

Table 5. Soils data for Toolik lake permanent plots

Sample No.	Plot No.	Horizon	Depth (cm)	Wet color	Bulk density (g/cc, 1/240)	% Gravel >2mm	% Sand	% Silt	% Clay	Texture	% Water	% Water	% Water	% OM
											Field	1/3 atm	15 atm	
T-001	SWT-1	Oa	0 - 10	7.5YR 2/2	0.57		##	##	##	##	114.7	##	##	37.3
T-002	SWT-1	A	10 - 20	10YR 3/2	1.55						21.8			
T-003	SWT-2	A1	0 - 10	7.5YR 2/2.5	1.06	56	94	1	5	S	8.0	##	##	4.7
T-004	SWT-2	A2	10 - 46	10YR 2.5/3	0.81	4	76	13	11	SL	45.2	##	##	6.5
T-005	SWT-3	Oa2	4 - 18	7.5YR 2/2	0.20		##	##	##	##	248.9	##	##	69.6
T-006	SWT-4	Oi			0.15		##	##	##	##	217.5	##	##	23
T-007	SWT-4	C			-						-			
T-008	SWT-5	Oa	0 - 8	7.5YR 2/2	-		****	****	****	****	-	##	##	46.3
T-009	SWT-5	Bw	8 - 12	7.5YR 4.5/4	-	22	54	35	11	SL	-	##	##	6
T-010	SWT-5	Bw2	12 - 39	7.5YR 4.5/6	-	67	70	14	16	SL	-	##	##	3.8
T-011	SWT-5	C	39 - 45+	10YR 3/4	-	54	84	8	8	LS	-	##	##	2.6
T-012	SWT-6	Bg	3 - 30+	7.5YR 2/3	0.60		##	##	##	##	91.5	##	##	51.7
T-013	SWT-7	Oa	0 - 5	7.5YR 2/1.5	0.62		##	##	##	##	43.1	##	##	23.9
T-014	SWT-7	Bkj	5 - 25	10YR 3/3.5	1.22						8.1			
T-015	SWT-7	Ck1	25 - 56	10YR 3.5/2	1.38						4.6			
T-016	SWT-8	Oa	0 - 8	7.5YR 2/2	0.63	4	62	27	11	SL	99.2	##	##	27.3
T-017	SWT-8	Bw	8 - 20	10YR 4.5/6	1.51	63	35	33	32	CL	21.0	##	##	10.5
T-018	SWT-8	IIC	20 - 45+	10YR 4/2	1.74	77	88	4	8	LS	3.8	##	##	0.9
T-019	SWT-9	Oa	4 - 17	7.5YR 2/2	0.35		##	##	##	##	208.3	##	##	50.3

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T-020	SWT-9	A/B	17 - 52	10YR 3/3	1.02						15.1			
T-021	SWT-9	C	52 - 67+	10YR 4/3	0.79						14.9			
T-022	SWT-10	Oa	7 - 16	7.5YR 2/1	0.22		##	##	##	##	347.1	##	##	64.2
T-023	SWT-10	Bw	16 - 33	10YR 3/2.5	1.38						25.7			
T-024	SWT-11	Oe	5 - 25	7.5YR 3.5/3	0.15		****	****	****	****	576.8	##	##	70.7
T-025	SWT-11	Oa	25 - 40	7.5YR 3/3	0.47		54	34	12	SL	454.6	##	##	56.1
T-026	SWT-12	Oi	-		0.14						611.6			
T-027	SWT-12	Oe	-		0.27						1020.6			
T-028	SWT-12	Oa	-		0.11		##	##	##	##	744.1	##	##	74.5
T-029	SWT-13	Oi	0 - 15	7.5YR 3/3	0.30		****	****	****	****	239.3	##	##	62.9
T-030	SWT-13	Oe	15 - 30	7.5YR 3/3	0.17		****	****	****	****	416.9	##	##	60.6
T-031	SWT-13	Oa	30 - 40+	7.5YR 3/3	0.18		****	****	****	****	502.6	##	##	63.1
T-032	SWT-14	Oi	0 - 6	7.5YR 2/2.5	0.15		****	****	****	****	472.1	##	##	82.1
T-033	SWT-14	Oe	6 - 30	7.5YR 3/3.5	0.14		****	****	****	****	615.3	##	##	84
T-034	SWT-14	Oa	30 - 40+	10YR 3/3	0.13		****	****	****	****	815.4	##	##	81.1
T-035	SWT-15	Oe	4 - 25		0.32		##	##	##	##	528.4	##	##	78
T-036	SWT-16	A	6 - 32	7.5YR 2/2	1.15		##	##	##	##	38.7	##	##	17.3
T-037	SWT-17	Oa	3 - 14	7.5YR 2/2	0.51						56.1			
T-038	SWT-17	A	14 - 40	7.5YR 3/3.5	0.72		##	##	##	##	23.6	##	##	28.9
T-039	SWT-18	A	0 - 5	10YR 2/3	1.07		##	##	##	##	22.5	##	##	11.4
T-040	SWT-18	Bw1	5 - 24	10YR 4/6	0.93						14.9			
T-041	SWT-19	Oa	3 - 12	5YR 2/2.5	0.23		##	##	##	##	152.1	##	##	60.1

