

PUBLIC SUBMISSION

As of: May 18, 2016
Received: May 02, 2016
Status: Posted
Posted: May 02, 2016
Tracking No. 1k0-8pej-fa4i
Comments Due: May 10, 2016
Submission Type: Paper

Docket: FWS-R6-ES-2016-0042

Endangered and Threatened Wildlife and Plants; Removing the Greater Yellowstone Ecosystem Population of Grizzly Bears From the Federal List of Endangered and Threatened Wildlife

Comment On: FWS-R6-ES-2016-0042-0001

Endangered and Threatened Wildlife and Plants: Removing the Greater Yellowstone Ecosystem Population of Grizzly Bears from the Federal List of Endangered and Threatened Wildlife

Document: FWS-R6-ES-2016-0042-2008

Sitts Richard

Submitter Information

Name: Richard Sitts

Address:

18202 Gadwall St
Woodland, CA, 95695

General Comment

See Attached

Attachments

Sitts Richard

U.S. Fish and Wildlife Service Mountain-Prairie Region

Yellowstone Grizzly Bear Population Proposed Delisting



Comment Form

The U.S. Fish and Wildlife Service (Service) is accepting written comments on the Greater Yellowstone Ecosystem grizzly bear population proposed delisting rule, the draft supplement to the 1993 Grizzly Bear Recovery Plan for the Yellowstone grizzly bear population and the draft 2016 Conservation Strategy.

The recovery of the Yellowstone grizzly bear population serves as a remarkable Endangered Species Act success story. It is the result of strong partnerships among the Service, federal and state agencies, tribes and other partners. Yellowstone grizzly bear numbers have rebounded from as few as 136 bears when listed in 1975 to an estimated population of more than 700 today. There is now a sustainable and resilient population that occupies the entire available habitat. The population is at or near the ecosystem's long-term carrying capacity.

To comment, return this form by mail to the address on the reverse side. Fold this form on the lines with the return address showing, tape it closed, affix a stamp, and mail. You may attach additional pages. Comments may also be submitted for Docket No. FWS-R6-ES-2016-0042 via www.regulations.gov. For your comment to be reviewed and effective, the Service suggests the following guidelines:

- Be specific. Give defined reasons, not broad statements, or opinions.
- Share site-specific observations, data, or knowledge.
- Detail important environmental and community factors.
- Be timely. Comments are requested by **May 10, 2016** to be considered in the final rule.
- This is not a voting process. Petition signatures typically only express an opinion, which is not helpful in our decision making.

RECEIVED

MAY 02 2016

Div. of Policy, Perf. &
MGMT. Programs

MY COMMENTS RELATE TO SHORTCOMINGS
FROM NOT INCLUDING SOME OF THE
BEST AVAILABLE SCIENTIFIC DATA, AND
SUBSEQUENT EFFECTS ON ACCURACY AND
EFFECTIVENESS. THE LACKING DATA IS
ON GRIZZLY EMIGRATION FROM THE DMA.

THREE (3) ADDITIONAL PAGES ARE INSERTED/ATTACHED

You may insert additional pages.

Please provide your contact information.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you may ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

RICHARD SITTS

NAME

TITLE

ORGANIZATION

18202 GADWALL ST.

MAILING ADDRESS

WOODLAND, CA 95695

CITY, STATE ZIP CODE

Thank you for your interest and participation!

**The Proposed Rule for Delisting the Yellowstone Grizzly Bear
Lacks Available Scientific Data on Grizzly Emigration from the DMA and is Therefore
Short on the Best Data, Accuracy and Effectiveness**

By Rick Sitts, PhD, April 26, 2016.

The US Fish and Wildlife Service (Service) intends that any final action resulting from its Proposed Rule for delisting the Yellowstone grizzly bear will be based on the best available scientific and commercial data and will be as accurate and as effective as possible. To this end, the Service invited comments or recommendations concerning any aspect of this Proposed Rule, the Conservation Strategy, or the Recovery Plan. Unfortunately, the Proposed Rule (PR) is not based on some of the best available scientific data and therefore is not as accurate and effective as possible. In particular, the science in the PR focuses on grizzly bear losses only in terms of mortality, and leaves out the other type of loss, emigration, in this case grizzly bear movement out of the Demographic Monitoring Area (DMA). This shortcoming can be addressed as recommended at the end. Details are provided below and elaborate on my April 12, 2016 testimony at the Service's public hearing in Bozeman. I am available to address any questions.

Emigration is not included in the analyses or tools supporting the Proposed Rule

The PR has little to say about emigration effects on populations. The PR states that "Some of the demographic factors influencing population trend for grizzly bears are age-specific survival, ... and emigration. These data are all used to determine if and why a population is increasing or decreasing ... " (PR p 25). However, this is the first and last time the PR mentions "emigration." Further, the PR never mentions "leave," "leaving" or "emigrating." "Emigrate" is used in reference to grizzlies moving to the Bighorn Mountains, and although "dispersal" was used, it referred to the Bighorn Mountains or average dispersal distances for grizzlies (PR p 44). Further, emigration is not mentioned in PR Table 1, which lists DMA total mortality rate limits (PR p 55). These Table-1 numbers are loss "limits necessary to manage toward the long-term average population size ... [of] 674 [grizzly bears]" (PR p 55). The table also lists the components of total mortality; however, this list does not include emigration.

