

Boise National Forest SCA Corps

Team 2009

Hitch Report

Hitch 1: Lowman Ranger District 9/10-9/18

The team's first hitch of the season was on the trails in the Lowman Ranger District, seventy five miles north of Boise on Hwy. 21.

We started out on the Link Trail, off of the Warm Springs trail, at mile 93 on Hwy. 21. We built a switchback around three quarters of a mile in from the trailhead on this multiple use trail that sees heavy motorcycle traffic. The switchback involved constructing two retaining walls, one below the upper portion of tread coming down into the turn, and one below the lower portion of tread, coming down out of the turn. We then filled out the tread of the switchback with crushed rock and fine mineral soil to make a turning platform considerably flatter than the prevailing grade. We then installed a rock-reinforced reverse grade dip above the switchback to aid in drainage and reduce the maintenance necessary on the switchback in coming years. All material was found on site.

We then moved to tread and drainage work on the lower portion of the Link Trail. We reestablished an out-sloping bench-cut on approximately one hundred yards of the trail that traverses the hill immediately around the switchback and that had turned into a ditch. We then built nine more rock-reinforced reverse grade dips, one further above the switchback, and eight more below the switchback, covering the entire slope down to the Warm Springs Trailhead.

We then traveled on Rts. 582, 510, and 503 to the Deadwood Ridge Trail, where we hiked two miles North and established a camp in Whitehawk Basin.

There we installed two checks in a small slope just above Whitehawk Creek.

We then received dimensional lumber in a helicopter airdrop to build Puncheon in four locations in the meadow just across Whitehawk Creek. The Puncheon was built in all locations using native sills, sixteen foot, four by six inch stringers spaced twenty nine inches with thirty six inch decking and four by four bull rails with drains installed every thirty two inches. The lengths were sixteen feet, thirty two feet, forty eight feet, and sixteen feet, for a total of 112 feet.



(Puncheon site before construction)



(Completed puncheon, sixteen feet)



(Completed puncheon, thirty two feet)

Lowman Hitch One Totals

Rock-Reinforced Grade Dips Installed (#)	9
Timber Checks Installed (#)	2
Rock Walls Built (#)	2
Rock Walls Built (Feet)	10
Dimensional Lumber Bridges (#)	4
Dimensional Lumber Bridges (Feet)	112
Total Trail Structures Built (#)	17
Tread Restoration (Feet)	500
Service Provided (Hours)	552
Public Contacted (#)	15

Hitch 2: Lowman Ranger District 9/24-10/02

Our second hitch was a backcountry hitch located in Lowman, two miles south of FS Road 503. Our worksite was approximately a mile from where camp was set up on the side of 503.

The work we completed on this hitch was centered around drainage and more rustic timber construction. For the first two days of the hitch the crew engaged in a forest service chainsaw training that was composed of both a classroom and field component. Chainsaw experience in the field was continued throughout the duration of the hitch, and all crew members received either an A faller or B faller restricted certificate.



Our first project was a timber check at the shore of a stream crossing through the trail. We set two logs in the soil as the checks and created a gradual ramp with crush, larger rocks and mineral soil. We further reinforced the structure by using rebar to join the two pieces of lumber and to anchor them into the ground.



In the second project we installed a culvert to channel the path of runoff from the steep hill on one side of the trail to the creek on the other side. First we dug a trench for the culvert and ditches at either side of the culvert to direct the flow of the water through the culvert. We reinforced the walls of the ditches with logs 9 ft. in length and placed a 10 ft. plastic culvert in the trench. Then we secured the logs with rebar and supported the walls of the culvert with rocks. Then crush, larger rocks and fill dirt were placed on top of the geo-textile until the tread was even and compact.



The third project was maintaining a pre-existing drain. The drain consisted of a trench which collected run-off and diverted its path through a gutter. The gutter was formed out of two pieces of lumber lain parallel to each other (but perpendicular to the trench) with a 2 inch space between them to allow for water flow. We dug out a 45 degree angle into the hillside to prevent clogging of the drain, placed stones on each end to support the trench walls and filled the tread with mineral soil.



(Before construction at the site of the final two culverts)



(Drain for a spring at the head of one of the culverts)



(Culvert with rock drain after completion)



(One of the final two culvert sites after construction)



(Check and fill)

We completed two other culverts and one more area of check and fill.

