

YUKON-CHARLEY RIVERS NATIONAL PRESERVE

CENTRAL ALASKA NETWORK

Vegetation Monitoring Program

Summary Trip Report: Chester Bluff Mini-grid

19 July - 28 July, 2006



Figure 1:(pt 20) Typical white spruce forest with moderately thick understory at Chester Bluff

Lead Author: Jay Scelza
Contributor: Brian Dykstra

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Note: This report was written retrospectively in August, 2007 by Jay Scelza. This report was either not written in 2006 or lost. No notebooks were available for viewing from the 2006 season as they have been lost or taken out of the office and not returned, therefore this report is partially incomplete and written mainly from memory using the 2006 maps, photos, and data recorded in the database.

PURPOSE:

The purpose of this trip was to install permanent vegetation plots and to collect vegetation data at the Chester Bluff mini-grid study area according to the protocols established for the Central Alaska Network (CAKN) vegetation monitoring program. We accomplished sampling protocols at 17 of the 25 sample points in this mini-grid.

PERSONNEL:

B. Luke Bruner – crew leader, soil and non-vascular plant data collection
Brian J. Dykstra – transects, photography and vascular plant data collection
Jay D. Scelza – transects, tree and sapling, tree coring and non-vascular plant collection

ACCESS TO MINI-GRID AND CAMPING POSSIBILITIES:

A combination of vehicle, fixed-wing aircraft, and boat transport was used to access this mini-grid. Two members of the crew (Jay Scelza and Brian Dykstra), boat pilot (Fisheries Biologist, Fred Anderson) and a co-pilot (Mike ?) left Fairbanks in a truck towing the NPS boat out of the Fairbanks office, headed for Circle. The boat was launched and loaded in the early afternoon at the boat launch in Circle. The boat carried all the sampling gear (minus the tablet PC), camping gear and water (7, 5-gallon cubitainers) necessary for the sampling trip. Luke Bruner flew in to Coal Creek Camp via Wrights Air Service carrying the Tablet PC and personal gear and met the crew at Slaven's Roadhouse in the afternoon. This was due to fuel-weight issues and could potentially be avoided in the future. The crew then transferred the gear onto another boat out of Eagle, piloted by two maintenance employees out of Eagle who were heading up river that day. Since the bluffs are too steep to climb, and extend all the way to point 4 the camp was located just southwest of point 4, as close as possible to the bluffs and the center of the mini-grid.

HIKING:

Hiking to points across the grid took a long time due to thickness of vegetation in the understory, mostly consisting of *Picea* saplings, *Salix bebbiana* and *Alnus viridis*. Some of the points were in the opposite corner of the mini-grid, over a mile away from the camp location. It is advised to start early in the day to accomplish sampling at Chester Bluff due to the increased hike times. Heavy duty, waterproofed, leather boots are recommended, while rubber boots are not necessary. There was very little need for them, even on rainy days. Lightweight, comfortable shoes such as cros, sandals or running sneakers and dry socks are recommended for use after getting to the points on drier days.

WEATHER AND ENVIRONMENTAL CONDITIONS:

The weather during this sampling trip was a mix of everything from hot and dry (seldom) to cold and wet. It rained often, but not generally heavy, with precipitation frequent in the beginning of the trip. This caused mosquitoes to be particularly relentless, as was usual

during this wet summer. However, it is advisable to carry sunblock at all times because the weather could turn sunny and hot at any time. Bug repellent and a mesh head covering are also highly recommended. Specific temperature and weather data were not available for review for this report due to missing field notebooks. Fires and smoke were a problem in 2007, resulting in an emergency evacuation from one point. Checking with the fire managers at YUCH frequently prior to field work and keeping communications open with them is very important.



Figure 2: a large animal den in the metaplot at point 14, entrance around 40 cm diameter.

SAFETY CONSIDERATIONS:

Hiking through dense vegetation is probably the most dangerous aspect of this sampling location. The bluffs are sandy-loamy and very loose so care must be taken if using the slope to access the river when returning from the grid points. Black bear sign was often seen in the mini-grid including fresh scat loaded with berry seeds. While coring trees at point[??] a black bear walked into the plot and was spotted raising his head and sniffing at the air from a distance of 10 meters from one of the crew members who raised his hands and began to shout at the bear. After the other crew members joined in, making lots of noise and waving arms, the bear slowly retreated about another 10 meters back into the alder, where it appeared to sit and wait for a while. The crew returned to working on the last few data collection from the plot, and did not notice the bear return to that close distance again. It is assumed that the squeeking sound of the corer attracted the bear to our location.

PHENOLOGY OBSERVATIONS:

Boschniakia rossica occurred in fairly large numbers within this grid, fairly regularly within *Picea glauca* seed cone piles created around the large squirrel middens common in this grid. Bears are known to dig the roots of this plant and there was ample evidence of this. The shady aspect of this grid meant less observable flowering phenology. At the time of our grid sampling large mushrooms were relatively abundant, including a *Hericium* growing on tress/wood. Along the shore of the Yukon River *Hedysarum mackenzeei* and *Hedysarum alpinum* among various other forbs were blooming and going to seed.



Figure 3: A combination of live and dead, arching and fallen *Salix bebbiana* and *Alnus viridis*, over-storied by maturing spruce forest frequently results in these fence-like thickets at Chester Bluff.

