NCDE

Fall 2015 MEETING

December 2, 2015

Montana Depart Fish Wildlife and Parks: conference room
Lone Pine State Park, Kalispell, MT 59804
http://stateparks.mt.gov/lone-pine/

Chair: Deb Mucklow 406-387-3851 or dmucklow@fs.fed.us

Vice chair: Jim Williams –or jiwilliams@mt.gov

- > 09:45 Coffee and sign in
- > 10:00 **Agenda Review** introductions Deb Mucklow (breaks will be inserted 🔾
- > 10:10 **Housekeeping** Jim Williams
- > 10:20 NCDE Data Base Manager updates Kathy Ake
- > 10:35 **Bear Management Specialists –2015 activity updates** Tim Manley, Jamie Jonkel, Stacy Courville, Dan Carney, Mike Madel, Kraig Glazier, John Waller
- > 11:45 NCDE DRAFT Mortality information Chris Servheen

Lunch

- > 1:00 pm Conservation Strategy Plan Updates Chris Servheen
- 1:10 pm Agency specific updates related to the Draft Habitat Standards: Forest Service, Montana Department Fish Wildlife & Parks, Montana Department of Natural Resources, Glacier National Park, Bureau of Land Management, Salish Kootenai Tribe, Blackfoot Tribe, US Fish & Wildlife Service NCDE members or as asked to present
- > 1:30 Education updates Colleen Matt, Laurie Evarts
- > 1:45 Comprehensive Update Population Monitoring Lori Roberts, Cecily Costello
- > 2:15 **USGS Research updates** Tabitha Graves
- **> 2:45 Public Comment**
- > 3:00 Schedule fall meeting and conclude by 3:00 Deb Mucklow/Jim Williams

Deb Mucklow began Meeting began at 10:05 a.m.

Introductions all the way around

Business Topics / Housekeeping:

Glacier National Park Superintendent Jeff Mow is the incoming Vice -Chair

Laurie Wolf is going to be stepping up in the Education Chair behind Vivaca.

Want to continue to keep educational efforts in the forefront for "Living with Bears"

This meeting will help get the accomplishments written down for the IGBC meeting next week.

Goals for the future:

Re-starting the NCDE 'science team' subcommittee, which consisted of both scientists and managers from agencies in the NCDE and Canada would be useful for prioritizing research, identifying funding options for research, and regularly communicating.

- *Work plan is a little outdated
- *Linkage between NCDE & Cabinet Selkirk Ecosystem keep this as part of mgmt situation
- *tightening up the coordination between agencies
- *As we move forward with recovery in NCDE we will want to see all agencies adhering to the conservation strategy
- *USGS is a research focused agency and is still interested in looking at methodology surrounding bear connectivity.
- *Go forward with eye on the future. What is the repopulation going to look like in the future? How do we continue to deal with anthropogenic pressures?
- *Plan revision of the collective National Forests will ensure continued success
- *Enhance cooperative efforts with local communities to enhance ecosystem health. Increase our relationship with counties. We do not currently have County Commission representation on the NCDE. It would make them part of the process. The Chair will invite a County Commissioner to the next meeting.
- *Number one goal is to complete NCDE Conservation Strategy.
- *Maintain demographic monitoring work (technical science team)
- *Establish unknown unreported mortality (technical science team)
- *Continue known fate trend monitoring method in the NCDE (technical science team)
- *Amend all forest plans simultaneously
- *Develop demographic mortality protocols (technical science team)
- *Implement conservation strategy and will be tiered to FS EIS process
- *Propose delisting when all of the above needs are met.
- *Improve relationships between all grizzly bear ecosystems and recovery area. Facilitate connectivity throughout.
- *Preparing for continuing bear distribution expansion by working to prevent conflicts further out on the prairie east of the Rockies.
- *The subcommittee wanted to give credit for the on-the-ground conflict specialists, and we want to make sure we are still able to do this important work.