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T-042	SWT-19	IIBw1	12 - 20	10YR 4/4	1.14						14.4			
T-043	SWT-19	III Ckj	59 - 87+	10YR 3/2	1						10.4			
T-044	SWT-20	Oa	4 - 18	7.5YR 2/1.5	0.64		##	##	##	##	202.3	##	##	51.7
T-045	SWT-20	IIEj	18 - 36	10YR 3.5/5	1.35						10.1			
T-046	SWT-20	IIIA	36 - 56	10YR 3/2	1.28						12.5			
T-047	SWT-21	Oa	6 - 18	7.5YR 2/1	0.23		##	##	##	##	357.2	##	##	58.4
T-048	SWT-21	Bw	18 - 28	10YR 3.5/3	0.96						21.0			
T-049	SWT-21	Bg	28 - 60	10YR 3.5/1	1.23						17.7			
T-050	SWT-22	Oe	5 - 13	7.5YR 2/1	0.05						536.9			
T-051	SWT-22	Oa	13 - 21	7.5YR 2/2	0.18		##	##	##	##	426.1	##	##	77.6
T-052	SWT-22	Bhs	21 - 28	10YR 4.5/6	0.98						41.2			
T-053	SWT-22	Bg	28 - 40	10YR 4/1	1.37						29.9			
T-054	SWT-23	Oa	11 - 20	7.5YR 2/2	0.24		##	##	##	##	469.8	##	##	77.2
T-055	SWT-23	Bg	20 - 44	10YR 4/1	1.20						40.4			
T-056	SWT-24	Oa	9 - 13	10YR 2.5/2	0.33		##	##	##	##	238.6	##	##	52.3
T-057	SWT-24	Bg	13 - 47	10YR 4/2	1.24						31.1			
T-058	SWT-25	Oa	6 - 11	7.5YR 2.5/3	0.30		##	##	##	##	272.7	##	##	43.7
T-059	SWT-25	Bw	11 - 29	10YR 4/4	0.74						47.3			
T-060	SWT-26	Oa	7 - 10	10YR 2/2	0.12		****	****	****	****	393.0	79.5	53	71.6
T-061	SWT-26	Bw	10 - 40	10YR 3/4	0.60	16	46	26	28	SCL	39.7	28.2	13.7	6.5
T-062	SWT-27	B/O	19 - 40	10YR 15/2.5	0.67	0	45	39	16	L	78.0	##	##	12.8
T-063	SWT-28	Oe	3 - 11	7.5YR 2/1	0.08						468.0			

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T-064	SWT-28	Oa1	11 - 42	7.5YR 2/2	0.14		##	##	##	##	485.6	##	##	74.7
T-065	SWT-29	Oi2	9 - 21	7.5YR 2/2	0.21		##	##	##	##	773.5	##	##	64.9
T-066	SWT-29	C	21 - 26	10YR 3.5/2	0.38						168.1			
T-067	SWT-30	A	40+	10YR 3/2	0.57	3	36	40	24	L	190.3	##	##	6.5
T-068	SWT-31	Oa	0 - 3	7.5YR 2/2	0.37						115			
T-069	SWT-31	IIA	3 - 11	10YR 3.5/2	1.02						27.7			
T-070	SWT-31	IIIOb	11 - 16	7.5YR 2/2	0.55		##	##	##	##	35.8	##	##	32.3
T-071	SWT-31	IVC	16+		1.73						2.4			
T-072	SWT-32	Oa	9 - 18	10YR 3/3	0.53		##	##	##	##	192.6	##	##	38
T-073	SWT-32	Bw	18 - 40	10YR 4/3	1.13						42.5			
T-074	SWT-33	Oa1	4 - 12	7.5YR 2/1.5	0.20						378.5			
T-075	SWT-33	Oa2	12 - 56	7.5YR 2/2	0.24		##	##	##	##	308.8	##	##	55.3
T-076	SWT-34	Oe	3 - 15	7.5YR 2/1.5	0.12		****	****	****	****	373.7	##	##	77.9
T-077	SWT-34	Oa	15 - 63	7.5YR 2/1.5	0.21		52	42	6	SL	341.1	##	##	69.5
T-078	SWT-35	Bw1	0 - 6	10YR 4/6	0.98	3	52	28	20	SCL/L	22.4	##	##	2.5
T-079	SWT-36	Oi	0 - 9	10YR 5.5/6	0.04						482.7			
T-080	SWT-36	Oa1	12 - 16	5YR 2/2	0.15						418.0			
T-081	SWT-36	Oa2	16 - 21		0.34		##	##	##	##	198.1	##	##	44.8
T-082	SWT-36	Bw	21 - 35	10YR 4/2	1.53						25.9			
T-083	SWT-37	Oi2	2 - 32	7.5YR 3/2	0.14		****	****	****	****	578.4	##	##	78.5
T-084	SWT-37	Oa	32 - 40+	7.5YR 3.5/1	1.18	52	49	39	12	L	49.9	##	##	21.5
T-085	SWT-38	Oi	0 - 3		0.06		****	****	****	****	469.0	##	##	82.6

