundaries.

III. SPECIFIC PROGRAM OBJECTIVES:

- To reduce human-bear conflicts by teaching humans and bears the behaviors that prevent conflicts:
 - teach bears to recognize and avoid areas frequented by humans,
 - teach humans and bears to avoid close encounters,
 - teach humans and bears to respect spacial boundaries that keep people safe and bears naturally wild,
 - teach people how to secure attractants such as pet, livestock feed and garbage in order to prevent conflicts.
- To research and develop effective methods of modifying bear and human behavior to reduce conflicts and achieve lasting results. This will include developing and determining which methods are best suited to resolve different bear problem types and for working with different bear personality types and food procurement aggression levels.
- To develop and carry out courses in bear conditioning techniques called “Bear Shepherding,” Karelian Bear Dog (KBD) training and certification programs for bear managers and publics to ensure that the concepts and methods of the Wind River Bear Institute’s Partners-In-Life program are applied effectively, safely and internationally.

III. PROGRAM OVERVIEW:

Today, the Wind River Bear Institute (WRBI) is developing and implementing one of the only existing solutions to the dilemma of human-bear conflict. Led by bear biologist Carrie Hunt, WRBI bear conflict specialists and highly trained KBDs have developed the Partners-In-Life program as an international alternative bear management technique.

Hunt is a bear-conflict specialist with more than 25 years experience in hands-on work with black and grizzly bears throughout North America. Her research in the field of human-bear conflicts has earned international recognition. She developed the red pepper spray system now widely used to turn approaching bears and did the first tests of rubber bullets to condition free-ranging ‘problem’ grizzly bears. She also developed the concept of teaching boundary awareness to free-ranging bears with problem behaviors known as “Bear Shepherding”, used to recondition bears on-site after they were seriously habituated to the presence of humans and or conditioned to human food sources.

WRBI has demonstrated through its work that bears learn and retain this training in somewhat the same way dogs learn and retain obedience training. Problem bears that Hunt first worked with lived for up to 15 years more, with little follow-up work having to be done.... These bears typically would have been destroyed within one or two years.

Hunt has integrated the results of her years of research on conflicts between bears and people to develop the Partners-In-Life Program. The Program depends on the ‘partners’ working together to be effective: the bears, bear managing agencies, the publics and WRBI’s specially trained teams. Hunt incorporates the use of trained KBDs to ‘shepherd’ bears out of trouble. Hunt’s teams of KBDs are the only teams in the world trained to do this work. This break-through solution to human-bear conflicts helps both humans and bears to make the behavioral changes necessary for long-term, safe coexistence.

The Partners-In-Life Program is made up of two equally critical components:

Component 1- Bear Shepherding® is a bear management technique developed by the Wind River Bear Institute that employs specially trained Karelian Bear Dogs and structured learning situations to teach bears how to recognize and avoid human boundaries. The training reverses the conditioning bears acquire when they successfully locate food by venturing within human boundaries. Based on Hunt’s work with bears, the technique works with the instinctual boundary-awareness bears have evolved over centuries of living within

bear-to-bear relationships and hierarchies. Bear Shepherding is an innovative combination of animal-to-animal communication through the KBD's presence and human-to-bear communication, using a deep understanding of the species' behavior to structure training that the bear will absorb and retain. Key elements of Bear Shepherding are:

- **Bear conditioning** to teach bears with problem behaviors to recognize and avoid human boundaries. This technique uses aversive conditioning tools such as red pepper spray, rubber bullets, cracker shells and trained KBDs, combined with "on-site" releases of previously trapped bears that have developed problem behaviors. The bears remain flexible and not harassed because the shepherding techniques teach the bear to control what happens by making correct choices. For example, when the bear enters appropriate cover or leaves sites where they should not be, the Partners-In-Life team members remove the "pressure" on the bear. Bears usually experience this training at the site of conflict or within areas they naturally inhabit, called their "home range." This positive approach builds on the way bears operate and learn in the wild and uses their natural recognition of personal space and dominance hierarchies.
- **On-site consultations, courses in Bear Shepherding, refresher training courses and a certification process** to train agency personnel, publics and communities in the Partners-In-Life program methods so that this work will be carried out by trained and certified personnel to safely achieve effective results.
- **Ongoing research and documentation** to monitor the results of this work to refine the techniques used so that the effectiveness of the program in the field is ensured and to improve the certification of managers, dog/owner teams and private groups.
- **Wind River Karelian Bear Dog® Breeding and Training** to pilot and guide the use of these dogs in bear management, enabling WRBI teams and a select group of private and agency personnel to develop the use of these natural bear hunters in Bear Shepherding. Only certain individual dogs tend to be fearless with bears and have an inclination or drive to dominate the bear with a natural "dance" similar to that of dog breeds that work with cattle or other livestock. WRBI has developed the selection and training of the "right" dogs for Bear Shepherding.

Component 2- Public Education and Conflict Prevention is accomplished through one-on-one education and on-site work with private landowners and communities as well as through extensive local and national media coverage. The use of the beautiful, highly trained, people-friendly KBDs enhances the public education work, as does the fact that Bear Shepherding, unlike traditional methods of bear management, involves working with the bear when and where the bear conflict occurs. This means that a cabin owner, rural resident or camper is fully aware of the work being done with the bear. The public is engaged through public education and one-on-one demonstrations, in cleaning up bear attractants and in becoming an active and ongoing part of the solution to bear conflicts. WRBI's door-to-door contacts with the public when actively working with problem bears is unique to the Program and very effective.

IV. FUNDING OF INSTITUTE AND PROGRAMS

Funding of WRBI and its programs comes from a variety of government and private contracts and private donations combined. WRBI is seeking annual partnerships with private and agency sources to permanently establish and expand the Partners-In-Life Program Bear Shepherding techniques internationally. Sustained annual funding would allow expansion of the public educational and preventative work critical to reducing human/bear conflicts. Long-term annual partnerships and funding will enable the WRBI to continue to develop this unique method of working with bears and to teach Bear Shepherding methods and conflict prevention techniques to agency personnel and publics all across the world.

BEAR SHEPHERDING® – WHAT IS IT?

Frequently Asked Questions.

What Is Bear Shepherding®?

Bear Shepherding is a bear management technique developed by the Wind River Bear Institute (WRBI) to reduce conflicts between humans and bears and subsequently reduce human caused bear mortalities. Traditional bear management techniques are limited to the relocation or destruction of problem bears. Generally these methods treat symptoms and do not eliminate the root causes that create the problem bear's behavior. Today, WRBI is developing and implementing the only existing solution to this dilemma. Known as the "Partners in Life Program, this solution relies on 4 "Partners" to work together to achieve the desired results: the bears, the public, bear managing agencies and WRBI's experienced bear conflict teams.

The Program implements Bear Shepherding by focusing on 2 critical components: preventative and knowledgeable responses by the public and proper teaching and responses of the bears. Using this technique, the behaviors of people and bears are managed by teaching land users to prevent or reduce conflicts with bears and by teaching bears to avoid situations leading to conflict with humans. Based on more than 20 years of research and field work by WRBI Director and bear conflict specialist Carrie Hunt, this break-through solution to human-bear conflicts helps both humans and bears to make the behavior changes necessary for long-term, safe coexistence.

How Do You Teach the Bears?