Kathy Ake / NCDE Database Manager

Incorporate handout - reviewed 2015 accomplishments and 2016 work plan. Requesting \$2700.00 per unit (BLM, USFWS, US NPR, MT DNRC, MFWP, Flathead FS, Kootenai FS, Lewis & Clark FS, Lolo FS. Follow up with BLM to make sure there is not a conflict with contributing from them

Bear Management Specialists Reporting:

TIM MANLEY / FWP R1: GET HANDOUT -Grizzly bear captures were a little below normal levels.

Chickens continue to be a big issue, as well as cat food. Had a new technician Daniel Madel. Most of the bears that I monitor have VHF collars on them and requires flights to track them. Completed 18 presentations around the region and lots of landowner contacts to educate. Helped with bear management training in GNP.

JAMIE JONKEL / FWP R2: Busy year for black bears with changing environmental conditions. There are abundant food sources down low and very few up high. Perfect worst case storm. 16 conflicts, 7 depredations.

STACIE COLVILLE / CSKT: No conflict captures. Set a lot management traps but no captures. Set a lot of electric fence. Bears are eating from calf pellet feeders right along with the calves. "It's the new chicken"!

DAN CARNEY/BLACKFEET TRIBES: Had 3 captures this year which is a very low number. Had 3 mortalities on the reservation, found one GPS collar that had been cut off a female bear. One adult male was killed by a deer hunter. Put many propane cannons out to keep bears out of grain areas. Update on Babb dump? - Still a problem, the dumpster is still there, still open and still grizzly bears getting into it. Directors have changed again at the Tribal Solid Waste Program.

MIKE MADEL / FWP R4: Had bears farther East than ever before reported. It was an unusual year. Responded to 63 grizzly bear conflict calls. We had a failing chokecherry crop that began early. Bears are expanding their home ranges like we've never seen it before. The 63 calls is almost a 3-fold increase from prior years. 12 livestock depredations, 14 residential incidents, 3 property damage incidents, 2 encounters, 1 beehive incident, 7 crop foraging incidents. 4 grizzly bear mortalities. Captured a total of 5 grizzly bears during management control actions. Removed 79 livestock carcasses from RMF bone yards and bear conflict sites. The annual livestock carcass redistribution program worked well.

JOHN WALLER / GNP: Interesting year in GNP this year. We ended up removing 3 black bears. It was relatively quiet with grizzly bears this year. Someone living within the park thought it would be a good idea to raise chickens so we worked with that individual. We had 2 off trail hikers encounters between grizzly bear sows with cubs.

COLLEEN MATT / I&E FOR IGBC: We will be doing a lot of the content updates for the IGBC and NCDE website. The grizzly bear coloring book is complete. You can also print the coloring books from the IBGC website. It's titled "Staying Safe Around Bears". The I and E Grant selection committee made their selection for the FY16 grants. We highlighted Food Storage Regulations organized by State and they are available on the website.

LAURIE WOLF / 1&E MT WILD: It was a really busy year at the wildlife center in Helena. We have had almost 5,000 youth come through the center. Approximately 3,000 students have gone through grizzly bear recovery information training. "Living with Carnivores" video is really engaging.

CHRIS: The USFWS is incorporating public comment into document by end of this calendar year. Still have work to do with demographic issues and population level commitments, post delisting. I am still working with State of Montana on this topic as there has been professional disagreement.

JOE USFS FLATHEAD PLAN REVISION: The Flathead, Kootenai, Lolo, and Helena/Lewis & Clark National Forest are in the process of incorporating the habitat related direction from the Draft Conservation Strategy into their forest plans. A Draft Environmental Impact Statement is expected to be available in April 2016 with a 90 day public comment period followed by a Final Environmental Impact Statement and a Record of Decision scheduled for 2017.

ROSS DNRC: We will have an amendment to some language pertaining to the grizzly bear DNRC settlement agreement. We have some rule making going on right now. Will have approx 6 months to complete the process.

JIM FWP: We will get information regarding the various food storage orders for the spring NCDE meeting.

DAN CARNEY / BLACKFEET TRIBE: We have a few changes to make in the Tribal Fish and Wildlife code. They should go pretty fast. Changing grizzly bears to a designated game species, etc...

