

**From:** Haroldson, Mark  
**To:** [Servheen, Chris](#)  
**Cc:** [Frank van Manen](#); [Fortin-Noreus, Jennifer](#)  
**Subject:** Re: percent of DMA occupied  
**Date:** Thursday, September 24, 2015 12:01:21 PM  
**Attachments:** [Occupied range 2000-2014 in DMA.pdf](#)  
[DMA and grizzly bear range 2000-2014.pdf](#)

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Chris,

Using methodology presented in Bjornlie et al 2014, the estimated occupied grizzly bear range during 2000-2014 was 58,314 square kilometers. This shapefile for this most recent distribution estimate and the the shapefile for the DMA are available with metadata on our website (<http://www.nrmssc.usgs.gov/research/igbst-home.htm>) under mapping tools. Using this most recent estimate, 89% (89.37%) of the DMA is within occupied grizzly bear range. Area of the DMA occupied is 44,624 square kilometers. Total area of DMA is 49,931 square kilometers.

I have attached a couple of figures.

Bjornlie, D. D., Thompson, D. J., Haroldson, M. A., Schwartz, C. C., Gunther, K. A., Cain, S. L., Tyers, D. B., Frey, K. L. and Aber, B. C. (2014), [Methods to estimate distribution and range extent of grizzly bears in the Greater Yellowstone Ecosystem](#). Wildlife Society Bulletin, 38: 182–187. doi: 10.1002/wsb.368

On Wed, Sep 23, 2015 at 2:33 PM, Servheen, Chris <[grizz@umontana.edu](mailto:grizz@umontana.edu)> wrote:

Mark and Frank,

In 2014, you sent Rebecca these numbers for the % of suitable habitat that was occupied. We are going to move away from reporting such details about suitable habitat and instead report about the DMA. So, we need a similar calculation for the % of the DMA occupied and the definition you used for “occupied”.

Many thanks,

Chris

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Mark A. Haroldson  
USGS Northern Rocky Mountain Science Center  
Interagency Grizzly Bear Study Team  
2327 University Way, Suite 2  
Bozeman MT 59715  
Phone 406-994-5042  
Cell 406-570-7754  
Fax 406-994-6416