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T-086	SWT-38	Oa	3 - 8	7.5YR 2/1.5	0.17		****	****	****	****	360.1	##	##	60.8
T-087	SWT-38	IIOe1	8 - 19	7.5YR 2/3	0.13		72	28	0	LS	481.6	##	##	81.3
T-088	SWT-38	Bg	24 - 53	10YR 3.5/1	1.56	15	48	28	24	SCL/L	24.8	##	##	6.3
T-089	SWT-39	Oi	0 - 4		0.06		****	****	****	****	529.5	##	##	86
T-090	SWT-39	Oa	4 - 15	7.5YR 2/1.5	0.19		64	36	0	SL	403.0	##	##	76.2
T-091	SWT-39	Bh	15 - 51	10YR 3/2	1.24	9	44	30	26	L	31.3	##	##	4.5
T-092	SWT-40	Oa	8 - 13	7.5YR 2/1	0.27		72	28	0	LS	224.9	##	##	60.5
T-093	SWT-40	B1	13 - 18	10YR 3/3	1.28	50	55	25	20	SCL/L	34.4	##	##	6.7
T-094	SWT-41	Oa1	3 - 7	7.5YR 2/1.5	0.20		70	30	0	LS/SL	357.8	##	##	79.7
T-095	SWT-41	Oa2	7 - 53+	7.5YR 2/2	0.52		55	38	7	SL	114.3	##	##	32.2
T-096	SWT-42	Oi	0 - 6		0.04		****	****	****	****	448.3	##	##	91
T-097	SWT-42	Oe	6 - 11	7.5YR 2/2	0.12		****	****	****	****	468.8	##	##	79.6
T-098	SWT-42	Oa	11 - 28	7.5YR 2/1	0.25		52	48	0	SL	300.5	##	##	63.5
T-099	SWT-42	Bg	28 - 47	10YR 3.5/1	1.51	15	44	28	28	CL	25.0	##	##	5.4
T-100	SWT-43	Oa1	3 - 14	7.5YR 2/1.5	0.18		64	32	4	SL	397.2	****	****	73.1
T-101	SWT-43	Oa2	14 - 20	10YR 2/2	0.52		44	40	16	L	140.8	86.3	74.5	39.9
T-102	SWT-43	Bw	20 - 40	10YR 3/2	1.56	35	46	26	28	SCL	15.8	18.5	11.3	2.3
T-103	SWT-43	Bg	40 - 50+	10YR 3/1	1.07	22	43	26	31	CL	24.7	24	14.6	5.4
T-104	SWT-44	Oa	2 - 17	7.5YR 2/1.5	0.26	0	56	40	4	SL	245.5	##	##	54.9
T-105	SWT-44	Bw	17 - 53	10YR 3.5/2	1.09	40	58	20	22	SCL	18.1	##	##	3.4
T-106	SWT-45	Oi	0 - 8		0.08		****	****	****	****	449.5	179.9	174.3	83.3

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T-107	SWT-45	Oa1	8 - 22	7.5YR 2/1	0.19		56	38	6	SL	392.9	150.2	143.6	72.6
T-108	SWT-45	Oa2	22 - 35	7.5YR 2/2	0.59	6	40	42	18	L	126.7	****	****	41.9
T-109	SWT-45	A/B	35 - 60	10YR 4/3	0.81	29	48	24	28	SCL	16.9	20.1	12.9	3
T-110	SWT-45	Bw	60 - 65	10YR 4.5/2	1.29	38	51	32	17	L	12.5	15.3	9.8	1.4
T-111	SWT-46	Oa	1 - 9	7.5YR 2/3	0.56		64	28	8	SL	81.0	##	##	32.2
T-112	SWT-46	A	9 - 20	10YR 3/4	1.18	67	54	29	17	SL	25.8	##	##	6.2
T-113	SWT-47	Oa	1 - 5	7.5YR 2/2	0.67	8	50	24	26	SCL	62.2	****	****	29.2
T-114	SWT-47	A	5 - 23	10YR 3.5/3	1.85	28	56	30	14	SL	17.1	18.2	11	3.4
T-115	SWT-47	IIB	23 - 65	10YR 4/2	1.60	49	56	16	28	SCL	8.6	14.1	9.4	1.4
T-116	SWT-48	Oa	2 - 16	10YR 2.5/3	0.45	18	58	30	12	SL	35.0	****	****	32.3
T-117	SWT-48	B	16 - 45	10YR 5/5	1.73	34	50	24	26	SCL	9.8	18.3	11.5	3.9
T-118	SWT-49	Oa	4 - 14	7.5YR 2/2.5	0.26		72	20	8	SL	174.9	****	****	47.3
T-119	SWT-49	AB	14 - 30	10YR 3.5/3	1.79	48	64	18	18	SL	24.7	14	6.8	3.1
T-120	SWT-49	C	30 - 50	10YR 4/2	2.55	44	76	10	14	SL	5.5	4.3	3.2	0.6
T-121	SWT-50	Oa	7 - 14	7.5YR 2/2	0.45		36	58	6	SiL	142.1	57.8	54.5	27.3
T-122	SWT-50	A	14 - 43	10YR 3/3	1.32	42	50	23	27	SCL	15.0	19.8	10.6	4.7
T-123	SWT-50	IIBw	43 - 60	10YR 4/2	1.98	56	74	11	15	SL	5.4	7.9	4.8	0.5
T-124	SWT-51	Oe	4 - 9	7.5YR 2/1	0.14		****	****	****	****	282.4	****	****	50.1
T-125	SWT-51	Oa	9 - 24	10YR 2/2	0.38		36	56	8	SiL	188.0	82.1	68.2	29.6
T-126	SWT-51	IIBw	24 - 45	10YR 4/3	1.89	45	48	26	26	SCL	14.5	20.2	10.2	3.2
T-127	SWT-51	IIC	45 - 53	10YR 4/3	2.15	42	76	12	12	SL	12.9	7.2	4.1	0.5
T-128	SWT-52	Oi	0 - 4		0.04		****	****	****	****	405.4	****	****	78.7