The Wind River Bear Institute uses specially trained Wind River Karelian Bear Dogs® (KBDs) in combination with other aversive conditioning tools and structured learning situations to teach bears how to recognize and avoid humans and their personal space or "boundaries". The lessons reverse the conditioning bears acquire when they successfully locate food by venturing within human boundaries. Bears are taught "on-site" where the conflict occurred whenever possible. Based on research on how bears learn in the wild, Carrie Hunt developed the technique working with the instinctual boundary-awareness bears have evolved over centuries of living within bear-to-bear relationships and hierarchies. Bear Shepherding is an innovative combination of animal-to-animal communication through the KBDs' presence and human-to-bear communication, using a deep understanding of the species' behavior to structure lessons that the bear will absorb and retain.

How Do You Teach People To Prevent or Reduce Conflicts?

Prevention work is accomplished both through working "on-site" with private landowners as well as through extensive local and national media outreach. Landowners are taught and helped to secure attractants and to report bear activity early, before the problem behavior escalates. The use of the highly trained KBDs enhances the public education work- the dogs work as ambassadors for the Program, as does the fact that Bear Shepherding, unlike traditional methods of bear management, involves working with the bear when and where problem bear behaviors occur. This means that a cabin owner, rural resident or camper is fully aware of the work being done with the bear. The public is engaged, through public education and one-on-one demonstrations, in cleaning up bear attractants and in becoming an active and ongoing "Partner" in the resolution of bear conflicts.

Biological Basis.

General Introduction.

Conflicts between bears and people have increased in frequency as logging, tourism, and exploration for oil and gas have developed in areas used by bears (Jonkel 1970, Schweinsburg 1976). Escalating human-bear problems in the National and Provincial parks of the United States and Canada have been correlated with increases

in the number of people visiting the parks, and the unnatural foods made available to the bears by visitors (Herrero 1970, 1970a, 1976, Mundy and Flook 1973, Singer and Bratton 1980, Hastings and Gilbert 1981).

“Bears are omnivorous and highly intelligent, possessing both genetic and learned ability to utilize resources and deal with environmental change” (Eager and Pelton 1979). They are generally the most dominant non-human members of the communities in which they are found. Encounters with bears are inherently dangerous because of their size and strength. Because their ecological niche has many similarities with that of humans, the potential for conflicts will always exist in areas used by both humans and bears.

Effectiveness of Relocation and Destruction of Problem Bears.

Management control of human-bear conflicts has commonly involved relocation or destruction of the offending bear. In North America, the most widely used methods for control of nuisance bears are to destroy the animals or to relocate them to areas where they presumably will not cause further problems. These methods are expensive, time consuming, and ineffective as long-term solutions to most bear-human problems (Herrero 1976, Jorgensen et al. 1978, Eager and Pelton 1979).

Return rates from relocations are high because bears have the ability to “home” (Craighead and Craighead 1972, Beeman and Pelton 1976, Alt et al. 1977, Their and Sizemore 1981, Miller and Ballard 1982). The fate of those that do not return is largely unknown; accumulating evidence suggests that many die because of increased vulnerability associated with increased movement (post-relocation), unfamiliarity with the terrain, and non-territorial status (Jorgensen et al. 1978, Miller and Ballard 1982).

Bear populations have relatively low recruitment rates and generally occur over large areas in low densities (Craighead and Craighead 1972, Martinka 1976). The destruction of nuisance bears may become a significant mortality factor if the causes of bear-human problems are not prevented (Nagy and Russell 1978, McArthur 1979).

Generally, relocation and control kills are only treatments of the symptoms. They do not eliminate the causal factors that create nuisance bears. They do not prevent the problem from recurring, either by the same animal or another that moves in. These methods have their place, but should be used only in conjunction with management measures designed to prevent human-bear conflicts (McCabe and Kozicky 1972, Gilbert 1977, Follman et al. 1980).

State and Federal agencies are under growing public pressure to reduce or solve bear problems. With increasing frequency, management agencies are emphasizing the importance of methods that allow humans and bears to coexist. Interest is high in repellents and deterrents to prevent bears from approaching humans, settlements, campgrounds, and garbage dumps. The development of methods that prevent conflicts may be critical to the survival of grizzly bears (*Ursus arctos*) in the contiguous 48 states.

Repellents, Deterrents and Conditioning Based on Bear Behavior.

Efforts to repel or deter wildlife species have focused on insects, birds, deer, and most recently on coyotes; relatively few studies have been conducted on bears. Where applied, preventative measures such as electric fences, bells for hikers, and bear-proof campgrounds and garbage sites, have reduced conflicts (Parks Canada 1972, Herrero 1976, Meagher and Phillips 1980, Hastings and Gilbert 1981, Jope 1982). Approaches to repellent and deterrent methods should use knowledge of predictable bear behavior from an ecological perspective, with particular focus on bear behavior as it relates to the effect of the food base on a population. The nature and extent of human activity in an area, and the perceptive abilities of the bear, will dictate the choice of repellent or deterrent used (Dorrance and Gilbert 1977). Both repellents and deterrents must elicit avoidance behavior.

The frequency of encounters between competing dominant and subdominant species determines their distribution and densities (Nagy and Russell 1978). This mechanism appears to operate both intra- and interspecifically, affecting grizzly (*Ursus arctos*) and black bear (*U. americanus*) populations competing for space

and resources (Herrero 1972, 1978, Martinka 1976). Avoidance and tolerance between bears appears to be based on a loose social hierarchy established through aggression and size. Dominance is settled during the first few encounters and thereafter is maintained primarily through visual signals (Hornocker 1962, Egbert and Stokes 1972, Rogers 1977, Herrero 1980).

Interspecific relationships between grizzly and black bears may have considerable relevance to human-bear co-existence. Some evidence suggests that bears defer to people in the same manner as they do dominant bears (Herrero 1970a, Jonkel 1978). Bears generally try to avoid humans (Jonkel 1970, Martinka 1976). Jope (1983) found that grizzlies made no charges at hikers wearing bells. Most injuries have been partially attributable to improper behavior by people (Eager and Pelton 1979, Herrero 1980, Jope 1982). Repellents and deterrents, perhaps used in conjunction with correct body movements by humans, could serve as visual, auditory, or olfactory signals for bears. Application of effective repellents and deterrents during human-bear confrontations may play an important role in establishing and maintaining human dominance over bears, or at least in maintaining stable relationships.

Ideally, when activated, effective repellent or deterrent stimuli and practices must: a) immediately stop an undesirable behavior and turn a bear away during an encounter, regardless of the animal's motivation, temperament, or past history of encounters with people; b) not allow a second approach or cause increased aggression during subsequent encounters with humans; and c) not cause permanent physical damage to the bear.

Human-Bear Co-Existence: Key Factors.

Increasing numbers of bear-human conflicts have been reported in many areas where the activities of humans and bears overlap. Most commonly, conflicts involve property damage (Mundy and Flook 1973, Jonkel 1975, Herrero 1976, Schweinsburg 1976, Singer and Bratton 1980). Approaches to solutions for bear-human conflicts should revolve around preventive measures that preclude the establishment of behaviors that lead to conflicts, and that are based on predictable behavioral and ecological relationships.

Bears are highly mobile, opportunistic omnivores, adapted to exploit the seasonal productivity of their environment (Herrero 1976, McArthur 1979). They undergo a long period of dormancy and are thereby motivated to obtain foods high in starches, sugars, proteins, and fats, in excess of their maintenance requirements (Stebler 1972, Bacon 1973, Mealey 1975). As a result, they possess extremely adaptable behavioral mechanisms that allow them to interact advantageously with changes in their environment (Hornocker 1962, Craighead and Craighead 1972, Egbert and Stokes 1976, McArthur 1979, Eager and Pelton 1979). They are intelligent; their ability to learn has been documented by Burghardt and Burghardt (1972), Bacon (1973, 1979), and Jonkel and Cowan (1971). They are able to remember rich food sources from year to year (Egbert and Stokes 1976, Gilbert 1977, Merrill 1978), and they are capable of learning from a single experience (Gilbert 1977).

