

Wallowa Wolverine Project_2011-2012

September-October Progress Report

Winter Camera Stations

In this second year of the study, field work began on 26 September 2011 and by 4 February 2012, we had established 26 camera stations in and adjacent to the Eagle Cap Wilderness in the Wallowa-Whitman National Forest. These 26 camera stations are referred to as the winter camera stations, even though some were still operating into the summer months. Access to camera stations was on foot, horse, snowmobile, ATV, skis, and snowshoes. Ten of the 26 stations were below 6000' elevation (4784'-5820'). The remaining stations were located between 6014' and 7373' elevation. One station was removed (WCAM1) on March 23 because of its proximity to where the wolverine Stormy was trapped in December to prevent habituation of the wolverine to this site. This camera was operable on 100 days since it was deployed but no wolverines were detected.

All but 3 of the 26 camera stations were deactivated by the end of June and 2 by the end of July. We left 1 camera station active (at about 5700' elevation). At this station, Stormy was detected repeatedly during both years and we wanted to determine if he would continue to visit this relatively low-elevation site over the summer and fall. However, the last detection of Stormy at this site was on 2 May 2012 when there was still some snow present. We have visited this station on 5 additional occasions since that date, periodically adding bait and/or scent lure to the site, but the wolverine was not photographed again at the station. An additional camera focused on the ground beneath the run pole has also failed to detect wolverines at the site. This site will be run again in winter 2012-2013.

The 6 camera stations that had wolverine detections in late winter 2011 were reestablished this season and all but 1 were visited by Stormy this winter. The camera station that did not detect Stormy this season was in the West Eagle Creek drainage and was about 2 km south of a new camera station that did detect Stormy, therefore, we know that this male used the southern region of the Eagle Cap in both years. Only 1 camera station in the previous season was visited by a wolverine but not visited by Stormy. This camera station was reestablished this season but was not visited by any wolverine even though it was <2 km from an active station that Stormy did visit this season in the same drainage.

The last date that Stormy was detected at a winter camera station in 2012 was June 17 (Fig. 1). Eleven of the 26 winter camera stations were still active after June 17, but no wolverines were

detected at these stations after this date. The last winter camera station was deactivated on July 26. This station was the same station where Stormy was detected on June 17.



Figure 1. The last photo of Stormy, taken at a camera station on 17 June 2012.

After the last winter camera station was deactivated on July 26, we reviewed the visitation history of Stormy at the camera stations. Even though 21 of the 26 camera stations were deployed by January 2012 (4 in September, 10 in October, 1 in November, and 6 in December), including all but 1 of the stations that had wolverine detections in the 2010-2011 season, the first detection of Stormy at a camera station this season did not occur until January 27. This wolverine was known to be in the study area and in the vicinity of some camera stations at least as early as December 23 (when he was captured in a trap set for bobcats and released).

From January 27 through June 17, Stormy visited 10 of the 26 winter camera stations. He was detected at these stations on 39 days (4 days in January, 4 in February, 4 in March, 10 in April, 14 in May, and 3 in June). The longest interlude between detections at camera stations was 23 days, followed by another gap of 19 days. These 2 long gaps in visitation occurred after Stormy traveled 17.5 km in about 40 hours from the north side of the Wallowa Mountains to the south

side, where he was detected for the first time at a new camera station in West Eagle Creek (WCAM25). He visited this camera on 2 consecutive days, February 12 and 13. After a 19-day gap in detections, he was again photographed on the north side of the mountains at the first station he visited this season. He only made one other visit to WCAM 25, which occurred on May 8, and none of the other 5 cameras on the south side of the mountains had wolverine detections.

At each of the 10 camera stations where he was detected this season, Stormy was photographed on an average of 5.5 days (range 3–8 days) during the period the cameras were active. Some detections were made on consecutive days and others after interludes of 1 to 83 days. Multiple visits (range 2–3) to a particular camera station on a single day occurred 23% of the time. The number of visits is defined by the number of times a wolverine is detected at a camera station with >30 minutes between photographs. Detectable visits to a camera station lasted an average of 9.9 minutes (range 1–51 minutes). Note, however, that not all visits were necessarily detected if the wolverine did not enter the detection zone at the cameras and actual time spent at a camera station cannot be determined for the same reason.