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T-129	SWT-52	Oe	4 - 9	7.5YR 2/2	0.07		****	****	****	****	327.4	****	****	69.2
T-130	SWT-52	Oa1	9 - 14	7.5YR 2/2	0.23		44	44	12	L	324.2	****	****	37.5
T-131	SWT-52	A	31 - 53	10YR 2.5/2	1.16	18	58	27	15	SL	41.1	36.1	18.4	5.2
T-132	SWT-53	Oi	0 - 7		0.04		62	36	2	SL	330.0	##	##	75.9
T-133	SWT-53	Oe	7 - 12		0.09		****	****	****	****	393.7	##	##	80.1
T-134	SWT-53	Oa	12 - 17	7.5YR 2/1.5	0.19		****	****	****	****	313.0	##	##	47.4
T-135	SWT-53	Mottles base of Oa		7.5YR 4/6	0.27		****	****	****	****	172.3	##	##	39.3
T-136	SWT-53	A	17 - 40	10YR 2/3	1.31	16	53	28	19	SL	40.0	##	##	6.5
T-137	SWT-54	Oi	0 - 8		0.03		****	****	****	****	469.6	****	****	93.3
T-138	SWT-54	Oe	8 - 15	7.5YR 2/1	0.08		****	****	****	****	510.6	179.2	158.4	89.3
T-139	SWT-54	Oa	15 - 21	7.5YR 2/3	0.17		66	30	4	SL	467.0	****	****	80.1
T-140	SWT-54	Bw	21 - 39	10YR 3.5/3	1.30	5	52	24	24	SCL	32.2	23.6	10.6	3.9
T-141	SWT-54	Cg	39 - 44+	10YR 4/1	1.80	6	56	24	20	SCL/S	20.0	13.2	5.9	2.2
T-142	SWT-55	Oe	0 - 10		0.22		##	##	##	##	554.7	##	##	63.1
T-143	SWT-56	Oa	8 - 21	7.5YR 2/2	0.14		****	****	****	****	521.4	147.4	126	84.8
T-144	SWT-56	B/O	21 - 34	10YR 3/2	0.46	0	43	31	26	L	154.9	82.6	55.2	45.9
T-145	SWT-57	Oe	2 - 36	7.5YR 2/3	0.16		****	****	****	****	577.2	****	****	76.7
T-146	SWT-57	Cg	36 - 56	10YR 4/1	0.70	0	20	32	48	C	63.2	40.7	26.2	6.7
T-147	SWT-58	Oa	3 - 8	5YR 2/1	0.16		****	****	****	****	445.8	****	****	92.2
T-148	SWT-58	Oe1	8 - 24	7.5YR 2/2.5	0.16		****	****	****	****	531.9	****	****	79
T-149	SWT-58	Cg	37 - 45+	N 4/0	1.18	0	10	33	57	C	39.9	31.5	21.7	6.5
T-150	SWT-59	A2	20 - 40	7.5YR 2/3	1.03		##	##	##	##	31.1	##	##	20.3

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T-151	SWT-60	Bw	10		1.26		##	##	##	##	14.5	##	##	6.5
T-152	SWT-61	Oa2	8 - 16	7.5YR 2/2	0.37	0	46	48	6	SL	239.0	##	##	****
T-153	SWT-61	A2	16 - 40+	10YR 3/3	1.13	70	66	18	16	SL	12.9	##	##	5.4
T-154	SWT-62	Oe	3 - 13	7.5YR 2/2	0.30		##	##	##	##	339.9	##	##	51
T-155	SWT-63	Oa	1 - 8		0.54		##	##	##	##	137.9	##	##	44.8
T-156	SWT-63	Bw	8 - 21 +		0.90						35.7			
T-157	SWT-64	Bw	10		0.75		##	##	##	##	42.0	##	##	9.4
T-158	SWT-65	Oa	1 - 4	7.5YR 2/2	0.21		****	****	****	****	123.4	##	##	****
T-159	SWT-65	Bw1	4 - 18	7.5YR 3/4	1.02	46	44	26	30	CL	25.7	##	##	4.7
T-160	SWT-65	Bw2	18 - 35+	10YR 3/3	1.26	66	64	18	18	SL	7.6	##	##	1.9
T-161	SWT-66	A	9 - 20	7.5YR 3/3	1.82		##	##	##	##	21.2	##	##	8.6
T-162	SWT-67	Oa	3 - 24	10YR 2/2	0.42		##	##	##	##	209.2	##	##	60.3
T-163	SWT-67	A	24 - 37+	10YR 3/3	1.24						36.3			
T-164	SWT-68	Oa1	10 - 18	7.5YR 2/2	0.16		****	****	****	****	343.2	##	##	49.1
T-165	SWT-68	Oa2	18 - 27+	10YR 3/2	0.29	0	44	32	24	L	281.4	##	##	38.9
T-166	SWT-69	A	1 - 4	7.5YR 2/3	0.83		##	##	##	##	33.0	##	##	16.6
T-167	SWT-70	Oa2	7 - 11	7.5YR 4/3	0.74	0	58	30	12	SL	83.2	****	****	26.7
T-168	SWT-70	Bw	11 -21	7.5YR 4/5	0.65	58	72	8	20	SCL/S	9.6	****	****	2.5
T-169	SWT-70	C	21 - 30+	7.5YR 3.5/1.5	0.79	61	88	4	8	LS	8.7	****	****	2.5
T-170	SWT-71	Bw	1 - 5	7.5YR 5/5.5	1.10		##	##	##	##	20.7	##	##	4
T-171	SWT-71	BC	5 - 16	7.5YR 4/8	1.64						7.4			
T-172	SWT-71	C	16 - 46	10YR 3/2	2.24						3.5			