Bear distribution is altered by their attraction to food sources made available by people (Barnes and Bray 1967, Shaffer 1968, Cole 1972, Hastings 1982). Bears appear to quickly learn to associate humans with food, and become bold in their searching for and acquisition of it. McArthur (1980) hypothesized that their behavioral plasticity, together with their opportunistic food habits, is the mechanism by which bears overcome their reluctance to forage near people.

The majority of human-bear problems stem from situations where bears have been fed or are using human food sources such as garbage or bee yards, and/or natural foods are in low abundance (Eager and Pelton 1979). In a sense, we offer bears an attractive fast-food service, high in nutritive value (Herrero 1970, Craighead and Craighead 1972, Eager and Pelton 1979). During years of reduced availability of natural foods, bears appear to rely more heavily on human foods as an alternative food resource. Interestingly, Eager and Pelton (1979) indicate that summers with numerous bear problems often precede a fall mast shortage.

Prevention of many conflicts can be achieved by excluding unwanted animals from the site or decreasing the attractiveness of the resource (Follman et al. 1980, Conover 1981). The strategy of physically preventing access to a resource has been successfully used to deter both black (*Ursus americanus*) and grizzly bears (*U.*

arctos). Efforts to prevent access to human food sources by bear-proofing sites have significantly reduced conflicts in our national parks (Herrero 1976, Meagher and Phillips 1980, Hastings et al. 1981). Electric fences are widely used to prevent bear depredation of apiaries (Storer et al. 1938, Gard 1971, Hepburn 1974, Wynnk and Gunson 1977, Alt 1980); Effective designs for fences have been reviewed by Boddicker (1978) and Follman et al. (1980). Unfortunately, in many situations physical exclusion of bears may not be cost-effective or even feasible.

An alternative strategy for reducing human-bear conflicts is to modify undesirable behaviors, either by the use of fear-provoking repellent or deterrent stimuli that can reduce the bear's desire to approach a bait or enter an area, or by treating the food resource with some type of chemical repellent that reduces palatability. Animals function best where the predictability of the environment is maximized and stress is minimized (Geist 1970, McArthur 1979). Previous experience, as well as an immediate stimulus, determines behavior. Learning is the modification of current behavior by previous experience in the same situation (Scott 1972). Consistent use of methods that reduce the attraction of bears to human-associated food sources should reduce human-bear conflicts, minimizing stress on bear populations.

Bears initially approach human-linked situations with trepidation (Tate and Pelton 1979, Stenhouse 1982). Effective repellents and deterrents should prevent naïve bears from acquiring unwanted behaviors and stop bears that already exhibit undesirable behavioral patterns. Repeated repellent or deterrent treatments should deter bears from the action permanently through learning (e.g. aversive conditioning).

Results of Studies.

During studies of black bears in the Smokies, Tate and Pelton (1979) observed that bears varied in the extent to which they used human food sources and in their tolerance of human activities. Certain bears consistently appeared less capable of adapting to human-linked situations. During tests of deterrents and repellents Miller (1980) and Stenhouse (1982) noted repeated returns by specific bears. Miller further remarked that certain individuals could not be deterred or repelled.

During 1982-1984 WRBI Director, Carrie Hunt conducted tests of repellents and deterrents on captive and free-ranging bears (Hunt 1984). Results of the tests supported the above observations. During these studies, **Hunt discovered that red pepper spray could effectively turn a bear during an attack, that bears “read” human body positions as they would a dominant bears’ and responded to them predictably, and that certain bears appeared to be more flexible in adapting their responses based on previous conditioning experiences.** She wrote:

“The data indicate that repellents can be developed that will turn most bears during a charge. “Halt” and a Skunker/Halt repelled most bears, however, tests on a larger number of bears are necessary. These stimuli are not currently available with delivery systems that have the range and accuracy necessary for use on free-ranging bears. Effective repellents appear to reduce the frequency of immediate charges and the overall tendency to charge both during and in subsequent encounters.

Additional odor or visual cues combined with these stimuli may increase their effectiveness. Certain bears are more aggressive than others; these bears may be less easily repelled during an encounter. Moderately effective stimuli may increase aggression in more aggressive bears, while decreasing aggression in more submissive bears. Unpunished charges appear to elicit increases in frequency of aggression in all bears, both during and in subsequent encounters. Certain bears appear more capable of adapting to human-linked situations than others.

Effective repellent combinations appear well suited for bears already habituated to humans; these bears may react from a less basic “fight or flight” level, allowing more time during a human-bear encounter for behavioral modification. Bears communicated their aggressive intentions by displaying visual body signals involving torso positioning, head movements, and eye contact. Similar signals displayed by humans appear to elicit specific responses in bears.”

During 1986-1989 Hunt led the field work to conduct the first field tests of rubber bullets on free-ranging problem grizzly bears. During these tests, Hunt developed the basic methods that formed the backbone for “Bear Shepherding”. It was determined that grizzly bears could be conditioned without eliciting aggressive responses and that the bears could retain the lessons over long periods of time (Roop and Hunt 1986, Hammond and Hunt 1988). Bear No. 104 was a Yellowstone Ecosystem adult female grizzly bear. She was seriously habituated and slightly food conditioned. She was slated for destruction when Hunt began the conditioning lessons. She was worked for a month in 1986, 2 weeks in 1987 and never needed to be conditioned again.

Bear No. 104 lived 15 more years and raised 4 wild litters due to the Bear Shepherding. She died when she was hit on the highway in 2000. Bear No. 104 has been a long-term inspiration for Hunt. The bear taught Hunt that if attractants were mostly secured, a bear could be taught and retain the lessons with little to no follow-up booster work.

During 1996-the present WRBI has pursued teaching of bears and people through “Bear Shepherding” as an alternative to relocation and destruction of bears throughout North America and internationally (Hunt, et.al. 1996-2003). The work was piloted by WRBI in NW Montana under contract with Montana Department of Fish, Wildlife and Parks and Grizzly Bear Management Specialist Tim Manley.

Manley has been a consistent supporter and partner in developing the Program and working with Karelian Bear Dogs. The program has been successful in reducing incidences of conflict in areas where prevention work has been prioritized and in reducing the relocation and destruction of adult female grizzly bears. In addition, at the time of this writing, there have been no injuries to bears, humans or dogs while conducting the work. Reception by the public and private landowners has been overwhelmingly positive. This manual presents the first documentation of “Bear Shepherding” methods.

Basic Concepts.

Bear Shepherding is a bear management technique developed by WRBI to reduce conflicts between humans and bears and thereby reduce human-caused bear mortality. Traditional bear management techniques have been limited to the relocation or destruction of problem bears. Generally these methods treat symptoms and do not eliminate the root causes that create the problem bear’s behavior in the first place.

Bear Shepherding is aimed at establishing correct behaviors in BOTH humans and bears by working to reduce incidents of close encounters, bear habituation to humans and bear conditioning to human associated food sources. This strategy provides long-term solutions for reducing conflict by working to teach humans to prevent situations that create conflicts AND working with a bear’s mind to teach it “no” and to teach it what our human rules or “boundaries” are. In this way initial or subsequent conflicts are prevented.