We finished our hitch with a puncheon and a turnpike. We rerouted a small section of the Deadwood Ridge Trail and completed a puncheon with stringers and bull rails made of native lumber. The puncheon was 24 ft. long and 3 ft. wide. We also constructed a turnpike, with the same dimensions, to encourage drainage. Surrounding pine served as the retaining walls and end caps and then held in crush, rocks and mineral soil.



(Turnpike and Puncheon, finished)

Lowman Totals

	Hitch 1 (Lowman)	Hitch 2 Lowman)	Lowman Totals	
Blowdowns Removed (#)	0	1	1	
Rock-Reinforced Grade Dips Installed (#)	9	1	10	
Timber Checks Installed (#)	2	1	3	
Culverts Installed (#)	0	4	4	
Culverts Installed (Feet)	0	40	40	
Rock Walls Built (#)	2	0	2	
Rock Walls Built (Feet)	10	0	10	
Turnpikes (#)	0	1	1	
Turnpikes (Feet)	0	22	22	
Dimensional Lumber Bridges (#)	4	1	5	
Dimensional Lumber Bridges (Feet)	112	22	134	
Total Trail Structures Built (#)	17	8	25	
Tread Restoration (Feet)	500	0	500	
Service Provided (Hours)	552	489	1041	
Public Contacted (#)	15	4	19	

Hitch 3: Cascade Ranger District 10/8-10/16

Our third hitch was in the Warm Lake area of the Cascade Ranger District. We worked on the Firefighters Memorial Trail where we removed a blow-down from a streambed and installed a quarter-mile reroute. The blow-down took most of our first day, and the remaining eight were dedicated to the reroute, which included a sixty-foot rock retaining wall and five rock-reinforced reverse grade dips. Videos of the previous trail, the reroute site before improvement, and the new trail are available on the main page of our website.



(Rock retaining wall on the reroute)



(Rock retaining wall)



(One particularly challenging section of the reroute)

Cascade Totals

	Hitch 3 (Cascade)	
Trail Constructed (Feet)		1200
Blowdowns Removed (#)		24
Rock-Reinforced Grade Dips Installed (#)		5
Rock Walls Built (#)		1
Rock Walls Built (Feet)		60
Total Trail Structures Built (#)		6
Service Provided (Hours)		457
Public Contacted (#)		14

Hitch 4: Mountain Home Ranger District 10/22-10/30

We worked outside of Prairie, ID in the Mountain Home district for our fourth hitch. It was a straightforward project rehabilitating the tread on trail 642 off of Woods Lane. We were able to complete around 7000 feet of tread, taking a ten inch rut that had formed from years of dirt-bike use, and turning it into a 24-36 inch tread, out-sloped to shed water. Our section of trail included an 18 foot rock retaining wall and a 120 foot reroute to help maintain a steady grade on the trail.



(Walking on the finished tread)



(Unimproved tread)



(Before and after improvement)



(Trail after improvement)