ANNUAL NCDE GRIZZLY BEAR POPULATION TREND MONITORING PRESENTATIONS:

LORI ROBERTS (FWP): 2015 NCDE TREND FIELD UPDATE:

I am the FWP grizzly bear research technician on the population trend monitoring project. Based on USGS (Kate Kendall's) 2004 data, we determined how many bears we want to capture by geographic area based on density. For research and management we had a total of 43 individuals bear captured and a total of 45 captures. We captured 14 research females and 7 research males. During the 2015 field season, we followed a total of 33 research female. We followed 25 females into the den, 5 collars released and were retrieved, 2 collars failed, and 1 was on a mortality. We also followed a total of 6 males this field season, 3 we followed into the den, 1 collar failed, and 2 were dropped and retrieved. The NCDE averages 24 mortalities per year, this year we had a total of 14 human caused mortalities and 6 agency removals. Of the 14 human cause mortalities: 6 were automobile, 1 capture mortality, 1 mistaken id by a black bear hunter, 4 poached or maliciously killed, 1 defense of life, and 1 still under investigation. Of the 6 agency removals: 4 livestock depredation, 1 property damage, and 1 augmentation bear was relocated to the CYE.

Dr. CECILY COSTELLO (FWP): NCDE GRIZZLY BEAR TREND UPDATE:

I am the new statewide grizzly bear research lead for FWP. I have been on the job for only one month, but have been working with Rick & Lori for the past 2 years analyzing the data. Prior to that, I have worked on grizzly and black bear research projects in the Adirondacks, New Mexico for the Hornocker Research Team, and the greater Yellowstone based out of Bozeman and Montana State University. I want to say thanks for all the cooperation from all NCDE team members.

1. Spatial monitoring

Occupancy of females with cubs: All BMS's met occupancy criteria during 2010-2014.

Population distribution: Our total NCDE population distribution is 53,663 km².

Relative population density: Using Kendall's 2004 hair snags the highest relative density focuses in GNP and radiates out from there.

2. Demographic monitoring: We took our research sample of bears during 2004-2014 and added all management bears into the sample with a management history covariate to calculate survival rates and reproductive rates.

Survival rates: We have an annual survival rate of 0.947 for independent females, 0.895 for independent males, 0.639 for yearlings, and 0.553 for cubs.

Reproductive rates: Of the independent females: 29% with cubs, 23% with yearlings, 14% with two-year-olds, and 34% had none. Our mean litter size is 2.10 and the mean age of first reproduction is 5.7.

Population trajectory and age structure: Our annual growth rate is 1.023 which project the population to 960 bears (837-1039).

Total Estimated number of mortalities

3. Population modeling and sustainable mortality

Summary:

- PCA fully occupied by reproductive females by 2009.
- Grizzly bear distribution increased ~58% since 2002 and extends beyond the DMA.
- No negative trends in vital rates were observed during 2004-2014.

- Observed vital rates were consistent with annual population growth of ~2.3%.
- Assuming population size of 765 bear in 2004 (Kendall et al. 2009), 2014 estimated is 960 bears (837-1039).
- Documented and estimated numbers of independent grizzly bear mortalities also increased ~2-3% per year.
- Current estimates of total annual mortality of independent bears fall below thresholds for decline.

TABITHA GRAVES / USGS: Evaluating Genetic Diversity through Time in the NCDE

I am a research biologist with USGS based in Glacier National Park. USGS mission is broad in terms of science- answering questions beyond this ecosystem and grizzly bears (e.g. now need non-invasive methods for polar bear work, theory of expanding/recovering populations important for trust species generally). USGS scientists are encouraged to push the envelope in terms of developing new projects which sometimes requires initial work to bring ideas to maturity My current project is an important piece of the conservation puzzle for ensuring grizzly bears can continue to adapt to environmental changes. From hair sampling alone, we detected 1115 individual bears. We observed a very rapid increase in individuals across time. Huckleberry productivity correlates with bear reproduction and survival in Flathead, B.C. There are 6 bumblebee species that are pollinating huckleberries in my research sites within the NCDE. Severe fires are expected to increase and that poses a potential change to huckleberry systems. The phenology of huckleberry development was a month earlier this year.

Will Doodle Poll for spring meeting date. Jim Williams will be Chair and Jeff Mow will be Vice Chair.

Adjourned 4 pm.