Bear Shepherding techniques include teaching humans to prevent conflicts and teaching bears through the use of positive reinforcement and aversive conditioning using pain and noise stimuli, along with specialized Karelian Bear Dogs and controlled on-site trap releases to modify bear behavior. WRBI has applied and developed Bear Shepherding techniques on black and grizzly bears in 200-300 incidences each year since 1996.

There have been no aggressive incidences with bears and no injuries to people, Karelian Bear Dogs or bears.

The Bear Shepherding methods are constantly evolving as WRBI works with different bears in different situations with various experienced bear managers who add their observations and expertise towards improving the efficiency and effectiveness of the training. The basic foundation of Bear Shepherding is that to manage bears we need to do so through behavioral management as well as the more traditional methods of harvest and habitat management.

Bear Shepherding prioritizes prevention of conflicts by humans as the most significant component of the work. In terms of the bears, it works with basic natural processes that bears have evolved for survival – how a bear thinks, including what effects a bears’ attitude and how a bear perceives the world, its intelligence, adaptability, its

capacity to learn and remember, and their social instincts related to personal space, boundary awareness and dominance. Using these processes, bears are taught to avoid humans and human-associated food sources, in the same way that they avoid areas being used by more dominant bears. The KBDs and other aversive conditioning methods can be used as deterrents to prevent bears from learning conflict behaviors and to repel bears that have already become a problem. Either way the goal is to teach the bear “no” and to teach it to do the right thing.

There are two focal priorities that serve as the backbone for Bear Shepherding:

1). First and foremost, the priority should be to teach humans correct behaviors to PREVENT conflicts before a bear develops “problem” behaviors. The first goal of Bear Shepherding is to secure or make unavailable to bears the attractants or situations that cause bear habituation and food conditioning through on-site work and public education.

2). Second, when planning and conducting conditioning lessons for bears, the priority is to learn to think about the lesson from a bear’s perspective first....think like a bear and work with it’s attitude, not man-made standards like specific distances. Work instead with real-life bear issues like security and dominance to teach meaningful lessons that are easily accepted and incorporated into lessons bears learn daily in the wild.

In planning and teaching meaningful lessons for bears, keep it simple, clear and consistent. There are two key concepts that serve as a basis for all lessons:

a). The first is that bears are educated through the Program to associate their activities with the resulting negative or positive events. This is very different than asking a bear to associate a site with a negative stimulus. Bears are taught that they can choose an option and that their actions determine what happens. Bear Shepherding does not seek to establish fear of people, but to establish fear of actually choosing to approach humans or human-associated sites. Bears are given a clear message that they can choose to come into human presence and things are going to go badly, or they can choose to leave and things will instantly get better. They get a positive reward for leaving. In teaching bears, the right choice is made easy and the wrong choice is made difficult—this is a tried and true horse and dog training method. A lot of thought goes into how to make it easy for the bear to do the right thing and get the right message quickly. Bears should never be asked to do something they cannot do. A clear consistent message is given again and again, often under different scenarios, until the bear understands.

b). The second core concept used in Bear Shepherding is that some bears are more flexible and able to adapt to the lessons better than others. This can be due to the bear’s history, personality, or it can be due to something more temporal like a seasonal food shortage. Whether a bear is aggressive or timid, the ability to be flexible appears to have a large influence on how a bear responds to the training. Most often, if there is not a natural food shortage, it is the flexible or more adaptable bears that become the “problem bears”. Flexibility is maintained in the bears by teaching bears to know that they have options. The basic personality of an easy-going flexible bear is maintained so that it does not develop a rigid “fear reaction” to people. A bear that has been taught in this way can run into a person in the woods and will know that it can choose the preferred option of leaving. This marks the difference between a bear that has been taught properly to respond to people by leaving, compared with a bear that has been harassed through improper aversive conditioning or hazing, and is fearful that people will harm it because it does not understand the basis for our actions.

For example, a bear that is repeatedly shot with rubber bullets while in a tree or hurt by humans while confined in a trap, learns that it cannot leave when confronted by people. It learns to feel cornered and rigid in the presence of people- it learns that it has no choices. The correct procedure would be not to shoot at it until it comes out of the tree or harass it for a period of time with the dogs, then let it come down out of the tree and shoot at it as it is leaving—same thing with a bear in a trap. Shooting and yelling should cease when the bear has reached cover or is continuing

to leave. Shooting and yelling should resume if the bear stops and looks while still in close proximity to people. The goal is to teach the bear to leave when in the presence of people and to use cover. This type of approach turns most bears around fairly quickly and ensures that they remain unaggressive and flexible, enough to adapt to people and their ways.

Teaching bears what our boundaries are can take time and be labor intensive. However, the end result is often a bear that lives and no longer causes bad PR for other bears and will live to raise wild litters. Over the long term, it is probably a cheaper, more effective alternative to the never ending cycle of repeated trapping and relocation of bears and their young and the young of their young. This is particularly true if these bears progress in their conflict behavior and are destroyed in the end anyway. If the Bear Shepherding program is applied over several years, it is possible that the number of problem young from problem females would be reduced. Repeat offences at the same sites and expenditures on problem bears would also decrease.

Partners-In-Life® Program: **Bear Shepherding® Goals and Objectives.**

Goals:

1. In Parks and other bear-proof sites that implement WRBI Bear Shepherding techniques the relocation and destruction of bears will be reduced annually;
2. In communities adjacent to Parks and bear proof areas that are “bear aware and bear proof” the human-bear conflicts will be reduced and the relocation and destruction of problem bears will be reduced;
3. The application of Bear Shepherding conditioning and conflict prevention techniques will be standardized through courses and certification to increase effectiveness of conflict treatment and maintain a near zero injury rate to people, dogs and bears; and
4. The breeding, training and use of Karelian Bear Dogs in Bear Shepherding will be standardized through courses and certification to increase effectiveness of conflict treatment and maintain a near zero injury rate to people, dogs and bears.

Objectives:

1. Develop long-term solutions to reduce human-bear conflicts through training of wildlife agency personnel, the public and specialized Karelian Bear Dogs with focus on Parks, areas with critical bear problems; and grizzly bears in the lower 48 states and contiguous habitat in Alberta and British Columbia;
2. Develop and deliver Bear Shepherding training and certification programs, community education and conflict prevention plans for agency personnel and the public to prevent and reduce the relocation and destruction of bears;
3. Expand the Partners-In-Life Program and Bear Shepherding concepts and techniques to new regions;
4. Develop responsible training, ownership and uses of Karelian Bear Dogs; and
5. Develop annual sustained partnerships, contracts and funding with wildlife agencies, private corporations, groups and individuals to provide funding for annual operation of the Program.

Goals of WRBI Training and Consultations:

1. Provide decision-making guidelines for working with human-bear conflicts to provide a basis for planning safe and effective bear conditioning and prevention programs;
2. Provide meaningful lessons to bears that teach bears to avoid humans and developed areas;
3. Provide meaningful lessons to bears that do not create confused or aggressive bear behavior;
4. Prevent or reduce bear habituation to human activities;
5. Prevent or reduce bear conditioning to human-associated food rewards; and
6. Highlight the need for wildlife managers, private groups, individuals and communities to prioritize implementation of conflict prevention programs to reduce the attractants that teach bears to associate developed sites with food rewards.

