

Talus Slope Modeling for Wolverine Habitat

Wolverine-Winter Recreation Study, Summer 2016

The Wolverine –Winter Recreation Study has identified talus slopes and particularly talus slopes that include large boulders as potentially important habitat for female denning and for resting habitat. In the winter, the large crevices, tunnels and gaps in the talus between the boulders create subnivean (under snow) spaces that may provide thermal protection for animals as well as potential foraging opportunities. A notable portion of the reproductive dens documented by the study are found in talus and associated with large boulders. Anecdotal information from other studies also suggest the importance of these habitats for foraging (e.g., on marmots). Unfortunately, there are no existing spatial datasets that identify or predict the location and/or extent of talus habitats across our study area.

We are using fine-resolution satellite imagery and other environmental variables to predict the occurrence of: 1) talus fields and 2) large boulder talus, as habitat types potentially important to wolverines (and other species). If the models prove valuable in predicting the location of these talus habitats, they will be used as a key data input in resource selection function modeling of wolverine habitat use and den site selection.

Thank you for assisting with the field data collection to support this important effort. The data you collect will assist in both refining our predictions and validating the models. At the most basic level, we need the GPS locations of many talus fields across our study area, along with some basic information on the characteristics of the slope. The short field data form below describes the information we hope you will help collect in your travels in the backcountry. You can take this information at any and all talus slopes that you encounter – every data point contributes to our effort. Your contributions will be acknowledged, so please include your name with data submitted.

The Wolverine-Winter Recreation Project is looking for talus sites in the following locations:

The Teton Range, Wyoming and Idaho

The Madison Range, Montana

The Centennial and Henry Ranges, Montana and Idaho

The Payette, Boise, Sawtooth and Caribou-Targhee National Forests, Idaho

Please scan or photograph completed data-sheets and return, along with any site photos, to idahowolverine@gmail.com

Talus Slope Field Data Collection Form

Date: _____ Technician Name: _____

Ideally, a GPS location should be taken approximately in the center of the slope. If this is not feasible, then take a GPS location at edge and provide a description of where the GPS location is relative to the slope and the center of the slope is

GPS X/Easting: _____ GPS Y/Northing: _____ GPS Datum: _____

Description of GPS Location Relative to Edge and Center of Slope (e.g., on SE edge of talus slope; or better yet is a compass bearing identify magnetic or true north) and estimated distance to center of slope for GPS location: _____

Approximate distance from top to bottom of the talus slope: _____ in feet or meters (circle one)

Approximate distance from side to side of the talus slope: _____ in feet or in meters (circle one)

Are there 2 or more boulders that are at least 6 ft in height and width? _____ If yes, provide an approximate count: _____

Where do these large boulders occur on the talus slope: Circle best description: lower quarter of slope, lower half of slope, upper quarter of slope, upper half of slope, or scattered throughout slope.

What habitat types immediately border the talus slope – circle all that apply: Forest (conifer or deciduous), Open grass, Open low, herbaceous cover, brush (willow, scrub, etc), water (lake, creek), solid rock (cliffs)

From the GPS location that you took, please take one or more photos of the talus slope that will provide us a sense of the habitat. Descriptions of the directions the photos are oriented are helpful! Were you able to take photos of the slope? _____ If yes, please describe the photos directions or other pertinent information _____

Have you noticed pika or marmot on the talus slope? Describe evidence (calls, haystacks, animal seen):

Other comments and observations: _____

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