

DENALI NATIONAL PARK AND PRESERVE

CENTRAL ALASKA NETWORK

Vegetation Monitoring Program

Summary Trip Report: Gorge Creek Mini-grid

16 July to 22 July, 2007



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PURPOSE:

The purpose of this trip was to resample the permanent Gorge Creek mini-grid that was previously sampled in July of 2002. We followed the protocols established for the Central Alaska Network (CAKN) vegetation monitoring program. We were able to sample two points that had not been sampled previously. However, five points were still inaccessible.

PERSONNEL:

Carl Roland – Crew leader, vascular plant collections and identification, metaplot, solar charging and tablet maintenance, observations and plot navigation
Peter Nelson - non-vascular collections and identification, gps, plot photographs, crew leader
Nikki Grant-Hoffman – soil observations and collections, tree coring and solar charging and tablet maintenance
Fleur Nicklen – vascular plant collections and identification

ACCESS TO MINI-GRID AND CAMPING POSSIBILITIES:

Access to the Gorge Creek mini-grid is easy from the park road. We began hiking from about a mile east of the visitor center. We had two hikers helping us with gear and the hike took about an hour. The hike itself was easy; it was mostly flat except for a steep bit hiking into the Gorge. We camped in the Gorge which allowed us to be out of sight of the road and while we had to hike out of the Gorge each day, we did not have to hike both in and out of the Gorge! Water was abundant both in and out of the Gorge. Also, good sized (6 or 8in) grayling were seen in the creek on several occasions and pika were often seen around our camp area.

HIKING:

As noted in the 2002 trip report much of the walking in this grid is easy tundra walking. However, there is a good bit of ascending and descending, ridge walking, and some scree slopes. The hiking was a combination of tundra walking which was fairly easy, ridge walking which was easy once we got to the ridge, but required fairly long and steep hikes to get up to the ridge. There was also a lot of steep walking to get to in and out of the gorge and walking along the gorge on loose rocks. Finally, we crossed the creek several times a day which required wet feet, or using a pole to cross along rocks.

WEATHER AND ENVIRONMENTAL CONDITIONS:

Overall the weather was good for this trip, we rarely had rain. We did have some low clouds which made visibility poor at some of the higher points.

SAFETY CONSIDERATIONS:

Our main safety consideration was the steep, loose terrain. Climbing in and out of the Gorge and ascending and descending to the ridges or to certain points was often on steep,

occasionally talus slopes. While the first crew to visit this mini-grid reported seeing 9 bears, we saw none. We did see plenty of caribou and we did see bear signs many times and bears are certainly a concern at this mini-grid.

GENERAL NOTES ON PLOT-WORK AND PLOT OBSERVATIONS:

In addition to the notes about points in the 2002 report we completed points 3 and 6. Point 3 had very loose and large rocks. We accessed this point by walking up a ridge and descending to the point. Point 6 was accessed by crossing the gorge at a steep but vegetated place.

Table 1. Points of Concern (*see appendix 1*)

Point	Concern
3	Large, loose rocks with lots of lichens on them. Not very stable, difficult to walk on and very slippery when wet. You also have to walk down and up these rocks to reach this point. Best to stay on the ridge and then drop down to minimize rock walking (Photo 1).
10	Up the gorge, north transect is on a rock face and was not sampled. Also the east transect is on a steep slope with lots of gravel and walking is not possible without creating lots of disturbance. This point is most easily accessed by hiking up the gorge (Photo 2).
13	Located in an avalanche gully. Not terribly steep, but interesting (Photo 3).
19	Steep drop off on north transect (Photo 4).

Table 2. Inaccessible points

Point	Reason for not sampling
4	Peter and Fleur hiked up the ridge to attempt this point. They found the slope very steep with loose rocks and boulders. The plot itself is not safe to sample.
1	Not attempted; on steep scree slope
7	Not attempted; on steep scree slope
8	Not attempted; on steep scree slope

Table 3. Points sampled during only one of two sampling periods (*see appendix 2*)

Point	When sampled	Notes
6	2007	Plot landed on edge of plateau leading into rocky talus drainage (Photo 5).
3	2007	Very loose and large rocks. There were not many vascular plants or mosses at this point; however, lots of lichens were present. Move very carefully in this plot and its best done on a dry day (Photo 1).
21	2002	Not sampled to minimize damage to plot. ‘On steep scree slope, accessed by nasty side-hill across scree slope. <i>Summary Trip Report: Gorge Creek Mini-grid 2002</i> ’
22	2002	Not sampled to minimize damage to plot. ‘Located on steep scree slope below cliffs, one section within plot was very prone to sliding. <i>Summary trip report: Gorge Creek Mini-grid 2002</i> ’

Table 4. Collection series for the Gorge Creek mini-grid.

Collector	Identifier	Series
Roland		CR07-027- to CR07-045;
Nicklen	Vascular plants	EFN07-102 to EFN07-131
Nelson	Digital Photos	145-4548 to 148-4875 PN07-310 to PN07-497; PN07-744 to
Nelson	Nonvascular collections	PN07-745; PN07-747 to PN07-753
Grant-Hoffman	Soils	2,3,6,17 full samples
Grant-Hoffman	Tree cores	No trees

ACTIVITIES:

Monday, July 16

Today we packed up our packs for our hike in. Wendy and one back country ranger (Jess) are helping us hike our gear out. After a 3 hour drive we parked on the side of the road about a mile away from the visitor center. We hiked to the Gorge where we went to the fork to hike down. We camped where the Gorge is wider just *south of* the fork, out of site from the road. After setting up camp we hiked to point 17 and then back to camp.