LITERATURE CITED AND SUGGESTED READING

- Alt, G. L. 1980. Bears, beehives, and beekeepers. 1980. Gleanings in Bee Culture 108(3) 137-139, 162.
- Alt, G. L. G. J. Matula, Jr., F. W. Alt, and J. S. Lindzey. 1977. Movements of translocated nuisance black bears of northeastern Pennsylvania. Trans. N.E. Fish and Wildl. Conf. 1977: 119-126 and trans. Appendix 1977: 61-66.
- Bacon, E. S. 1973. Investigation on perception and behavior of the American black bear (Ursus americanus). PhD. Diss. The Univ. of Tenn., Knoxville. 161 pp.
- Bacon, E. S. 1980. Curiosity in the American black bear. PP. 153-158 In C. J. Martinka and K. L. McArthur (eds.) Bears--their biology and management. Bear Biol. Assoc. Conf. Ser. No. 3, U.S. Gov. Printing Off., Washington, D. C.
- Barnes, V. G. , Jr. and O. E. Bray. 1967. Population characteristics and activities of black bears in Yellowstone National Park. Natl. Park Serv. Rep. 199 pp.Final rep. Submitted to Natl. Park Serv. By Colo. Coop. Wildl. Res. Unit. Colo. State Univ., Ft. Collins. Natl. park Serv. Off. of Nat. Sci. Res. Rep. File Yell-67-n-14. Washington, D. C. unpublished. 199 pp.
- Beeman, L. E., and M. R. Pelton. 1976. Homing of black bears in the Great Smokey Mountains National Park. PP. 87-95 In: M. R. Pelton, J. W. Lentfer, and G. E. Folk, Jr. (eds.) Bears – their biology and management. Int. Union Conserv. Natl. Ser. Publ. 40. Morges, Switzerland.
- Best, R. C. 1976. Ecological energetics of the polar bear (Ursus maritimus Phipps 1774). M. Sc. Thesis Univ. of Guelph, Guelph, Ontario, Canada.
- Burghardt, G. M., and L. S. Burghardt. 1972. Notes on behavioral development of two female black bears cubs: the first eight months. PP. 207-220 In: S. Herrero (ed.) Bears—their biology and management. Int. Union Conserv. Nat. Res. New Ser. No. 23.
- Cole, G. F. 1972. Preservation and management of grizzly bears in Yellowstone National Park. Pages 274-288 in S. Herrero, ed. Bears – their biology and management. Int. Union Conserv. Nat. Res. New Ser. 23.
- Conover, M. R. 1981. Evaluation of behavioral techniques to reduce wildlife damage. PP 332-344 In: J.M. Peek and P. D. Dalke (eds.) Proc. Wildl.-Livestock Relationships Symposium, Apr. 20-22, 1981, Coeur d'Alene, Idaho. Published by: For., Wildl. And Range Exp. Station , Univ. of Idaho, Moscow, Idaho.
- Craighead, J. J., and F. C. Craighead Jr. 1972. Grizzly bear-man relationships in Yellowstone National Park. PP. 304-332 In: S. Herrero (ed.) Bears—their biology and management. Int. Union Conserv. Nat. Resour. Publ. New Ser. No. 23, Mores, Switzerland.
- Cushing, B.S. 1980. The effects of human mentrual odors, other scents, ringed seal vocalizations on the polar bear. M.S. Thesis Univ. of Mont., Missoula, Mont. 49 pp.
- Dorrance, M. J., and B. K. Gilbert. 1977. Considerations in the application of aversion conditioning. PP> 136-144 In: W. B. Jackson and R. E. Marsh (eds.) Test methods for vertebrate pest control and management materials Am. Society for Testing and Materials, Special Technical Publ. 625 pp.
- Eager, J. T., and M. R. Pelton. 1979. Panhandler black bears in the Great Smokey Mountains National Park. Final Rep. To U.S. Dept. of Inter. Natl. Park Serv. From Univ. of Tenn., Knoxville, 180 pp.
- Egbert, A. L., and A. W. Stokes. 1976. The social behavior of brown bears on an Alaskan Salmon

- Stream. PP. 41-56 In: M.R. Pelton, J. W. Lentfer, and G. E. Folk, Jr. (eds.), Bears—their biology and management. Int. Union Concave. Nat. Ser. Publ. 40, Morges, Switzerland.
- Follman, E. H., R. A. Dieterich, and J. L. Hechtel. 1980. Recommended carnivore control program for the Northwest Alaskan Pipeline Project including a review of human-carnivore encounter problems and animal deterrent methodology. Final Rep. for Northwest Alaska Pipeline Co. Inst. Arctic Biol., Univ. of Alaska, unpublished. 113 pp.
- Gard, R. 1971. Brown bear predation on sockeye salmon at Karluk Lake, Alaska. *J. Wild. Manage.* 35(2): 196-199.
- Geist, V. 1970. A behavioral approach to the management of wild ungulates. Pages 413-424 in E. Duffy and A. S. Watt, Eds. *The scientific management of animal and plant communities for conservation.* Sump. Brit. Ecol. Soc. 11
- Gilbert, B. K. 1977. Bear behavior and human-bear relationships in national parks. Res. Proposal to the Natl. Park Serv. 19 pp.
- Hastings, B. C. 1982. Human-bear interactions in the backcountry of Yosemite National Park. M. S. Thesis, Utah State Univ., Logan. 184 pp.
- Hastings, B. C., and B. K. Gilbert. 1981. Aversive conditioning of black bears in the backcountry of Yosemite National Park. *Proc. Of the Second Conf. On Sci. Res. In the National Parks.* 2:294-303.
- Hastings, B. C., B. K. Gilbert, and D. C. Turner. 1981. Black bear behavior and human-bear relationships in Yosemite National Park. Final Rep. To the Natl. Park Serv., Rocky Mountain Reg. Tech. Rep. No. 2, Coop. Natl. Park Resource Studies Unit. 42 pp.
- Hepburn, R. 1974. An electrical fence charger to discourage bears. U-S. Dep. Inter. Natl. Park Serv. Yellowstone Natl. Park, West Yellowstone. Unpublished. 2 pp.
- Herrero, S. 1970. Man and the Grizzly bear (present, past but future??). *BioScience* 20(21):1148-1153.
- Herrero, S. 1970a. Human injury inflicted by grizzly bears. *Science.* 170: 693-598.
- Herrero, S. 1972. Aspects of evolution and adaptation in American black bears (*Ursus americanus* Pallas) and brown and grizzly bears (*U. arctos* Linne) of North America. PP. 221-231 In: S. Herrero (ed.) *Bears—their biology and management.* Int. Union Conserv. Nat. New Ser. 23. Morges, Switzerland.
- Herrero, S. 1976. Conflicts between man and grizzly bears in the National Parks of North America. PP. 121-145. IN: M.R. Pelton, J.W. Lentfer, and G.E. Folk, Jr. (eds.) *Bears—their biology and management.* Int. Union Conserv. Nat. Resour. Publ. New Ser. No. 40, Morges, Switzerland.
- Herrero, S. 1978. A comparison of some features of the evolution, ecology and behavior of black and grizzly/brown bears. *Carnivore* 1 (1): 7-17.
- Herrero, S. 1980. Social behavior of black bears at a garbage dump in Jasper National Park. 40 +13 pp. In press In: E. C. Meslow (ed.) *Proc. Of 5th Conf. On Bear Res. And Manage.,* Feb. 10-13, 1980. Madison, Wisc.