Table 5. Soils data for Toolik lake permanent plots

Sample No.	Plot No.	Horizon	Depth (cm)	Wet color	Bulk density (g/cc, 1/240)	% Gravel >2mm	% Sand	% Silt	% Clay	Texture	% Water	% Water	% Water	% OM
T-173	SWT-72	Oi2	4 - 19	7.5YR 2/2	0.14		##	##	##	##	426.1	##	##	94.7
T-174	SWT-73	Oa	6 - 8	7.5YR 3.5/3	0.30		60	28	12	SL	216.6	48.5	40	32
T-175	SWT-73	Bw	8 - 35	10YR 4.5/3	1.16	0	43	28	29	CL	29.9	33.4	10.6	3.6
T-176	SWT-74	Bw	10	10YR 4/3.5	1.04		##	##	##	##	37.5	##	##	7.4
T-177	SWT-75	Oi	0 - 5		0.02		****	****	****	****	901.7	172.9	137	89.3
T-178	SWT-75	Oe	5 - 10	7.5YR 2.5/4	0.17		****	****	****	****	389.3	246.8	178.9	19.2
T-179	SWT-75	Oa2	13 - 18	5YR 3/4	0.18		****	****	****	****	372.2	****	****	58
T-180	SWT-75	Bhs	18 - 31	10YR 3.5/3	0.38	0	40	45	15	L	178.8	****	****	38
T-181	SWT-76	Oa	10	7.5YR 2/2	1.19		##	##	##	##	26.5	##	##	21.2
T-182	SWT-76	A	30	7.5YR 3.5/4										
T-183	SWT-76	Cox		10YR 4/4										
T-184	SWT-77	Oi	0 - 6		0.05						244.2			
T-185	SWT-77	Oe	6 - 17	7.5YR 2/2	0.11						372.5			
T-186	SWT-77	Oa	17 - 32	7.5YR 2/2	0.20		##	##	##	##	393.4	##	##	71.5
T-187	SWT-78	Oa	3 - 22	7.5YR 2/2	0.25		##	##	##	##	535.7	##	##	53.2
T-188	SWT-78	O/C	22+	10YR 4/1	1.62						83.4			
T-189	SWT-79	Oi	0 - 4		0.02		****	****	****	****	850.8	##	##	83.3
T-190	SWT-79	Oe	4 - 7	7.5YR 2/2	0.10		****	****	****	****	535.4	##	##	66.8
T-191	SWT-79	Oe2	7 - 12	5YR 3/5	0.09		****	****	****	****	830.3	##	##	75.6
T-192	SWT-79	Oa	12 - 20	7.5YR 3.5/3	0.26		52	34	14	L/SL	283.0	##	##	50.9
T-193	SWT-79	II Cox	20 - 32+	10YR 4/5.3		0	46	28	26	SCL/L		##	##	5.9

Toolik Lake permanent vegetation plots: site factors, soil physical and chemical properties, plant species cover, photographs, and soil descriptions

Table 5. Soils data for Toolik lake permanent plots

Sample No.	Plot No.	Horizon	Depth (cm)	Wet color	Bulk density (g/cc, 1/240)	% Gravel >2mm	% Sand	% Silt	% Clay	Texture	% Water	% Water	% Water	% OM
T-194	SWT-80		frost scar	NULL	1.55	NULL	##	##	##	##	43.0	##	##	11.6
T-195	SWT-81	Oi	0 - 6	7.5YR 5/4	0.04						1062.9			
T-196	SWT-81	Oe	6 - 10	5YR 2/2	0.08						866.0			
T-197	SWT-81	Oa	10 - 38	7.5YR 2/2	0.21		##	##	##	##	332.7	##	##	75
T-198	SWT-81	C	38+	10YR 4/1	1.11						52.8			
T-199	SWT-81	till from east side of Limno Bay				58	67	15	18	SL		##	##	1.5

Table 5. Soils data for Toolik lake permanent plots

Sample No.	Plot No.	Paste pH	Paste EC mmhos/cm	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	% CaCO ₃ equivalent	meq/100g CEC	Bray# P ppm
				NO ₃ -N	P	K	Zn	Fe	Mn	Cu	Ca	Mg	Na	K			
T-001	SWT-1	5.6	0.8	10	11	97.2	22.3	820	467	8.5	##	##	##	##	##	35	18.8
T-002	SWT-1																
T-003	SWT-2	6.3	0.7	<1	5	105	10.1	63.7	152	1.7	6.23	0.82	0.08	0.27	0.4	8.3	
T-004	SWT-2	6.4	1.2	<1	2.3	51.1	18.2	67.7	560	4.1	9.09	1.51	0.06	0.12	0.5	12.6	
T-005	SWT-3	3.5	0.8	30	92	229	8.3	1500	15.2	1.5	##	##	##	##	##	25.3	87
T-006	SWT-4	5	0.9	10	14	156	60.3	3410	450	24.2	##	##	##	##	##	16	4.8
T-007	SWT-4																
T-008	SWT-5	4	0.5	<4	42.8	440	27.6	584	432	2.6	6.8	2.22	0.3	0.16	<0.1	16.5	70
T-009	SWT-5	4.1	0.4	<1	1.4	73.7	3.9	222	18.7	0.6	1.66	0.55	0.06	0.23	<0.1	6.9	9.4
T-010	SWT-5	4.6	1.2	<1	1.1	19.3	1.5	572	8.8	1.2	0.33	0.15	0.03	0.08	<0.1	7.8	3
T-011	SWT-5	4.9	0.2	2	2	24.5	1.3	410	7.9	1	0.24	0.08	0.02	0.07	<0.1	4.4	15.2
T-012	SWT-6	3.5	0.9	20	41	17.6	2.5	4000	5.2	3.2	##	##	##	##	##	15.1	25.6
T-013	SWT-7	5.1	1	20	25	212	8.9	307	125	1.3	##	##	##	##	##	15.7	51.4
T-014	SWT-7																
T-015	SWT-7																
T-016	SWT-8	3.9	0.8	2	4.4	97.3	13.8	1730	22.7	1.8	3.63	1.16	0.08	0.24	<0.1	14.2	35.6
T-017	SWT-8	4.5	0.4	1	0.8	61.3	1.9	499	34.5	1.7	2.59	0.81	0.05	0.11	<0.1	9.2	4.2
T-018	SWT-8	6.8	0.4	1	1.1	38.3	0.8	45.4	21.1	3.6	4.36	0.23	0.04	0.08	<0.1	4.9	
T-019	SWT-9	5.7	1	<10	17	19.2	11.1	807	581	7.2	##	##	##	##	##	67.7	24
T-020	SWT-9																
T-021	SWT-9																
T-022	SWT-10	5.9	1	<10	28	54.7	15.8	640	222	10.1	##	##	##	##	##	81.8	36.6
T-023	SWT-10																
T-024	SWT-11	4.6	0.6	<10	11	184	14.9	3640	261	34.6	8.71	1.72	0.6	0.38	<0.1	19.1	12.4
T-025	SWT-11	4.5	0.6	<4	2	100	10.4	2068	96.4	23.8	6.91	1.05	0.33	0.17	<0.1	10.7	1.2
T-026	SWT-12																
T-027	SWT-12																
T-028	SWT-12	4.6	0.5	40	17	98.7	15.1	2280	120	25.9	##	##	##	##	##	19.9	23.2
T-029	SWT-13	4.5	0.6	<1	2	101	32.4	1428	40	8.6	3.38	0.73	0.39	0.24	<0.1	18.2	32.6

