IDAHO DEPARTMENT OF FISH AND GAME

Ed Schriever, Director

Project F19AF00807

Mapping Winter Recreation in Idaho’s Wolverine Habitat
Cooperative Endangered Species Conservation

Interim Performance Report

Performance Period
August 13, 2019 to June 30, 2022

Compiled and edited by: Tempe Regan, Joel Sauder, and Cory Mosby

August 2020
Boise, Idaho
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1. **State:** Idaho

   **Grant number:** F19AF00807

   **Grant name:** Mapping Winter Recreation in Idaho’s Wolverine Habitat

2. **Report Period:** August 13, 2019 to June 30, 2020

   **Report due date:** September 28, 2020

3. **Location of work.** Wolverine habitat in the Nez Perce – Clearwater, Sawtooth National Recreation Area, and Salmon – Challis national forests

4. **Objectives**

   (1) During the 2019/2020 winter season, conduct three replicate surveys (one each in January, February, and March 2020) in the Upper Lochsa River and Upper North Fork of the Clearwater River to estimate the footprint and intensity of backcountry recreation.

   (2) During the 2019/2020 winter season, conduct three replicate surveys (one each in January, February, and March 2020) in the Sawtooth and Boulder-White Cloud Mountains and the Beaverhead Mountains of the Sawtooth and Salmon-Challis national forests.

5. **If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project**

   Not applicable.

6. **Describe how the objectives were met.**

   Objective (1): A single survey was conducted February 19-20, 2020. Two repeat surveys were scheduled, but delayed due to weather, and eventually canceled due to COVID, thus ending surveys for the 2019/2020 season. For a complete description of survey methodology, see Heinemeyer (2019). In summary, two observers and a navigator flew fixed flight lines, recording the amount of backcountry recreation observed by type and amount (<10%, 10-50%, >50%) in a 1.5km viewshed on either side of the plane at 15 second intervals. This provided multiple estimates of recreation activity in each survey grid cell (Figure 1).

   As only a single survey was conducted, these results should only be considered preliminary and are best used to frame high level discussions about backcountry recreation instead of fine-scale analysis at this time. During the February 19-20 survey effort, we found recreation occurring at low levels across fairly predictable locations. In only a few instances did track densities exceed 10%.

   A description of the areas with winter recreation involve the following: 1) Hoodoo Pass in the North Fork, which is a major access point with access primarily from the MT side, with
activity extending down the state line to approximately Goose Lake; 2) Heart Lake, with most activity on the Montana side of the state line; and 3) Cedars Area in the North Fork, with some activity extending up Lake Creek to Fish Lake. Also, as expected, Granite Pass, Lolo Pass, and Skookum Butte areas were centers of extensive recreation. Overall, it appears that wilderness boundaries are being respected in these areas, with no significant wilderness intrusions being documented. The same appears to be true for Elk Summit areas, where some “play” locations were observed directly adjacent to wilderness, but generally appeared to be outside of it.

Repeat of the surveys in subsequent years with hopefully more favorable survey conditions will allow us to expand upon this preliminary observation.

**Objective (2):** Using survey methods outlined in Heinemeyer (2019), Idaho Department of Fish and Game (IDFG) staff flew three surveys each (January, February, and March 2020) in both study areas: Sawtooth and Boulder-White Cloud Mountains (SBWC), and almost all of the Beaverhead Mountains (BHM; Figure 2).

In the SBWC study area, recreation was more intense, more consistent and covered a greater spatial area than in the BHM. Only snowmobile and backcountry ski winter recreation types were observed in the SBWC, whereas in the BHM study area, vehicle, ATV, and snowtrack travel was additionally observed (Table 1). As time progressed from January through March, the number of positive recreation observations of all types increased across survey grid cells with March having both the greatest number of recreation positive survey cells in the SBWC, whereas the BHM saw similar amounts of recreation in both February and March (Table 2). March observations additionally yielded the farthest observed incursion into the backcountry for any recreation type – by backcountry skiers in the SBWC study area.

When addressing objective (2), these survey efforts provided several points of insight to the duration and intensity of winter recreation, and how these recreation patterns compare with historic wolverine home ranges in the SBWC study area. Winter recreation increased by both area impacted and intensity in both study areas over the progression of survey replicates (Table 2). Degree of winter recreation was less in the BHM than in the SBWC area and this could be due to it being further from population centers and being less “discovered” than areas in immediate proximity to Sun Valley, a popular winter recreation destination. In the SBWC area we compare current extents of winter recreation with known historic wolverine home ranges and the majority of these home ranges encompass areas with little to no backcountry recreation. These results provide the first structured and repeatable snapshot of winter recreation in these study areas and will provide an important baseline to access how winter recreation changes over time.

Future efforts conducted with this funding opportunity will further our knowledge of winter recreation activity and will assist both the IDFG and land management agencies in conservation and management planning related to this topic.

**Table 1. The number of cells containing each type of recreation mode observed per each month of our survey in each study area.**
<table>
<thead>
<tr>
<th>Survey Area</th>
<th>Month</th>
<th># of cells with snowmobile tracks</th>
<th># of cells with backcountry ski tracks</th>
<th># of cells with motorized vehicle (truck/ATV/snow-track machine)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBWC</td>
<td>January</td>
<td>65</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>February</td>
<td>87</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>March</td>
<td>130</td>
<td>72</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>282</td>
<td>147</td>
<td>0</td>
</tr>
<tr>
<td>BHM</td>
<td>January</td>
<td>23</td>
<td>9</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>February</td>
<td>62</td>
<td>19</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>March</td>
<td>62</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>147</td>
<td>47</td>
<td>95</td>
</tr>
</tbody>
</table>

Table 2. The number of cells by recreation intensity category observed for each month of our survey in each study area.

<table>
<thead>
<tr>
<th>Survey Area</th>
<th>Month</th>
<th># of cells with 33% positive recreation observations</th>
<th># of cells with 50% positive recreation observations</th>
<th># of cells with 100% positive winter recreation observations</th>
<th>Anomalies</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBWC</td>
<td>January</td>
<td>0</td>
<td>21</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td></td>
<td>February</td>
<td>1</td>
<td>45</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td></td>
<td>March</td>
<td>1</td>
<td>70</td>
<td>119</td>
<td></td>
</tr>
<tr>
<td>BHM</td>
<td>January</td>
<td>2</td>
<td>36</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td></td>
<td>February</td>
<td>2</td>
<td>41</td>
<td>55</td>
<td>1 cell with 67%</td>
</tr>
<tr>
<td></td>
<td>March</td>
<td>1</td>
<td>48</td>
<td>43</td>
<td></td>
</tr>
</tbody>
</table>
Figure 1. Compiled results from backcountry winter recreation surveys in the Nez Perce – Clearwater National Forests conducted in 2020.
7. Discuss differences between work anticipated in grant proposal and grant agreement, and that carried out with Federal Aid grant funds.

Work was conducted as described in the grant proposal and agreement with the exception of us not being able to complete all surveys as proposed due to inclement weather and COVID.
7. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds
   Not applicable.

8. List any publications or in-house reports resulting from this work.


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