Tuesday, July 17

Today we finished 4 plots, 12, 11, 16 and 18. These were all of the plots to the east of camp so we won't need to hike up that area of the Gorge again! We had several creek crossings on today's hike out. There was a new bear dig in point 11 quadrat C. The quadrat photos were mixed up for several of the quadrats; however, in all cases we were able to match the quadrats and transects up using the photos.

Weather: We had great weather today, we could see thunderstorms to the west but we did not get rain.

Wednesday, July 18

Today we again did 4 points, 15, 14, 13, and 19. We also had a great view of the mountain from this point, it was a clear morning. Point 19 was just above where we camped (*see appendix 1*). At point 15 we saw ptarmigan and ground squirrels. The monument and bar were out of the ground and down slope at point 15. Point 14 was in a boulder field with lots of flies. There was a marmot just outside of plot 19 watching us. Also from point 19 we saw pika near our camp.

Weather: Good weather today, very clear in the morning and no rain.

Thursday, July 19

Today we again completed 4 plots, 23, 24, 25, and 20. At points 20, 24 and 25 the monuments had been moved in some way. At point 24 the stake was missing but the

monument was still present. The monument had marks on it, possibly teeth marks. At point 25 the monument was off of the stake and the stake was out of the ground with no marks on it. At point 20 the monument and stake were out of the ground with teeth marks on both. We saw 8 hikers along the far ridge.

After seeing several monuments and stakes moved in some way we have decided that the bears in the area may be investigating them. From the previous pictures it seems that the monuments were left several inches out of the ground and we think the bears have been chewing on them. To try to prevent this from happening again we have been putting the monuments almost flush with the ground so they are not so obvious. This may make them more difficult to find during the next sampling, but hopefully will keep bear disturbance to a minimum

Weather: It was overcast, but no rain.

Friday, July 20

Today we completed 3 points, 2, 3 and 9. We had a long uphill hike to begin the day. We hiked up the ridge leaving camp at 0815 and arriving at point 2 at 1030. We followed a sheep trail up and across the ridge, and walking was not too difficult once we got on top of the ridge. On the hike up we saw a golden plover and ptarmigan. There were low clouds this morning which made visibility during the hike poor, these points would be better done on a clear day. Point 2 was on a rocky slope and was fairly quick to sample. Point 3 had lots of loose, big rocks with little vegetation, and mostly lichens. It was raining at this point which made the rocks very slippery. We're not sure how stable this area is and if the monument will be there in 5 years! Point 9 was flat and easy, a nice end to our day! At point 9 four hikers came walking up the drainage as we were working. They camped just above point 9.

Weather: Today was overcast most of the day, with light rain on occasion.

Saturday, July 21

Today we hiked out of the Gorge and up to the bench attempted point 4 and completed points 5 and 10. We then had a nice relatively flat hike around the bench. We started the day with Peter and Fleur hiking up to attempt point 4, which was not able to be sampled. They hiked up the ridge dropping into the basin (not visible from below) just before the large rocks on the ridge. The basin is scree and steep and point 4 is not safe to sample. We then moved to point 5 where the monument was missing but the stake was in the ground and had been chewed. There is a social trail just below point 5. We also saw a caribou running through the meadow below this point. We used the monument we had brought for point 4 to replace the missing one and we scratched out the number. This point is a mixture of rocks and vegetation and we found that there had been a lot of movement of the rocks since the last sampling. Many big rocks from previous pictures were moved or no longer found. At point 10 the monument was shallowly buried by sliding gravel.

Weather: Today was beautiful weather, partly cloudy and warm!

Sunday, July 22

Today, Peter and Fleur hiked to point 6 and completed it. To get to point 6 they hiked out of the gorge and then south east along the flatter tundra, crossed the gorge at a steep but vegetated area and then hiked up to point 6. I stayed at camp and began hiking things to the road and entering data. They used the old stake from point 5 at point 6 and the monument would not grip the stake and it is loose. We met James around 1530 and left for the Upper moose creek mini-grid.

Weather: Partly cloudy with an odd cold mist that moved through mid-morning. Then clearing and warm in the afternoon.

CONCLUSION AND FUTURE CONSIDERATIONS:

Appendix 1 – Points of concern

Point #3 - This picture makes this plot look much tamer than it seemed at the time! This is looking south. Large, loose, lichen covered rocks make this plot slippery and unstable.



Photo 1. Point 3 looking south.



Photo 2. Looking north east at the plot 10 from about 10 meters outside of the plot.



Photo 3. Point 13 looking east from edge of slide.



Photo 4. Point 19 - Looking north from plot center. The campsite is visible in the top left corner of the picture (northwest of point 19).

Appendix 2 – New points sampled in 2007 (also see photo 1 of point 3)



Photo 5. Point 6 looking northeast from a distance.

Appendix 3 – Maps of the area