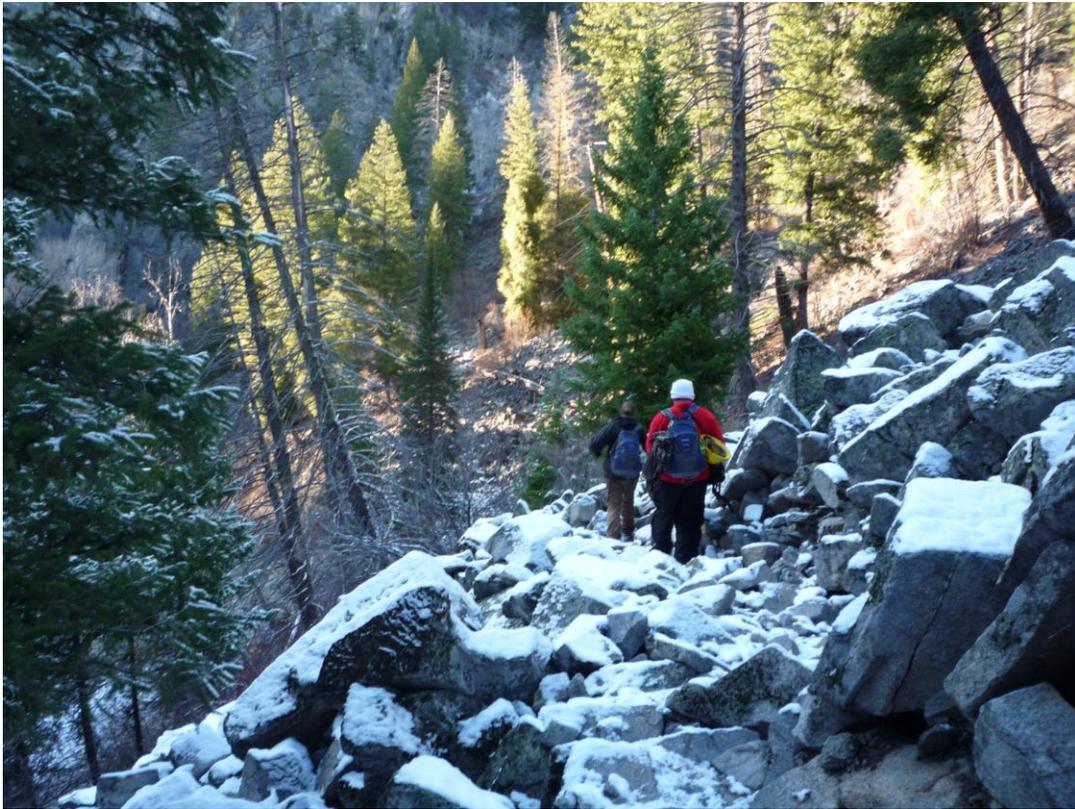
Mountain Home Totals

	Hitch 4 (Mountain Home)	
Trail Constructed (Feet)		120
Rock-Reinforced Grade Dips Installed (#)		3
Rock Walls Built (#)		1
Rock Walls Built (Feet)		18
Total Trail Structures Built (#)		4
Tread Restoration (Feet)		7000
Service Provided (Hours)		513
Public Contacted (#)		25

Hitch 5: Idaho City Ranger District 11/05-11/12

For our fifth and final hitch we worked on the North Fork Boise River Trail, thirty miles outside of Idaho City. The North Fork Trail is a hiking and stock trail that has road access on either end of its nine mile length. The trail is routinely maintained for a few miles from either end, so our focus was the middle section of the trail rarely receives attention.

Our work involved removing blowdowns from the trail, brushing mountain maple that had grown over the trail, and reestablishing tread through scree slopes. We reopened six kilometers of trail that was previously often impossible to follow. We documented a typical section of work on this trail with a before and after video on the main website.



(Trail carved into the talus).

Idaho City Totals

	Hitch 5 (Idaho City)
Trail Constructed (Feet)	45
Blowdowns Removed (#)	47
Tread Restoration (Feet)	19685
Service Provided (Hours)	347.5

Project Totals, September 3- November 12, 2009

	Hitch 1 (Lowman)	Hitch 2 (Lowman)	Hitch 3 (Cascade)	Hitch 4 (Mountain Home)	Hitch 5 (Idaho City)	Totals
Trail Constructed (Feet)	0	0	1200	120	45	1365
Blowdowns Removed (#)	0	1	24	0	47	72
Rock-Reinforced Grade Dips Installed (#)	9	1	5	3	0	18
Timber Checks Installed (#)	2	1	0	0	0	3
Culverts Installed (#)	0	4	0	0	0	4
Culverts Installed (Feet)	0	40	0	0	0	40
Rock Walls Built (#)	2	0	1	1	0	4
Rock Walls Built (Feet)	10	0	60	18	0	88
Turnpikes (#)	0	1	0	0	0	1
Turnpikes (Feet)	0	22	0	0	0	22
Dimensional Lumber Bridges (#)	4	1	0	0	0	5
Dimensional Lumber Bridges (Feet)	112	22	0	0	0	134
Total Trail Structures Built (#)	17	8	6	4	0	35
Tread Restoration (Feet)	500	0	0	7000	19685	27185
Service Provided (Hours)	552	489	457	513	347.5	2358.5
Public Contacted (#)	15	4	14	25	0	58