July 27, 1997

To: Richard Clark
From: Hilary Boyd
Subject: Bear Management Information

**Bear-Human Conflict Management Plan:**

- The plan written in 1988 is the only plan that has been officially approved.

- Ron Squibb rewrote the plan in 1995, but it was never approved. However, since the rewriting, management decisions have been based on this plan rather than the 1988 plan.

- I made additional revisions in 1996 to reflect changes at Brooks Camp and the latest strategies for bear management. Last fall I met with Sue Mills, Susan Savage, Mark Wagner, & Pete Webster to discuss my ideas. The group agreed the document should be park inclusive as people regularly interact with bears on the coast, rivers, etc. We all felt strongly that it must incorporate new information on food storage and garbage handling for backcountry lodges and camps. My revisions and an outline of recommendations are included in the materials I gave you. This plan should be completed and approved as soon as possible as the 1988 and 1995 plans are outdated and inadequate. This will be a big project and it is not realistic that a seasonal bear technician stationed at Brooks Camp will be able to complete it during the busy season.

**Bear Management:**

- Look at the information from John Hechtel’s workshop held in Fairbanks in 1997. I highly recommend Aumiller & Matt’s 1994 article MANAGEMENT OF MCNEIL RIVER STATE GAME SANCTUARY FOR VIEWING OF BROWN BEARS and Olson and Gilbert’s 1994 article VARIABLE IMPACTS OF PEOPLE ON BROWN BEAR USE OF AN ALASKAN RIVER.

- We haze rather than averatively condition bears at Brooks Camp. We try to keep the bears from lingering in the developed area and campground whenever possible. Technically speaking, aversive conditioning involves giving a bear a negative experience every time it exhibits a problem behavior. Although we do our best, bears sometime wander through camp without being detected by people. Our goal is to get through July and September without bears hurting anyone, becoming food-conditioned, or causing property damage. By keeping them out of the developed area we greatly reduce the opportunity for them to obtain food/garbage or damage buildings, etc.

- When hazing we use the least intrusive technique first and progress to cracker shells and bean bag rounds only when necessary. This differs from what is recommended in the 1995 bear plan (most intrusive method first). However, the strategy we use has been successful at McNeil, Denali National Park, and other bear viewing areas and is recommended by the most recent literature. Based on my experience I believe it is the best approach to hazing bears.

- Emergency closures are an essential component of our bear management program. If a bear obtains fish from anglers, human food, etc., the safest action is often to temporarily close an area to eliminate the potential for additional conflicts. Sometimes this means closing an area until a particular bear or bear family has moved out of the area.
I do not believe the Brooks Camp staff needs to be armed all of the time as long as management remains consistent with the current program. If we are armed can we really allow visitors to explore the area unescorted? I sometimes carry a shotgun when I am hoping to have an opportunity to haze a specific bear or if I am spending time in the campground after a tent has been damaged. However, I think it is unnecessary for the staff to carry firearms on a daily basis unless it is in response to a specific incident.

Bear Management Report Forms (BMRF):

- These forms are used to document bear-human interactions. There is one for Brooks Camp interactions and one for backcountry interactions. The form was updated in 1997 to make it easier to understand. Backcountry rangers have been asked to complete forms and send us information on backcountry bears. Hopefully this information can be used to help develop the backcountry portion of the new bear management plan. I have included forms and instructions. The form is a CorelDRAW file on Mark Wagner’s computer.

- From 1991 to 1994 an effort was made to record as many bear-human interactions as possible. This provided a good sample of what happens at Brooks Camp. However, there has not been personnel available for such an intensive effort since 1994. In 1995 BMRFs were only completed for incidents requiring Case Incident 10-343s. In 1996 and 1997 new forms were used and charts were incorporated enabling staff to quickly record information. It should be realized that changes in numbers of incidents over the years probably have more to do with reporting effort than changes in bear and human behavior.