- Herrerro, 1985. *Bear Attacks. Their Causes and Avoidances.* Winchester Press, Piscataway, New Jersey, USA.
- Hornocker, M. G. 1962. *Population Characteristics and Social and Reproductive behavior of the grizzly bear in Yellowstone National Park.* M. S. Thesis. Univ. of Mont. 94 pp.
- Hunt, C. 1983. *Deterrents, Aversive Conditioning, and Other Practices; An Annotated Bibliography to Aid in Bear Management.* National Park Service Report, Glacier National Park, Montana. 136 pp.
- Hunt, C. 1984. *Behavioral Responses of Bears to Tests of Repellents, Deterrents, and Aversive Conditioning.* M.S. Thesis, University of Montana, Missoula. 137 pp.
- Hunt, C. 1985. *Descriptions of Five Repellant/Deterrent Products for Use on Bears.* Grizzly Bear Recovery Coordinator, U.S. Fish and Wildlife Service, Missoula, Montana. 50 pp.
- Hunt, C.L., F. Hammond and C. Peterson. 1988. *Behavioral Responses of Yellowstone Ecosystem Grizzly Bears to Aversive Conditioning Techniques.* Wyoming Game and Fish Department, Progress Report, Cody, Wyoming. April 1988. 68 pp.
- Hunt, C. L., et. al. 1996; 1997; 1998; 1999; 2000; 2001; 2002. *Wind River Bear Institute: Partners-In-Life Program: Annual Summary Reports – Bear Shepherding.* Each report includes several contract summary reports and number of pages varies.
- Hunt, C. L. 2000. *Bear Shepherding; Tribute To Cassie.* IUCN/SSC Bear Specialist Group International Bear News. May 2000. Vol. 9, no.2 pp14-18.
- Jonkel, C. J. 1970. *The behavior of captured North American bears (with comments on bear management and research).* *BioSci.* 20(21):1145-1147.
- Jonkel, C. J. 1975. *Of bears and people.* *Western Wildlands,* Winter 1975.
- Jonkel, C. J. , and I. McT. Cowan. 1971. *The black bear in the spruce-fir forest.* *Wildl. Monog.* 27:1-57.
- Joep, K. L. 1982. *Interactions between grizzly bears and hikers in Glacier National Park, Montana.* Final Rep. 82.1. Coop. Park Studies Unit, Oreg. State Unive. Corvallis, Oreg.
- Jorgensen, C. J. , R. H. Conley, R. J. Hamilton, and O. T. Sanders. 1978. *Management of black bear depredation problems.* PP. 297-319 In: R. D. Hugie (ed.) *Fourth East. Black Bear Workshop.* Apr. 3-6, 1978. Greenville, Maine.
- Martinka, C. J. 1976. *Ecological role and management of grizzly bears in Glacier National Park, Montana.* PP. 147-156 In: M.R. Pelton, J. W. Lentfer, and G. E. Folk, Jr. (eds.) *Bears—their biology and management.* Int. Union Conserv. Nat. Publ. New Ser. 40. Morges, Switzerland.
- McArthur, K. L. 1979. *The behavior of grizzly beaus in Glacier National park – a literature review.* *Natl. Park Serv. Prog. Rep.* 71 pp.
- McArthur, K. L. 1980. *Habituation of grizzly bears to people: a hypothesis.* In press In: E. C. Meslow (ed.) *Proc. Of 5th Int. Conf. Bear Res. And Manage.,* Feb. 10-13, 1980. Madison, Wisc.
- McCabe, R. A. and E. L. Koziacky. 1972. *A position on predator management.* *J. of Wildl. Manage.* 36:382-394.

- Meagher, M., and J. R. Phillips. 1980. Restoration of natural populations of grizzly and black bears in Yellowstone National Park. 17 + 10 pp. In press In: E. C. Meslow (ed.). Proc. Of the 5th Int. Conf. On Bear Res. And Manage. Feb. 10-13, 1980. Madison, Wisc.
- Mealey, S. P. 1975. The natural food habits of free-ranging grizzly bears in Yellowstone National Park, 1973-1974. M. S. thesis. Montana State University, Bozeman. 158 pp.
- Merrill, E. H. 1978. Bear depredation at backcountry campgrounds in Glacier National Park. Wildl. Soc. Bull. 6(3): 123:126
- Miller, G. D. 1980. Behavioral and physiological characteristics of grizzly and polar bears, and their relation to bear repellents. M. S. Thesis Univ. of Mont., Missoula. 106 pp.
- Miller, S. D., and W. B. Ballard. 1982. Homing of transplanted Alaskan brown bears. J. Wild. Manage. 46(4):869-876.
- Mundy, K. R. D., and D. R. Flook. 1973. Background for managing grizzly bears in the national parks of Canada. Canadian Wildl. Serv. Rep. Ser. No. 22, Ottawa. 35 pp.
- Nagy, J. A., and R. H. Russell. 1978. Ecological studies of the boreal grizzly bear (*Ursus-arctos* L.) – annual report for 1977, Canada Wildl. Serv. 72 pp.
- Parks Canada. 1972. Minutes. 1972 Bear Mgmt. Conf. And Inservice Workshop. Jasper Natl. Park, Canada. Nov. 26-30, 63 pp.
- Rogers, L. L. 1977. Social relationships, movements, and population dynamics of black bears in northeastern Minnesota. Ph.D. Thesis. Univ. of Minn. St. Paul. 194 pp.
- Roop, L. and C. Hunt. 1986 Applications of Aversive Conditioning Techniques to Yellowstone Ecosystem Grizzly Bears. Wyoming Game and Fish Department, Progress Report, Cody, Wyoming. November 1986. 71 pp.
- Schweinsburg, R. E. 1976. More research needed to minimize conflicts between men and polar bears. Oilweek, March 15, 1976.
- Scott, J. P. 1972. Animal behavior. 2nd ed. The Univ. of Chicago Press, Chicago. 349 pp.
- Shaffer, S. C. 1968. Some ecological relationships of grizzly bears and black bears in the Apgar Mountains in Glacier National Park, Montana. M.S. Thesis. Univ. of Montana, Missoula. 134 pp.
- Singer, F. J., and S. P. Bratton. 1980. Black bear/human conflicts in the Great Smokey Mountains National Park. PP> 137-139 In: C. J. Martinka and K. L. McArthur, (eds.) Bears—their biology and management. Bear Biol. Assoc. Conf. Ser. No. 3. U.S. Gov. Printing Off., Washington, D. C.
- Stebler, A. M. 1972. Conservation of the grizzly ecological and cultural considerations. Pages 297-303 In: S. Herrero, ed. Bears-their biology and management IUCN Publ. New Ser. 23.
- Stenhouse, G. 1982. Bear detection and deterrent study, Cape Churchill, Manitoba, 1981. Rep. No. 23 for the Gov. Northwest Territ., Canada. 65 pp.
- Storer, T. I., G. H. Vansell, and B. D. Moses. 1938. Protection of mountain apiaries from bears by use of electric fence. J. Wildl. Manage. 1(4): 172-178.
- Tate, J. and M. R. Pelton. 1979. Panhandler Black Bears in the Great Smokey Mountains National Park. Contract report to the National Park Service, Southeast Regional Office, Atlanta. 180 pp.

Their, T., and D. Sizemore. 1981. An evaluation of grizzly relocations in the Border Grizzly Project area, 1975-1980. Border Grizzly Proj. Spec. Rep. 47. Univ. of Mont., Missoula. 16 pp.

Wynnyk, W. P., and J. R. Gunson. 1977. Design and effectiveness of a portable electric fence for apiaries. Alberta Recreation, Parks and Wildlife, Fish and Wildlife Division. 11 pp.

