

From: [Jens Persson](#)
To: [Grizzle, Betty](#)
Subject: Re: Follow-up regarding den locations
Date: Wednesday, May 10, 2017 1:25:24 PM

Hi again,

I was on the phone for a while, so if you called it was busy. But I am here now and free to talk!

Jens

On 10 May 2017, at 21:07, Grizzle, Betty <betty_grizzle@fws.gov> wrote:

Thanks Jens. I will try shortly to reach you by telephone. I am teleworking from home today, so you will see my home number on your caller ID rather than my work number.

On Wed, May 10, 2017 at 11:53 AM, Jens Persson <Jens.Persson@slu.se> wrote:
Hi Betty,

I am sorry for probably being a little bit unclear with my (not very strong) concerns. I am aware of the purpose of your work and I am willing to share as much as possible of our knowledge here that could be useful for you. My unclear issue was more like: I want to know what I write that will potentially “published”. It is easy to be informal in e-mail and things that are not very relevant or thought-through (maybe not proper english..). Similar to when we make interviews with journalists - we want to know when the recorder is on or when the interviews start - and we generally ask to see the text before it is published. If you see what I mean - probably not a big deal.

Anyway, I did not get back to you before because the work I did to check into your question was lost with computer problems - so I had to redo it today. We are imitating more detailed and formal analyses of the issue (“wolverines and snow”) and I have only had time to look at documented wolverine reproductions (mostly natal den sites - but some could be observations of females with cubs after den abandonment, but in most cases it makes no difference as the location has been far enough from the border of the “snow model” to make it unlikely that the natal den was inside the snow model. I found more than 80 reproductions outside the snow model. A majority are found at least 20 km outside the edge of the “main body” of the snow model. After visiting a number of these den sites and seen pictures from when they were active from February to April, I know that there was very little snow already then at many of these sites. Note; I used the same snow data used in Copeland et al. 2010 (that I received from Copeland). So it is snow data from the period used in the paper.

That was some rough information from today’s exercise.

I am at the office now and 1-2 more hours tonight. So if you want to discuss this

more on the phone, I would be happy to do that.

Best wishes,

Jens

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www.wolverineproject.se (english)

www.jarvprojektet.se (svenska)

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On 08 May 2017, at 18:19, Grizzle, Betty
<betty_grizzle@fws.gov> wrote:

Hello Jens - Thank you for your reply.

Regarding my reasons for requesting information. You may recall I sent an email to you on January 5 with this message:

Hello Jens - Bob Inman recommended you as a contact in Sweden for questions about the wolverine.

A bit of background: I am a biologist with the U.S. Fish and Wildlife Service and have been assigned to work on our agency's listing determination for the wolverine (lower 48 states). As you are probably aware, a federal court vacated and remanded back to our agency our proposed rule (from 2014) to withdraw our previous proposed rule (2013) to list the species as threatened under the U.S. Endangered Species Act.

We are preparing a new status review for the species and I have been tasked with preparing a status assessment report that will be used to support our next listing determination (either warranted for listing or another withdrawal).

I have been busy reviewing background information and previous studies, as well as newer studies/publications, including the 2016 paper that you coauthored with Maria Aronsson, and would like to speak with you about habitat suitability modeling, among other topics.

A phone call would be easier to discuss specifics, so please let me know if you are available next week. I am in California, so I believe you are about 9 hours ahead of me. I am generally at work by 7:15 am Pacific Standard Time, so perhaps first thing in the morning (my time) would be an appropriate time to reach you.

Thank you for your time. I look forward to hearing from you,
Betty

To add to this: The status review I am preparing (Species Status Assessment Report) is not a document that presents our proposed listing determination (under the Endangered Species Act), but is a scientific review of the North American wolverine's life history, ecological needs, and current/future conditions related to potential threats to the species. This document is then provided to decision-makers for their consideration of the proposed listing determination (see bottom of my email message for additional information). More specifically, as to my email about wolverine den locations, our agency is evaluating information (including projections from previous "snow" models, information provided in scientific publications, and other sources) related to snow cover in the context of North American wolverine occurrences, including denning habitat. We are also conducting additional analyses (for example, climate change modeling) relative to potential effects of global warming to wolverine habitat in the United States. I hope that explains a bit more about my requests for information.

If any information sent by email were to be included in this report, it would be attributed appropriately. [Note: As a federal employee, all email communications are subject to our Freedom of Information Act.]

However, I do not wish to make anyone uncomfortable with my request for information, so I certainly understand and respect your decision whether to provide any additional den location information you may have collected. I do have your previous publications and "chapters" from Malin's thesis.

Kind regards,
Betty

Additional information on the Species Status Assessment Process is available at: https://www.fws.gov/endangered/improving_ESA/ssa.html

"An SSA is a focused, repeatable, and rigorous assessment of a species' ability to maintain self-sustaining populations over time. This assessment is based on the best available scientific and commercial information regarding life history, biology, and consideration of current and future vulnerabilities. The result is a single document that delivers foundational science for informing all ESA decisions, including listing determinations, consultations, grant allocations, permitting, and recovery planning."



On Mon, May 8, 2017 at 4:59 AM, Jens Persson
<Jens.Persson@slu.se> wrote:

Hi Betty,

Good that you got Malin's thesis. I was going to send it - but forgot.

Regarding coloration of wolverines in Sweden: In general it seems like there is more variation in coloration of Scandinavian wolverines compared to North American. I cannot recall that I have seen any wolverines with white paws or "extra coloration"

over here. They are generally dark with varying levels of light chest pattern, in addition to the typical light band along the side of the body.

Regarding den sites outside the snow model: I will look into that later today or tomorrow. But first it would be nice if you explain to me how the information I send will be used. I understand it is an important issue for discussion over there. And I am happy to help out and think we have valuable information. But I think it makes sense to explain in detail how it is going to be used and/or presented in your material. For instance, I have experienced similar things where informal e-mail communication has been included in formal documents, without acknowledging that beforehand, which I do not find to be fair. So, I would appreciate if you could explain that to me, please.

Best wishes,

Jens

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> On 04 May 2017, at 22:21, Grizzle, Betty

<betty_grizzle@fws.gov> wrote:

>

> Hi Jens - I have been reading through Malin Aronsson's in prep and final papers, and her doctoral thesis, and wanted to follow-up with you regarding your recent and current studies of wolverines and den locations. Can you provide a summary (number) of natal den locations that have been observed outside the snow model (developed by Copeland et al. 2010) in Sweden?

>

> Also, you may be aware that there are wolverines here in North America (Montana) with white "paws" and other white markings. I have also read accounts of nearly all white coloration of

wolverines in Canada, and Audrey's says also in NE Alaska.
Have you seen this trait in Scandinavian wolverines?

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> Thanks for your time,

> Betty

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> Betty J. Grizzle, D.Env.

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