

---

**From:** Eyes, Stephanie A </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D29ABF6B8CF3401F8C6974D8624A7598-STEPHANIE\_E>  
**To:** Livingston, Sue  
**Sent:** 3/6/2020 5:10:34 PM  
**Subject:** Re: Response from Craig Thompson re Stephanie's 5 female home range question

"The conceptual framework of the 2016 SSFCS was based on this overall habitat structure; maintaining a minimum number of viable female fisher home ranges within each core area, and protecting the integrity of linkages by encouraging landscape resilience. Based on expert opinion, a minimum of five contiguous female home ranges was determined to be the minimum number necessary to identify a core habitat area (Spencer et al. 2016). Each core area contained an average of approximately 400 km<sup>2</sup> of contiguous denning habitat, able to support approximately 10 to 30 female fishers each." pg 10 Thompson et al. 2019b (draft conservation strategy interim guidelines)

In case that is helpful too.

---

**From:** Livingston, Sue <sue\_livingston@fws.gov>  
**Sent:** Friday, March 6, 2020 2:01 PM  
**To:** Eyes, Stephanie A <stephanie\_eyes@fws.gov>  
**Subject:** RE: Response from Craig Thompson re Stephanie's 5 female home range question

Thanks Stephanie.  
Enjoy Chile and say hi to a guanaco for me!

Sue Livingston  
Fish and Wildlife Biologist  
U.S. Fish and Wildlife Service  
Oregon Fish and Wildlife Office  
2600 SE 98th Ave., Suite 100  
Portland, OR 97266  
503-231-6908  
FAX 503-231-6195  
<http://www.fws.gov/oregonfwo/>  
Connect with us on [Facebook](#)

**From:** Eyes, Stephanie A <stephanie\_eyes@fws.gov>  
**Sent:** Friday, March 6, 2020 1:32 PM  
**To:** Livingston, Sue <sue\_livingston@fws.gov>  
**Subject:** Fw: Response from Craig Thompson re Stephanie's 5 female home range question

---

**From:** Finley, Laura <laura\_finley@fws.gov>  
**Sent:** Wednesday, November 13, 2019 11:08 AM  
**To:** Eyes, Stephanie A <stephanie\_eyes@fws.gov>; Livingston, Sue <sue\_livingston@fws.gov>; Willy, Elizabeth <elizabeth\_willy@fws.gov>; Schmidt, Gregory <gregory\_schmidt@fws.gov>; Glenne, Gina <gina\_glenne@fws.gov>; Crowell, Heidi <heidi\_crowell@fws.gov>  
**Subject:** Response from Craig Thompson re Stephanie's 5 female home range question

One slight addition from Heather. Apparently the use of a 5-female home range minimum first appeared in CBI's 2011-2012 carnivore habitat modeling efforts, again for the purpose of facilitating connectivity mapping. Because

that threshold fit the fisher data, and there was a precedent, it was reused in the fisher assessment.

Craig

On Tue, Nov 12, 2019 at 4:34 PM Craig Thompson <[craig.thompson@consbio.org](mailto:craig.thompson@consbio.org)> wrote:  
Hi Laura,

I've looked back through the various documents, and if remember correctly the LinkageMapper software that was used to map the linkage areas requires the identification of core areas as input. It's a characteristic of that program, you have to tell it what areas to try and connect. And given the acreage of the smallest contiguous block of denning habitat (the Stanislaus core as Stephanie identified), we needed to make decision on what input to give the connectivity model.

As Keith stated, we really don't know what a minimum viable number is. But we did know that we needed to recognize the Stanislaus habitat block. So I think 5 was really just a biologically and logistically valid choice. It fit the data, it fit expert opinion, and it allowed us to move forward with the connectivity questions.

I've sent Heather a note to verify this and make sure there wasn't a better reason. but I think that was it. Do you need something more formal than this?

I will add that I think that 5-female threshold might need to be revisited in the near future. All our core areas were well above that in 2014, but not anymore. Given the current fragmentation, recognizing what is and isn't a viable 'meta-population' pocket might be a far more important question.

Craig  
Laura Finley  
U.S. Fish and Wildlife Service  
Yreka, CA 96097  
office (530) 841-3104

"When you cease to make a contribution you begin to die" Eleanor Roosevelt

[laura\\_finley@fws.gov](mailto:laura_finley@fws.gov)