Per page 26 of the PR, "For populations at or near carrying capacity, population size fluctuates just above and below carrying capacity" However, individuals with access to adjacent areas can emigrate to those adjacent areas in search of food, mates or territory; but, the PR does not mention this emigration option.

GYE grizzlies are emigrating from the DMA

Emigration of DMA grizzly bears is not only happening, it is increasing. Data in the Draft Conservation Strategy (CS 2016) show this growth. The CS figure 3, 4 and 5, show increasing numbers of females with cubs (FCOY), as well as increasing mortalities, outside the DMA. Mortalities and FCOY outside the DMA I identified from the dots on maps in figures 4 and 5 are in Table A, below.

Table A. Grizzly bear mortalities and females with cubs (FCOY) outside the DMA (i.e., ex-DMA) during 2005-2014, identified by Rick Sitts from the draft Conservation Strategy (CS) (2016), from dots on DMA maps in figures 4 and 5. Dots centered on the DMA border line in these figures were not counted as outside the DMA.

	<u>Grizzlies ex-DMA over 2005-2014</u>	<u>ex-DMA grizzlies/year</u>
Dots of females with cubs (FCOY) (CS Figure 4)	17	2
Two cubs with FCOY assumed, x 17 FCOY =	34	3
Two independents per FCOY assumed, x 17 FCOY =	34	3
Dots of known & probable deaths (CS Figure 5)	30	3
<u>Unknown/unrecorded deaths assumed</u>	<u>10</u>	<u>1</u>
Total estimate of grizzlies, including cubs	125	12
Total estimate of grizzlies, without cubs	91	9

These results indicate an average of 12 grizzly bears, both independent (9) and dependent (3), left the DMA per year (Table 1). These are rough estimates, and maybe more were out at other times, or some were counted in multiple years or some were born out there. In any case, as stated on page 45 of the CS, “the population continues to expand.”

Emigration losses can affect accuracy and effectiveness

Delisting actions based on unaddressed emigration losses may put the DMA population in a decline. The PR’s Demographic Recovery Criterion 3 is for maintaining the DMA population over the long term at an average of 674 grizzly bears using total annual mortality rate limits specified in Table 1 (PR p 53-55). Total annual mortality limits for independent bears at a population size of 674 grizzly bears, are 18 and 35 independent female and male grizzly bears, respectively, or 53 independent grizzlies combined (PR p 116-7). Dependent grizzlies have the same mortality rate limit as independent females, thus there would be 18 of them, bringing the total mortality limit to 71 grizzlies overall. However, if emigration is considered, then 12 grizzlies lost to emigration should be added to the corresponding mortality loss of 71 grizzlies, indicating losses would be 83 grizzlies, or 17% higher than presently calculated for the PR. The 17% in unaccounted for DMA grizzly losses would put the DMA population in a decline.

Overlooking emigration also has implications for mortalities allocated to hunting. In the PR example given for 674 grizzlies in the DMA population, 16 independent grizzlies were indicated as available for hunting in the DMA (PR p 118). Grizzlies available for the hunting allocation are independent bears left over after subtracting background mortality from the total annual mortality limits for the most recent year (PR p 117-8). Background mortality is the prior-4-years mortality from all causes except hunting, and emigration. However, if emigration losses were included in background losses, then background losses would be greater, and the corresponding hunting mortality allocation would be less. With 9 independent grizzlies lost to emigration added to background losses, the hunting allocation would be 7, not 16.

Years of grizzly emigration data are available to improve accuracy and effectiveness

There is an immense amount of data available for analyses of grizzly bear emigration from the DMA. For example, I have seen this data being used in the vicinity of Island Park, Idaho, during 2013, while assisting an agency biologist characterize grizzly habitat along a 2-week-old GPS track. This habitat characterization was a small part of collared grizzly movement investigations in the Island Park area. But, obviously from the CS, a great deal of other tracking data has been collected.

Recommendations to improve the Proposed Rule

The following three recommendations would address science concerns about presently unanalyzed effects of DMA grizzly bear emigration on the accuracy and effectiveness of the PR and CS. Part of each recommendation is to revise the PR, CS and related documents as merited.

1. Ask the PR peer reviewers to address the likely effects of leaving out DMA grizzly emigration rates on the following:
 - estimating DMA grizzly losses,
 - maintaining annual average DMA population size at 674,
 - hunting mortality allocations, and
 - risks in interpreting the trend in the DMA grizzly population size.
2. Analyze existing data on grizzly bear movements along the DMA border (ask USGS's Mark Haroldson about/for the data). Analyze these data for the following:
 - seasonal emigration losses,
 - effects of these emigration losses relative to DMA mortality on overall DMA losses,
 - usefulness in maintaining annual average DMA population size at 674,
 - risks in interpreting the trend in the DMA grizzly population size, and
 - answers to questions from the peer reviewers.
3. Starting next year, collect and analyze new tracking data on grizzly bear seasonal migration out of and back into the DMA, along with concurrent grizzly bear deaths outside the DMA. Analyze these data for the same things as under Bullet 2.