GENERAL NOTES ON PLOT-WORK AND PLOT OBSERVATIONS:

In general the plots took about 3-5 hours to complete. In the thickly vegetated plots the sampling times were increased due to maneuvering around among the vegetation and the abundant tree and sapling data. The most time consuming aspect being the vascular and non-vascular collecting and abundances. Occasionally there were trees to core. Sampling three points in a single day occurred only once during the sampling trip, and then it was close to camp and during a long day.

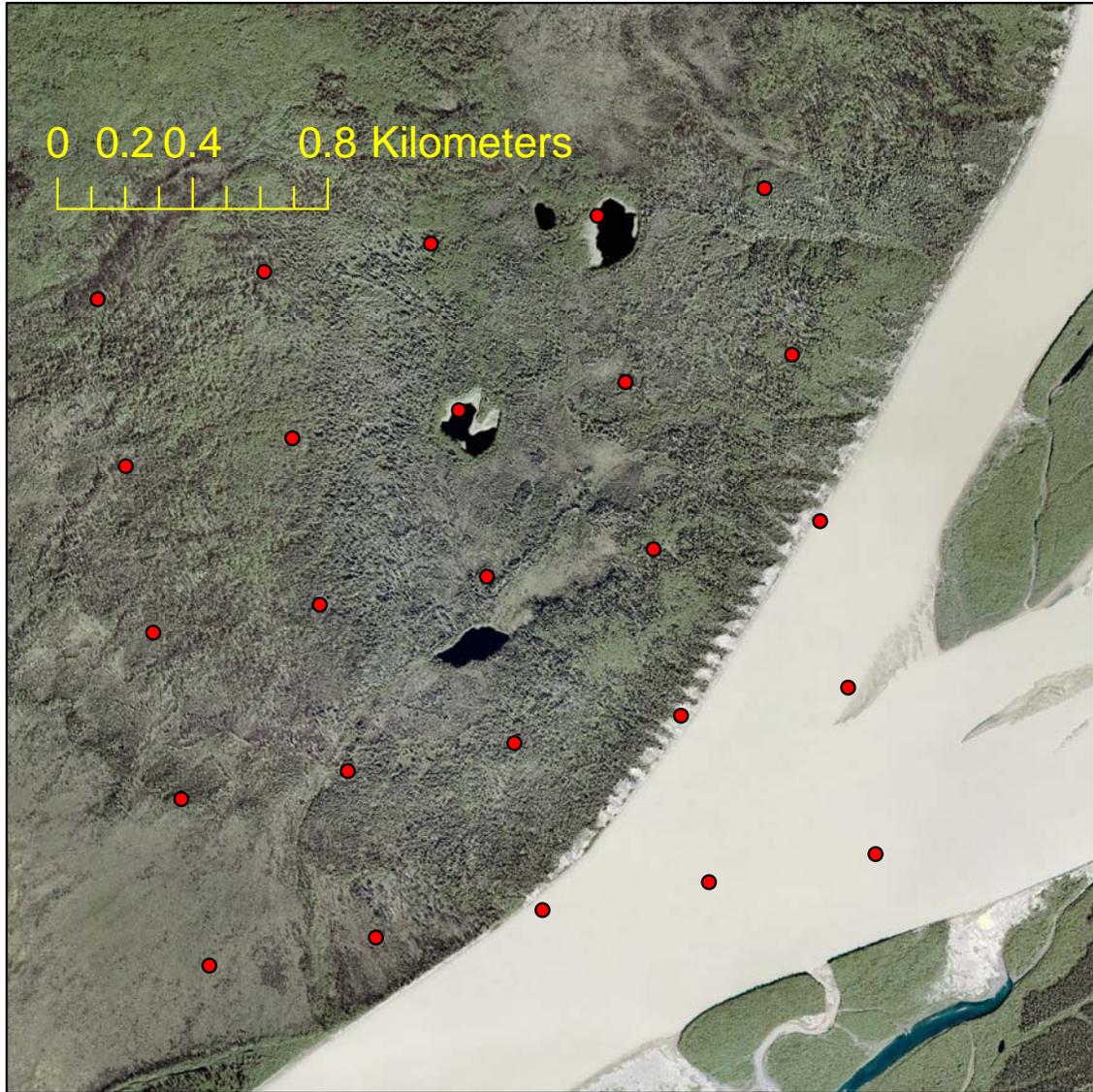
ACTIVITIES:

Table 1. Date Chester Bluff points completed.

mini-grid point	Date Completed
CB1	N/A, point in Yukon R.
CB2	N/A, point in Yukon R.
CB3	N/A, point in Yukon R.
CB4	7/25/06
CB5	7/19/06
CB6	N/A, point in Yukon R.
CB7	N/A, point in Yukon R.
CB8	7/25/06
CB9	7/25/06
CB10	7/20/06
CB11	N/A, point in Yukon R.
CB12	7/26/06
CB13	7/26/06
CB14	7/21/06
CB15	7/20/06
CB16	7/27/06
CB17	7/24/06
CB18	N/A, point in pond
CB19	7/22/06
CB20	7/21/06
CB21	7/27/06
CB22	N/A, point in pond
CB23	7/23/06
CB24	7/23/06
CB25	7/22/06

CONCLUSION AND FUTURE CONSIDERATIONS:

The sampling at Chester Bluff was generally smooth and without incident. Alternatively the future crew leader could be trained to become a boat pilot and ideally the crew could have exclusive use of a shallow-draw boat for the summer. This would save having to coordinate with other personnel which was problematic on several occasions in 2006 and cut short the sampling time.



Map 1. Chester Bluff mini-grid