APPENDICES

Appendix A. Carrie Hunt: Background Vitae and Resume.

BACKGROUND CURRICULUM VITAE.

Carrie Hunt has been a bear biologist working with government and private groups for over 25 years throughout North America and internationally. Hunt is known for her pioneering work in the area of bear-human conflict resolution and in particular for her work in modifying wild bear behavior through the use of repellents, deterrents and conditioning. She developed the use of the red pepper spray system that today is widely used to turn approaching bears. She also conducted the first investigations of aversive conditioning of wild, free-ranging grizzly bears with problem behaviors, by using rubber bullets.

Hunt founded and developed the Wind River Bear Institute and its Programs: the Partners-In-Life Program and Wind River Karelian Bear Dogs. Hunt developed the concept of "Bear Shepherding" that simultaneously teaches humans to prevent conflicts and teaches problem bears behaviorally based lessons that create boundary awareness and avoidance of humans and developed sites. The Institute has demonstrated through its work that bears learn and retain this training. Along with the concept of Bear Shepherding, Hunt identified and developed the use of and training methods for Karelian Bear Dogs in bear conservation through the Program. WRBI has successfully trained and used KBDs for Bear Shepherding since 1990.

RESUME.

Carrie L. Hunt

P. O. Box 1299, Florence, MT U.S.A. 59833

Telephone: 406-273-4899 FAX: 406-273-4752 Email: windriver@beardogs.org

Education

1984

M.S., Wildlife Biology, University of Montana, Missoula

1977

B.S., Zoology, Montana State University, Bozeman

Professional Experience

1995 – Present

Director/Bear Conflict Specialist, Wind River Bear Institute, Heber City, Utah. Founder of the Wind River Karelian Bear Dogs and the Partners-In-Life Programs. Programs are aimed at the development of aversive conditioning methods, training courses and community-based conflict prevention plans to aid agencies and publics in reducing bear conflicts.

1992 – 1995

Research Associate, New Mexico Black Bear Project, Hornocker Wildlife Research Institute, New Mexico. Project leader for all aspects of a long-term black bear project. Determined the effects of environmental parameters, hunting, and land use practices on black bears.

1989 – 1992

Wildlife Biologist, Wind River Ranger District, Shoshone National Forest, US Forest Service, Dubois, Wyoming. First District Biologist; identified wildlife and habitat needs, developed wildlife and fisheries program, worked with other agencies and the public. Identified need and developed first grizzly bear conservation and conflict prevention program for District.

1986 – 1989

Research Biologist, Grizzly Bear Program, Wyoming Game and Fish Department, Cody, Wyoming. Supervisor for the first aversive conditioning project of free-ranging grizzly bears. Conducted tests using rubber bullets for conditioning of problem grizzly bears in the Yellowstone Ecosystem.

Winter 1986

Wildlife Biologist, Wyoming Game and Fish Department, Cody, Wyoming. Assisted the District Wildlife Management Coordinator in a variety of field and office responsibilities.

1985 – 1986

Research Biologist, Rocky Mountain Front Grizzly Bear Study, Montana, Department of Fish Wildlife and Parks, Choteau, Montana. Identified, defined and mapped grizzly bear habitat components.

- Spring 1985 Research Biologist, Wildlife, Wildlands Institute, Missoula, Montana. Assisted with library research, and compilation and analysis of data for research on the Barren-ground caribou of Alaska.
- Winter 1985 Contract with U.S. Fish and Wildlife Service, Grizzly Bear Recovery Program, Missoula, Montana. Proposed, researched, and wrote paper entitled: *Descriptions of Five Repellent/Deterrent Products for Use on Bears*; to provide options to reduce bear conflicts in North America.
- 1978 – 1979
and
1980 – 1984 Research Biologist, Interagency Grizzly Bear Study Team, Yellowstone National Park. Documented bear activity and habitat use, conducted trapping, immobilization, and radio-monitoring of bears.
- 1981 – 1984 M.S. Research, Wildlife Biology, University of Montana, Missoula, Montana. Thesis: *Behavioral Responses of Bears to Tests of Repellents, Deterrents and Aversive Conditioning*. Pioneered this field of research on bears.

Publications by Hunt Include:

- Hunt, C. L. 2003. *Partners-In-Life Program - Bear Shepherding Guidelines For Safe and Effective Treatment of Human-Bear Conflicts*". Wind River Bear Institute, Heber City, Utah. January 2003.
- Hunt, C. L., et. al. 1996; 1997; 1998; 1999; 2000; 2001; 2002. *Wind River Bear Institute: Partners-In-Life Program*. Wind River Bear Institute, Annual Summary Reports, Heber City, Utah. Each report includes several contract summary reports and number of pages varies.
- Hunt, C. L., et. al., 1993; 1994; 1995. *Population Ecology of New Mexico Black Bear*. Hornocker Wildlife Research Institute, Annual Reports, Reserve, New Mexico. May 1993. 25 pp; May 1994. 60 pp; May 1995. 61 pp.
- Hunt, C. L., F. Hammond and C. Peterson. 1988. *Behavioral Responses of Yellowstone Ecosystem Grizzly Bears to Aversive Conditioning Techniques*. Wyoming Game and Fish Department, Progress Report, Cody, Wyoming. April 1988. 68 pp.
- Roop, L. and C. Hunt. 1986 *Applications of Aversive Conditioning Techniques to Yellowstone Ecosystem Grizzly Bears*. Wyoming Game and Fish Department, Progress Report, Cody, Wyoming. November 1986. 71 pp.
- Aune, K., M. Madel and C. Hunt. 1986. *Rocky Mountain Front Grizzly Bear Monitoring and Investigation*. Montana Department of Fish, Wildlife and Parks, Annual Report, Helena, Montana. 175 pp.
- Hunt, C. 1985. *Descriptions of Five Repellant/Deterrent Products for Use on Bears*. Grizzly Bear Recovery Coordinator, U.S. Fish and Wildlife Service, Missoula, Montana. 50 pp.
- Hunt, C. 1984. *Behavioral Responses of Bears to Tests of Repellents, Deterrents, and Aversive Conditioning*. M.S. Thesis, University of Montana, Missoula. 137 pp.
- Hunt, C. 1983. *Deterrents, Aversive Conditioning, and Other Practices; An Annotated Bibliography to Aid in Bear Management*. National Park Service Report, Glacier National Park, Montana. 136 pp.

**Appendix B. Letters Of Recommendation:
From Bear Management Agencies.**



November 15, 2000

To Whom It May Concern,

Since 1996, Montana Fish, Wildlife and Parks have contracted and worked very closely with the Wind River Bear Institute (WRBI) and their "Partner's In Life Program". We believe the WRBI Program has greatly influenced the way that we manage "nuisance" bears. So much in fact, that the newly formed Montana Fish, Wildlife & Parks Foundation has selected the WRBI Program as their flagship project. A goal of the Foundation is to raise operating funds and create an endowment that would fund the WRBI Program into perpetuity.

There are 4 primary reasons that the WRBI Program has been successful in Montana.

