

From: [Stephen Torbit](#)
To: [John Guinotte](#)
Subject: RE: wolverine questions
Date: Wednesday, February 1, 2017 10:48:39 AM

Added a few below for you to think about. Maybe you and I should discuss before we send to ES. Might stir things up with a long list at this late date.

Stephen C. Torbit
Assistant Regional Director
Science Applications
U.S. Fish and Wildlife Service
134 Union Blvd.
Lakewood, Colorado 80228
303-236-4602 – Office
720-626-7504 – Cell

From: Guinotte, John [mailto:john.guinotte@fws.gov]
Sent: Wednesday, February 01, 2017 10:08 AM
To: Stephen Torbit
Subject: wolverine questions

Hi Steve,
Here is a quick list of issues. Feel free to add to this. I'd like to know how the wider team is going to address these, might not know until we see them in person.

Wolverine issues / assumptions / questions:

1. Is snow critical to wolverine denning success in the lower 48? Why (Food caching, predator avoidance, human avoidance)?
2. Is the wolverine population in the lower 48 a DPS or sub species?
3. Is female dispersal spatially limited by snow cover?
4. Habitat limited vs demographically limited (low population #s)?
5. Biology vs behavior (human avoidance)
6. Even if snow is critical (literature calls this into question) are the areas with adequate snow actually limiting, given the population size. In other words, are there plenty of potential den sites for the population size now and into the immediate future?
7. Is the current population of wolverines habitat limited or is it constrained by the small population and wide distribution of that population?
8. Besides snow cover, are there other documented barriers to dispersal?