In addition to multiple visits to the same camera station on the same day, Stormy also visited multiple camera stations on the same day. He was detected at multiple camera stations on 31% of the 39 days on which he was detected this season (2 stations per day on 8 days, 3 on 3 days, and 1 on 4 days). The average straight-line distance between 2 cameras visited on the same day was 4.8 km (range 1.5–10.5 km).

Summer Camera Stations

From late June through mid-August, we established 10 new summer camera stations at high elevation sites (7200'–8500') where access in winter would have been difficult and dangerous. Access in summer was on foot and by horse and mule (Fig. 2). Most of these stations were deployed in boulder fields where remnant snowdrifts still lingered at the time the stations were established (Fig. 3). Pieces of bait were placed under boulders or large logs, where they were protected from sunlight. The bait was secured by cables around boulders or trees and scent (beaver castor, perfume, and wolverine urine and gland secretions from captive wolverines) was distributed in the area. The intent of the summer camera trapping effort was to document additional wolverines, in particular females, that may be occupying areas of the Eagle Cap Wilderness that were inaccessible for camera trapping in winter. We retrieved these cameras from late September through mid-October. Total active camera-days for the summer camera stations was 570. For different reasons, 3 of the 10 summer cameras (Reconyx PC800) did not function properly and therefore will not be included in the analysis of summer camera stations.



Figure 2. Access to summer camera stations in the Eagle Cap Wilderness in 2012 was on foot or by horse and mule. Elevations at the stations ranged from 7232 feet to 8458 feet.

No wolverines were detected at the summer camera stations although several other carnivore species were photographed at the stations including black bear, coyote, badger, and marten (Fig. 4). Other species at these stations included elk, mule deer, mountain goat, bobcat, ground squirrel, red squirrel, pika, and chipmunk. At all stations, bone and hide was still attached to the bait cables when the cameras were checked in the fall, but all the meat had been removed. It was not possible to determine all the species that may have fed on the bait, but most baits had not been pulled out from under the boulders by the larger carnivores and there was little evidence of gnawing on bones at most of the stations. Much of the meat was probably consumed by insects and small mammals. Coyotes fed at one of the bait stations where the bait had been placed under snow beneath a fallen tree. Marten were photographed at all the summer camera stations and were probably responsible for removing meat at stations where the bait was still relatively fresh when the marten discovered the bait site.



Figure 3. A boulder field at over 8000' elevation in the Eagle Cap Wilderness where a summer camera station was set up on 25 July 2012.



Figure 4. Black bear at a summer camera station (see Figure 3) in the Eagle Cap Wilderness on 5 September 2012, 6 weeks after the camera was deployed.

Summary of the 2011-2012 Camera Trapping Season

During the period 26 September 2011 through 19 October 2012, 36 camera stations were established in and adjacent to the Eagle Cap Wilderness. Over this 390-day period, we spent 144 days in the field (37% of the trapping period) deploying, checking, and deactivating the camera stations. This time does not include collecting and preparing baits (primarily road-killed deer), purchasing and preparing equipment, downloading and archiving photos, or preparing reports and giving presentations.

The total number of active camera days at the camera stations was 5,340. Only 1 wolverine was detected during this period, compared to 3 wolverines in the 2010-2011 season, which had fewer camera stations and a shorter detection period. The lone wolverine detected in the 2011-2012 season was the male Stormy, also detected the previous season. He was detected on 39 days at 10 of the 36 camera stations. All the detections of this wolverine occurred between January 27 and June 17, 2012.



A detailed final report covering both seasons of camera trapping and aerial tracking will be available by the end of December 2012. At this time, we are planning to continue operating some of the winter camera stations in the Eagle Cap Wilderness to determine if the wolverine Stormy is still occupying the study area for a third winter.

Submitted by:

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