Table 5. Soils data for Toolik lake permanent plots

Sample No.	Plot No.	Paste pH	Paste EC mmhos/cm	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	% CaCO ₃ equivalent	meq/100g CEC	Bray# P ppm
				NO ₃ -N	P	K	Zn	Fe	Mn	Cu	Ca	Mg	Na	K			
T-030	SWT-13	4.3	0.9	<4	1.2	78.4	155	2420	149	16	5.1	0.47	0.23	0.12	<0.1	19.1	4
T-031	SWT-13	4.4	1.1	8	1.2	70	132	2572	337	16.2	7.28	0.37	0.35	0.08	<0.1	21.8	4.6
T-032	SWT-14	6.8	0.6	30	3	363	186	1510	1950	8.2	24.68	2.49	0.7	0.52	0.4	52	
T-033	SWT-14	5.4	0.3	20	14	69.1	24.6	797	138	13.3	38.25	3.11	0.79	0.16	<0.1	67.4	25.6
T-034	SWT-14	4.8	0.6	20	11	75.9	19.3	1630	411	28.3	31.04	2.52	0.67	0.14	<0.1	36	18.8
T-035	SWT-15	5	0.4	<10	28	123	17.4	1180	28.9	10.1	##	##	##	##	##	22.6	31.4
T-036	SWT-16	6.9	0.7	<10	11	48.2	2.3	281	58.5	7.7	##	##	##	##	##	25.5	
T-037	SWT-17																
T-038	SWT-17	5	0.7	<10	28	326	1.7	827	20.3	3.2	##	##	##	##	##	27.4	41
T-039	SWT-18	5.4	0.6	20	14	418	1.7	140	15.5	3	##	##	##	##	##	11.1	18.2
T-040	SWT-18																
T-041	SWT-19	4	0.5	10	64	449	6	687	3.8	2.9	##	##	##	##	##	20.8	32.4
T-042	SWT-19																
T-043	SWT-19																
T-044	SWT-20	5.9	0.9	10	23	403	6	304	106	4.2	##	##	##	##	##	77.5	24.8
T-045	SWT-20																
T-046	SWT-20																
T-047	SWT-21	6.8	0.6	<10	14	412	6	245	79.5	8.7	##	##	##	##	##	115.7	
T-048	SWT-21																
T-049	SWT-21																
T-050	SWT-22																
T-051	SWT-22	6.2	0.7	<10	28	464	17.3	820	234	5.9	##	##	##	##	##	112.5	
T-052	SWT-22																
T-053	SWT-22																
T-054	SWT-23	6.3	1.1	<10	38	499	33.4	287	966	7.1	##	##	##	##	##	111.3	
T-055	SWT-23																
T-056	SWT-24	5.6	0.8	20	11	32.6	22.1	2290	408	11.5	##	##	##	##	##	62	4.4
T-057	SWT-24																
T-058	SWT-25	3.8	0.9	30	47	228	18.1	3280	109	4.3	##	##	##	##	##	15.5	27.6

