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C. Servheen

Briefing paper – National parks and grizzly population management

The National Park Service has been a conservation leader on grizzlies and an integral partner in the recovery of the Yellowstone grizzly bears. The initial concerns about the dire status of Yellowstone ecosystem bears were raised by NPS. NPS chaired the precursor to the IGBC and the Roland Wauer of NPS wrote the memo that resulted in the creation of the

IGBC: <http://www.nytimes.com/1982/09/01/us/yellowstone-grizzly-reported-imperiled.html>

The precursor of the Study Team was an NPS-funded science team that was funded through YNP until USGS took over all DOI science. Of all the agencies, NPS has invested the most in the recovery of Yellowstone grizzlies. NPS leadership has been critical to the recovery effort and their involvement has been constant and positive over 34 years. NPS support for recovery and delisting will require that they are a part of discussions about mortality management because they manage a portion of the population and have invested so much in its recovery.

The Service led team has developed management systems to allocate mortality within ecosystems by removing the proportion of the population within national parks from the discretionary mortality available within each ecosystem. This has been done to assure that we do not overharvest each ecosystem. The rationale is as follows:

- Ecosystem discretionary mortalities are allocated by the percentage of area of each management entity within the demographic monitoring area. These management entities are national park lands and reservation lands, with all other lands being the state allocation. Each management entity is responsible for managing within the mortality limits for their proportion of the ecosystem.
- Parks have traditionally managed the bears within their population segment for maximum survival since their constituency (visitors) wants to view bears. This approach serves the constituency of the national parks. The parks have argued that their "need" is just as legitimate as the states. The NPS "need" is their large and vocal constituency of people who come to YNP and GTNP to see bears and who want "park" bears to be managed carefully. This approach serves the constituency of the national parks. The NPS personnel on the team feel very strongly about this issue. The constituency who wants to see park bears managed carefully is very, very large and vocal.
- The parks have little mortality but occasionally have a need to remove a nuisance bear. Natural mortalities do occur in parks. All park mortalities do count against the ecosystem mortality limits.
- Yellowstone National Park is basically at carrying capacity with little or no population growth within the park. This is due to density dependent population regulation. The result is that Yellowstone does not produce many bears and the park is not a source of dispersing subadult bears for other

areas of the ecosystem. A similar situation exists in Glacier National Park in the NCDE.

- The majority of the park's bear population lives within the park most of the time, but some bears on the periphery have home ranges that straddle the park boundary and go in and out of the park seasonally. It is difficult to precisely know how many bears are only "inside the park" bears. Since bears living on the edge do go in and out of the parks (both ways), a reasonable assumption is to assume that the percentage of the area of the parks is a rough estimate of the percentage of the population. The NPS would consider these to be "Park Bears."
- If you take a portion of the bears "outside" the park area as if all the bears are there using the total population estimate, you will over harvest the outside population and drive the "outside" population down. This is especially true if the population inside the parks is growing very little if at all, which is the case in YNP. Taking only part of a population at the sustainable rate for the entire population will result in managed population decline for the part that is over harvested. The result would be continued population decline for that portion of the population outside the Park.
- There are Tribal reservation lands inside the DMAs in both the Yellowstone and the NCDE. Some of these reservations may decide to implement discretionary mortality through hunting while some will likely decide not to hunt. If we decide to "allocate" "unused" discretionary park mortality to the non-park population, will we also decide to attempt to allocate the reservation discretionary mortalities to the non-reservation population? The result would be continual overharvest of the non-reservation population and likely a concern for reservation management authorities.
- The parks position is that there is a legitimate need for special status for wildlife "inside" the parks because the parks are a special place with bears having no fear of people and being very visible and "available" to park visitors. This availability is based on their lack of fear of humans. The parks believe that their constituency will actively oppose any option that results in the perceived or real reduction of "Park bears." Similar circumstances are occurring in British Columbia currently where there are significantly more grizzly bears.

In summary, the parks have maintained that the discretionary mortality for park grizzly populations is within the management authority of the national parks and cannot be allocated to non-park populations.