1. The WRBI team works closely with the agency bear management personnel on the ground to understand the problems, provide reasonable solutions and to provide on-site training.
2. The WRBI team works extremely well with the public (landowners and tourists alike), to prevent bear problems by identifying and securing or removing attractants. A tool that makes this prevention program so unique and successful is the Karelian Bear Dogs. The dogs provide an opportunity to "break the ice", discuss the problem and to provide effective alternatives for dealing with the situation. The team members are trained to deal with a wide range of personality types and have been very successful in working in a non-confrontational manner and in affecting lasting changes in securing attractants on private property.
3. The WRBI team works with the management of bears through an innovative method they have developed called "Bear Shepherding". One aspect of Bear Shepherding involves teaching the bears to modify their problem behavior by using on-site releases, close monitoring of their movements and follow up booster work as required. A majority of the management grizzly bears that WRBI has worked with in the past 5 years are still alive and in the wild.
4. Carrie Hunt as the Director of WRBI, has the background and experience that allows her to guide her team's efforts into the various agency frameworks and public situations in a skilled and seamless manner. In addition, Hunt's knowledge of bear behavior and the training of animals are the backbone of the Program's effectiveness. Their safety record for bears, dogs, agencies and the public is flawless.

Due to the impressive success of the WRBI Program that we have seen, I would highly recommend that your agency and staff give careful consideration to this unique and innovative program. We believe that this Program has changed the way we manage "nuisance" bears in Montana and believe that the methodology has far reaching implications that will change the way other species of "problem" wildlife are managed throughout Montana and perhaps the world.

Sincerely,

Patrick J. Graham
Director



Region 1
490 N. Meridian Road
Kalispell, MT 59901
(406) 752-5501
FAX: (406) 257-0349
Ref:jw028-01
December 19, 2001

Spence Hegstad, Foundation Liaison
Montana Fish, Wildlife and Parks Foundation
P.O. Box 100701
Helena, MT 59620-0701

Dear Spence,

I wanted to take a moment to share some thought with you relative to a regional perspective on this past year's WRBI activities in Northwest Montana. Northwest Montana has two United States Fish and Wildlife Service grizzly bear recovery areas, the Cabinet-Yaak and the NCDE. Between these two federal recovery areas lies the Salish Mountains. This mountain range essentially represents the western Flathead Valley mountain face, which trends northward to Eureka. This area is populated by year-round residents throughout most of the major drainages.

Tim Manley, FWP's grizzly bear manager in northwest Montana, has identified at least six different grizzly bears in the Salish Mountains between the two recovery areas. One of the bears, a female with two cubs of the year, was worked extensively by the WRBI crews and Tim. This bear was kept alive throughout the summer by the crews and their extensive interface with the private property owners in the area. Between school presentations and visits to private property owners, this female with cubs was worked until she trailed up the mountain to her den. We, as an agency, are always concerned with exceeding the mortality quotas for females that is set by the USFWS grizzly bear recovery coordinator. We exceeded this mortality quota again this year as we have in the last couple of years. We believe it is because there are more bears, to the point that they are populating habitats that are outside of the recovery areas and are operating, from a population perspective, in a more recovered mode. Due to the effectiveness of the WRBI programs that have been implemented in the area, we did not have one female bear that died due to a management removal in this populated area. This has not happened since 1994.

As grizzly bears become more numerous outside of the recovery areas, public sensitivity to their presence with undoubtedly be heightened. We had an individual that was charged for shooting and killing an adult male grizzly bear in the Salish Mountains this past summer. This bear had been captured in the Rhodes Draw area west of Kalispell and released higher up in the same mountain range. Private property owners are still not used to having grizzly bears between the two recovery areas in northwest Montana, and these problems have the potential to escalate. On the ground, information and education efforts by Tim and WRBI personnel focused on living with bears is paramount to the success of grizzly bear conservation program outside of a national park. Montana is clearly a leader in terms of funding "conflict prevention" efforts through this innovative program.

In terms of this coming spring and our next field season, we know of at least 5 adult females that could have a minimum of 6 cubs, for a total of 11 grizzly bears that we will be faced with when the snow melts. We appreciate support from the Foundation to continue funding our grizzly bear conservation efforts in northwest Montana. It is our hope that by sharing some of this information with you in this letter that you will see some of the positive results from your hard work as a Foundation and allow us to expand the program into other parts of Montana.

Sincerely,

Jim Williams
Regional Wildlife Manager

United States Department of the Interior

NATIONAL PARK SERVICE
Glacier National Park
West Glacier National Park 59936

November 20, 2002

TO WHOM IT MAY CONCERN

I am writing to express my support and appreciation for the efforts of Ms. Carrie Hunt and the Wind River Bear Institute (WRBI) in resolving bear-people conflicts.

I have been involved in bear management in Glacier National Park for 15 years and have found Carrie's work to be the most innovative and effective approach to resolving bear-people conflicts. Carrie and her associate Tim Manley first assisted us with bear management problems in 1996, and they have been actively assisting us to varying degrees since then. Carrie and her WRBI staff have been involved in our annual Bear Management Training workshops, conducted additional on-the-ground training sessions for subdistrict personnel, and conducted intensive field work on resolving specific bear management problems.

Carrie's efforts have produced tangible improvements in conflict situations, and her approach to bear-human conflict resolution has gained wide acceptance among park staff. However, uncertain and variable budgets have prevented us from scheduling and making more efficient use of WRBI. It is imperative that consistent funding be secured to allow Glacier and other cooperators to make full and effective use of Carrie and her WRBI program.

I support all efforts to secure the financial independence necessary to permit Carrie's full involvement in bear management programs in and around Glacier National Park.

Sincerely,

Steve Gniadek
Wildlife Biologist
Glacier National Park

Alberta Sustainable Resource Development

Alberta Ministry of the Environment

September 14, 2006

Jon T. Jorgenson
Alberta Fish and Wildlife Division
Suite 201, 800 Railway Ave
Canmore, AB. T1W 1P1

September 12, 2006

Wind River Bear Institute
PO. Box 1299
Florence, Montana
59833

Dear Carrie,

Alberta Fish and Wildlife is interested in continuing to look for better ways to manage bear conflict issues in Alberta. We have been involved with your Program over the past several years and believe that WRBI has influenced the way that we manage “nuisance” bears, particularly in the Canmore and Kananaskis areas.

We are nearing the end of the bear season and are completing another successful season of our aversion program on grizzly and black bears that employed the services of the Wind River Institute. The use of aversive conditioning tools including the Wind River Bear Institute’s Karelian bear dog program offers valuable new options to proactively deal with grizzly bears that have the potential to become involved in conflicts with humans. Managing bears in landscapes with ever-increasing levels of human activities has become a significant challenge. In the past, we have had limited options in dealing with bears before they become problems.

We view your work as a good opportunity to work with bears so we can keep them in the ecosystem, reduce conflicts, and maintain public safety. The program also offers a valuable public education component that has the capacity to effectively reach large numbers of people on how to behave while in bear country. It is important to start thinking and planning for next year. The program has gone well this summer and we would like to be able to utilize your services next year. Contracting of your services will, of course, be dependent upon available funding. I am hoping I will be able to accomplish that and look forward to getting the program underway for next year.

Sincerely,

Jon T. Jorgenson
Area Wildlife Biologist
Canmore

From: Masaya Kusube [mailto:tennisplayer@picchio.co.jp]
Sent: Thursday, September 14, 2006 8:17 PM



To: Wind River Bear Institute
Cc:
Subject: Re: Letter of Interest by Thursday 9-14-06

September 14, 2006

To whom it may concern,

We are interested to have Wind River Bear Institute's Bear Shepherding program held in Karuizawa Japan. We had WRBI's program in 2003 and 2004 which showed great progress in Karuizawa's bear conservation.

Masaya Kusube
Director, Marketing
Picchio Co.
2148 Nagakura Karuizawa, Nagano Pref. Japan
TEL: 267-46-6666
September 14, 2006