Table 5. Soils data for Toolik lake permanent plots

Sample No.	Plot No.	Paste pH	Paste EC mmhos/cm	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	% CaCO ₃ equivalent	meq/100g CEC	Bray# P ppm
				NO ₃ -N	P	K	Zn	Fe	Mn	Cu	Ca	Mg	Na	K			
T-059	SWT-25																
T-060	SWT-26	4.4	0.7	8	22.8	452	30.8	760	1192	3.7	11.07	4.82	0.7	1.7	<0.1	29	124.8
T-061	SWT-26	4.5	0.8	4	2.8	39.9	3.3	551	71.8	3.3	1.7	0.68	0.13	0.14	<0.1	6.9	18.2
T-062	SWT-27	4.6	0.6	3	6.7	60.1	5.8	867	46.6	8.8	0.55	0.13	0.02	0.08	<0.1	4.7	29.6
T-063	SWT-28																
T-064	SWT-28	6.4	1	20	41	135	17.9	1100	594	17.5	##	##	##	##	##	116.6	
T-065	SWT-29	6	0.7	20	34	179	9	974	68	9.8	##	##	##	##	##	51.3	
T-066	SWT-29																
T-067	SWT-30	4.7	1.3	2	4.4	85.2	101	768	180	15.8	9.32	0.94	0.09	0.1	<0.1	19.3	30.4
T-068	SWT-31																
T-069	SWT-31																
T-070	SWT-31	6.4	0.8	20	34	89	3.5	389	94.2	4.3	##	##	##	##	##	47.6	
T-071	SWT-31																
T-072	SWT-32	4.1	0.6	30	25	19.8	11.1	3930	61	6.3	##	##	##	##	##	17.4	19.4
T-073	SWT-32																
T-074	SWT-33																
T-075	SWT-33	5.9	0.6	20	14	6.4	7.8	1340	119	7.8	##	##	##	##	##	51.8	10.2
T-076	SWT-34	6.9	1.5	20	95	380	149	81.4	568	3.8	108	10.89	0.58	0.89	1.8	137	
T-077	SWT-34	6.2	0.9	20	14	79	14.6	1800	716	6.6	84.89	8.1	0.55	0.12	1.1	97.6	
T-078	SWT-35	4.7	0.3	1	1.4	42.3	2.6	388	27.3	4	0.56	0.21	0.12	0.12	<0.1	3.9	14.4
T-079	SWT-36																
T-080	SWT-36																
T-081	SWT-36	4.1	0.7	40	23	14	10.5	5010	78	13.7	##	##	##	##	##	15.2	17.4
T-082	SWT-36																
T-083	SWT-37	5.6	0.4	30	<0	163	16.4	2130	114	6.9	36.02	3.26	0.74	0.37	0.9	67.6	4.2
T-084	SWT-37	6.1	1	1	0.5	49.5	10.7	635	177	19.9	9.16	2.28	0.12	0.12	0.6	26.6	
T-085	SWT-38	7	1	20	81	482	71.2	275	1220	3.7	83.6	8.59	0.63	1.07	3.8	114.3	
T-086	SWT-38	7.5	1.6	20	25	286	86.3	375	1790	3.6	****	****	****	****	****	83.1	****
T-087	SWT-38	5.9	0.3	20	5	114	64.3	1550	502	7.2	26.25	2.16	1.06	0.44	****	61.2	****

Toolik Lake permanent vegetation plots: site factors, soil physical and chemical properties, plant species cover, photographs, and soil descriptions

Table 5. Soils data for Toolik lake permanent plots

Sample No.	Plot No.	Paste pH	Paste EC mmhos/cm	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	% CaCO ₃ equivalent	meq/100g CEC	Bray# P ppm
				NO ₃ -N	P	K	Zn	Fe	Mn	Cu	Ca	Mg	Na	K			
T-088	SWT-38	5.7	0.5	<1	0.5	56.3	2.9	395	135	13.9	7.99	0.78	0.07	0.17	0.3	11.5	8
T-089	SWT-39	6.8	1.2	20	231	961	156	32.2	572	3.4	84.18	11.42	0.73	2.58	1.7	113.6	
T-090	SWT-39	6.7	1	20	60	248	34	320	316	6.4	94.37	7.94	0.7	0.76	2	110.7	
T-091	SWT-39	6.1	0.9	1	1.1	62.7	1.5	287	9.1	9.9	8.62	1.26	0.07	0.2	<0.1	13	
T-092	SWT-40	5.3	0.5	12	33	194	10.1	876	74.8	3.7	54.76	5.14	0.57	0.71	****	77.7	****
T-093	SWT-40	6.2	0.6	3	1.7	57.2	1.4	340	33.2	60	9.17	2.09	0.09	0.17	0.4	25.4	
T-094	SWT-41	7.2	1.5	8	68.8	351	151	46	864	4.3	100	9.58	0.55	1.02	3	114.1	
T-095	SWT-41	6.9	1.1	8	4.4	34.4	6.6	808	369	6.3	45.63	3.83	0.33	0.2	1.5	55.2	
T-096	SWT-42	5.8	0.5	20	144	1430	96.1	17.3	218	2.6	43.23	8.1	0.84	3.17	1	86.1	****
T-097	SWT-42	6.8	1.1	20	89.6	484	100	145	532	11.5	88.68	8.08	0.7	1.45	1	104.3	
T-098	SWT-42	6.3	0.6	8	13.6	64.4	22	548	58	16.6	70.27	6.04	0.33	0.24	0.6	101.6	
T-099	SWT-42	5.6	0.5	2	0.8	67.9	2	352	15.1	8.3	8.37	1.1	0.09	0.24	<0.1	12.1	3.6
T-100	SWT-43	6.9	1	12	42.8	164	56.8	100	378	2.1	93.96	7.82	0.52	0.75	6.1	123.2	
T-101	SWT-43	6.3	0.7	8	13.6	72.4	4.8	216	64	8.2	54.88	4.55	0.28	0.18	0.8	70	
T-102	SWT-43	6.4	0.7	<1	0.3	45.8	1.8	116	22.8	5.1	7.69	0.95	0.1	0.16	0.2	10.5	
T-103	SWT-43	6	0.8	2	0.5	59.8	3.1	200	12	13.3	8.02	1.13	0.1	0.21	<0.1	14.1	
T-104	SWT-44	5.9	0.6	6	9.9	181	16.6	770	64.4	3.6	13.49	5.31	0.14	0.29	****	79.8	36.8
T-105	SWT-44	6.8	0.6	1	1.7	51	0.9	73.8	10.1	1.8	8.73	1.08	0.13	0.15	0.3	16	
T-106	SWT-45	6.2	1	20	205	926	110	38.8	170	4.4	79.84	8.62	0.57	3.14	1.1	95.8	
T-107	SWT-45	6.1	0.8	10	74	196	50.3	300	182	6.8	85.7	6.62	0.43	0.42	1.6	107.7	
T-108	SWT-45	6.4	0.6	<1	2.3	50	3.1	774	31.2	9.9	12.42	3.76	0.12	0.09	0.2	71.1	
T-109	SWT-45	6.8	0.6	4	2.5	46.2	1	109	11.8	4.9	8.1	1.13	0.13	0.17	0.4	17.4	
T-110	SWT-45	7.5	0.9	2	1.7	56.5	1.2	66.2	34.6	6.2	8.46	0.77	0.1	0.17	1.9	11.1	
T-111	SWT-46	4.4	0.6	4	7.6	84	4.1	860	18.4	1.1	7.82	2.52	0.36	0.44	<0.1	15.7	32.6
T-112	SWT-46	4.4	0.5	1	2.3	42.4	3.2	562	18.4	1.2	3.3	1.28	0.07	0.18	<0.1	10.7	8.8
T-113	SWT-47	5	0.9	14	11.1	468	34.8	718	462	3.2	17.68	2.6	0.35	0.6	0.2	25.3	63.4
T-114	SWT-47	4.9	0.5	5	1.1	43	1.3	192	35.8	1	3.72	0.81	0.31	0.2	<0.1	8.3	10
T-115	SWT-47	7.3	1.8	5	0.5	47.5	1.7	47	12.7	3.2	14.81	0.7	0.31	0.2	1.5	11.5	
T-116	SWT-48	6.4	1.2	8	13.5	346	3	78.2	45.3	1.2	11.56	1.53	0.38	1.19	1.1	49.4	

