Selection of sites for bryophyte sampling

FSU

August 31, 2016

Summary of Analysis

For all sites presented in this report, except UNDERC (details below), data used for analysis of bryophyte abundance came from site characterization diversity surveys conducted within vegetation plots located in the NEON tower airshed. For each plot surveyed, percent cover of mat-forming bryophytes was estimated at each of 8 $1m^2$ sampling areas.

The first table in each site specific section below indicates whether a site qualifies for bryophyte sampling. A qualifying site must have a mean percent cover of 20% bryophytes across all plots; if this threshold is not met, implementation of the bryophyte protocol will not occur at the specified site.

If a site qualifies (i.e., result = "sample"), each plot surveyed is assessed for bryophyte abundance. A plot with $< 20\%$ bryophyte cover is disqualified from sampling (sampleBry = "no"), and plots with $\geq 20\%$ bryophyte cover are accepted (sampleBry = "yes").

Treehaven (TREE)

site	numPlots	numMoss	expectedNumMoss	meanMoss	result
TREE	20	150	160	4.6	don't sample

UNDERC (UNDE)

Site characterization was conducted according to a differen protocol than was utilized for all other sites in this report, percent cover of moss was recorded in diversity sureveys of tower plots. Anaysis of moss abundance has been completed on 2015 diversity sampling bout. These results represt estimated moss abundence across the entire site rather than just within the Tower airshed.

site	numPlots	numMoss	expectedNumMoss	meanMoss	result
UNDE	31	216	248	24	sample

plotID	count	meanMoss	sampleBry
UNDE_037	4	18.1	No
UNDE_038	8	58.4	Yes
UNDE_043	7	2.7	No

Steigerwaldt Land Services (STEI)

site	numPlots	numMoss	expectedNumMoss	meanMoss	result
STEI	17	134	136	2.6	don't sample

Healy (HEAL)

site	numPlots	numMoss	expectedNumMoss	meanMoss	result
HEAL	30	238	240	51	sample

plotID	count	meanMoss	sampleBry
HEAL_045	7	29.9	Yes
HEAL_046	8	65.9	Yes
HEAL_047	8	25.8	Yes
HEAL_048	8	12.6	No
HEAL_049	8	34.6	Yes
HEAL_050	8	44.8	Yes
HEAL_051	8	73.8	Yes
HEAL_052	8	62.5	Yes
HEAL_053	8	64.0	Yes
HEAL_054	8	57.1	Yes
HEAL_055	8	22.6	Yes
HEAL_056	8	57.5	Yes
HEAL_057	8	71.8	Yes
HEAL_058	8	54.4	Yes
HEAL_059	8	50.0	Yes
HEAL_060	8	43.4	Yes
HEAL_061	8	42.4	Yes
HEAL_062	8	65.5	Yes
HEAL_063	7	59.0	Yes
HEAL_064	8	54.5	Yes
HEAL_065	8	46.0	Yes
HEAL_066	8	43.7	Yes
HEAL_067	8	50.2	Yes
HEAL_068	8	57.6	Yes
HEAL_069	8	58.2	Yes
HEAL_070	8	24.4	Yes
HEAL_071	8	24.9	Yes
HEAL_072	8	73.2	Yes
HEAL_073	8	75.8	Yes
HEAL_074	8	81.9	Yes

Delta Junction (DEJU)

site	numPlots	numMoss	expectedNumMoss	meanMoss	result
DEJU	20	159	160	40.6	sample

plotID	count	meanMoss	sampleBry
DEJU_045	8	1.6	No
DEJU_046	8	37.6	Yes
DEJU_047	8	71.2	Yes
DEJU_048	8	68.8	Yes
DEJU_049	8	62.5	Yes
DEJU_050	8	20.8	Yes
DEJU_051	8	69.1	Yes
DEJU_052	8	1.1	No
DEJU_053	8	61.4	Yes
DEJU_054	8	43.7	Yes
DEJU_055	8	21.7	Yes
DEJU_056	8	0.8	No
DEJU_057	8	40.6	Yes
DEJU_058	8	74.4	Yes
DEJU_059	8	10.0	No
DEJU_060	7	82.3	Yes
DEJU_061	8	10.3	No
DEJU_062	8	48.8	Yes
DEJU_063	8	61.0	Yes
DEJU_064	8	30.0	Yes

Toolik Lake (TOOL)

site	numPlots	numMoss	expectedNumMoss	meanMoss	result
TOOL	30	236	240	54.8	sample

plotID	count	meanMoss	sampleBry
TOOL_046	8	63.1	Yes
TOOL_047	8	61.2	Yes
TOOL_048	8	56.9	Yes
TOOL_042	8	57.5	Yes
TOOL_049	8	56.9	Yes
TOOL_050	8	58.8	Yes
TOOL_051	8	55.0	Yes
TOOL_052	8	60.0	Yes
TOOL_053	8	65.0	Yes
TOOL_054	8	71.9	Yes
TOOL_055	8	62.5	Yes
TOOL_056	8	39.4	Yes
TOOL_057	8	46.2	Yes
TOOL_058	8	43.2	Yes
TOOL_059	8	76.2	Yes
TOOL_060	8	66.2	Yes
TOOL_061	6	44.7	Yes
TOOL_062	8	62.5	Yes
TOOL_063	8	61.0	Yes
TOOL_064	8	46.9	Yes
TOOL_065	8	55.6	Yes

plotID	count	meanMoss	sampleBry
TOOL_066	7	30.3	Yes
TOOL_067	7	53.9	Yes
TOOL_068	8	57.5	Yes
TOOL_069	8	23.6	Yes
TOOL_043	8	63.8	Yes
TOOL_070	8	73.1	Yes
TOOL_044	8	63.1	Yes
TOOL_041	8	20.6	Yes

Caribou Creek - Poker Flats Watershed (BONA)

Site characterization has not yet been completed at this site. Analysis for bryophyte abundance and recommendations for sampling will be completed once data are avalilable.

Barrow Environmental Observatory (BARR)

site	numPlots	numMoss	expectedNumMoss	meanMoss	result
BARO	30	240	240	57.4	sample

plotID	count	meanMoss	sampleBry
BARR_062	8	76.0	Yes
BARR_063	8	32.9	Yes
BARR_053	8	79.4	Yes
BARR_051	8	30.5	Yes
BARR_064	8	78.8	Yes
BARR_065	8	71.0	Yes
BARR_066	8	40.0	Yes
BARR_067	8	83.8	Yes
BARR_068	8	33.9	Yes
BARR_069	8	48.8	Yes
BARR_070	8	81.9	Yes
BARR_071	8	61.5	Yes
BARR_072	8	69.4	Yes
BARR_073	8	50.8	Yes
BARR_074	8	33.2	Yes
BARR_075	8	59.0	Yes
BARR_076	8	42.5	Yes
BARR_077	8	79.2	Yes
BARR_054	8	48.1	Yes
BARR_078	8	48.6	Yes
BARR_079	8	47.5	Yes
BARR_080	8	98.8	Yes
BARR_055	8	84.5	Yes
BARR_056	8	77.2	Yes
BARR_057	8	27.2	Yes
BARR_052	8	43.1	Yes

plotID	count	meanMoss	sampleBry
BARR_058	8	20.2	Yes
BARR_059	8	53.8	Yes
BARR_060	8	54.5	Yes
BARR_061	8	65.0	Yes