- New interaction categories were developed for the new BMRF. The definitions are included in the BMRF instructions. These definitions are still being refined as we see how well we can categorize this season’s interactions. The revised bear management plan will need to include the final categories and definitions.

Annual Bear Reports:


- Brian Holmes wrote more involved reports from 1991-1994. These were the years a strong effort was made to report as many bear-human interactions as possible.

- Pete Webster did not write a report in 1995. He was both the lead law enforcement ranger and bear technician at Brooks Camp that year.

- Hilary Boyd wrote the 1996 report. I think the report should include information on all aspects of bear management at Brooks Camp and in other parts of the park. With the high turnover in staff that we have, detailed reports can provide continuity in the program. During my two seasons here I regularly looked up information in these reports.

- Dave Boyd will complete the 1997 report after I leave.

Training:

- At least four hours of bear training is usually provided for the entire Katmai staff as part of general training. This training must include information on bear behavior, safety, and park-specific management. I provided the training this year. If the new bear technician does not feel comfortable with this, John Hechtel should be contacted. He conducted our training in 1996. Larry Aumiller (ADF&G-Manages McNeil) would also be a good choice. Dick Sellers, ADF&G usually speaks for an hour about Alaska Peninsula bears.

- The Brooks Camp staff needs additional training after they arrive in camp. It would be beneficial to include the lodge staff in as much of this as possible.
• The staff is sometimes asked to provide educational programs about bears to the local community as well as villages. Someone should be made available to meet these requests.

**Brooks Camp Bear Monitoring:**

• We collected data from late June until July 31 in 1996 and 1997.

• The bear monitoring project was designed so the data can be compared with the research Tammy Olson conducted from 1988-1992. Tammy and Ron Squibb were contacted in 1996 and made recommendations for the monitoring project. All of Tammy’s reports including her thesis are in the King Salmon and Brooks Camp bear files.

• Dave Boyd and the SCA volunteers will write up a monitoring plan this season.

• Two people need to be dedicated to the project each season for it to work. Using two SCA volunteers worked well this year. Ideally there would be one paid biotech involved with the project. This would promote some consistency with bear identification. For instance, this year’s volunteers would probably be interested in working on the project next year if they could be paid. It has worked well for the bear technician to supervise this project.

• We need a database as soon as possible to enter the data we collected in 1996 and 1997. If the data base is built this winter, the staff working on the project next season should have time to enter the existing data.

• Video taping individual bears has become an important part of the project. The video camera purchased for this project should remain available for the exclusive use of the staff conducting the monitoring. Video footage should be used as a long-term identification and documentation tool.

**Bear Resistant Food Containers:**

• We provide food storage containers free of charge at the King Salmon Visitor Center, NPS King Salmon Office, Brooks Camp Visitor Center, and sometimes at the Nonvianuk ranger cabin.

• Someone in the King Salmon office needs to coordinate distribution. Jenny Church did a great job in 1997.

• An inventory needs to be done for all of the containers. This inventory should be checked at the end of every season. If containers are missing, the last people that checked them out should be contacted and asked to return the container or pay for its replacement.

**Contacts:**

• See list in packet from 1997 Bear Workshop

• I usually call:

  John Hechtel (ADF&G) 907-479-3228, email: jhechtel@polarnet.com
  conducts bear training and does bear management consultant work

  Sue Mills (NPS-AKSO) 907-257-2573, has cemail
  coordinates bear management activities among AK parks
Other contacts:  Ron Squibb-USFWS, King Salmon
               Former Brooks Camp Manager, supervised bear mgmt activities & research
 Tammy Olson-ADF&G, Anchorage
         Conducted bear research at Brooks Camp
Dick Sellers-ADF&G, King Salmon
            District Biologist, has done extensive bear research on AK Peninsula
 Susan Savage-USF&WS, King Salmon
          Worked for NPS in King Salmon, was acting Chief of Res. Mgmt.

Feel free to contact me any time. I will email you my address, telephone number, etc. as soon as I get settled in Tucson