Table 5. Soils data for Toolik lake permanent plots

Sample No.	Plot No.	Paste pH	Paste EC mmhos/cm	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	% CaCO ₃ equivalent	meq/100g CEC	Bray# P ppm
				NO ₃ -N	P	K	Zn	Fe	Mn	Cu	Ca	Mg	Na	K			
T-117	SWT-48	6.6	0.7	6	1.7	171	0.7	81.9	10.8	0.9	10.38	0.67	0.29	0.53	0.5	12.1	
T-118	SWT-49	4	0.5	8	38	114	7.7	1804	9.8	1.3	7.84	1.66	0.48	0.32	<0.1	17.1	84.4
T-119	SWT-49	5.3	0.7	4	1.7	26.8	3.8	371	24.8	1.1	4.13	0.59	0.25	0.15	0.2	7.6	12.8
T-120	SWT-49	7.6	0.6	4	0.8	24.7	0.7	37.7	3	1.1	7.48	0.36	0.21	0.13	0.8	5.4	
T-121	SWT-50	6.2	0.5	4	26.8	36.8	5.4	612	43.6	4.1	33.29	3.07	0.19	0.16	0.7	41.4	
T-122	SWT-50	6.7	0.7	7	1.7	31.9	1.2	132	10.6	2.6	12.23	1.17	0.28	0.16	0.5	18.9	
T-123	SWT-50	7.7	0.7	6	0.5	35.6	1.4	25	5.3	1.5	12.49	0.75	0.27	0.17	1.9	5.4	
T-124	SWT-51	6.4	0.8	10	78	494	68.4	174	245	4.6	32.51	4.07	1.21	0.55	****	77	****
T-125	SWT-51	6.7	0.7	4	12.4	43.6	11.9	277	110	5.9	40.79	5.38	0.22	0.09	1.5	56.2	
T-126	SWT-51	7.3	0.6	6	1.1	34.4	1.2	82.7	9.3	2.7	11.61	1.82	0.32	0.16	0.5	16.7	
T-127	SWT-51	7.9	0.6	5	0.3	29.6	0.9	22.9	6.9	1.5	8.85	0.85	0.29	0.15	1.8	5.4	
T-128	SWT-52	5.7	0.8	20	218	1790	124	61.9	363	4.8	59.25	7.33	0.9	3.37	1.3	69.7	****
T-129	SWT-52	6	0.8	4	98	912	143	48.8	860	5.4	65.86	7.11	0.51	1.34	2	80.6	
T-130	SWT-52	6.5	1.1	4	22.8	82	42.8	82.4	2012	3.5	47.55	4.25	0.3	0.12	2.1	63.3	
T-131	SWT-52	6.2	0.6	7	2	25.8	3.4	334	33.8	11.6	22.6	1.98	0.32	0.13	0.4	36.8	
T-132	SWT-53	5.8	0.6	20	111	996	55.8	40.4	264	4.1	49.88	7.43	0.91	2.63	1.7	100.3	****
T-133	SWT-53	6.1	0.7	20	92	479	55.1	84.6	310	4.8	63.31	7.48	0.8	1.91	1.9	75.8	
T-134	SWT-53	6	0.5	8	16.4	70.8	33.8	468	336	4.9	48.29	4.5	0.55	0.41	****	63.3	****
T-135	SWT-53	5.8	0.8	6	1	50.6	10.5	1168	44.2	11.4	34.08	3.29	0.65	0.23	0.6	42.6	3.6
T-136	SWT-53	5.3	0.6	2	1.7	44.3	2.8	442	25.1	11	8.32	1.16	0.09	0.13	<0.1	11.6	18.2
T-137	SWT-54	4.3	0.3	20	****	****	****	****	****	****	24.5	7.63	1.62	3.91	<0.1	36	****
T-138	SWT-54	6.2	0.6	<1	135	581	63.3	130	548	6.6	70.76	8.7	0.55	1.16	1.7	79.8	
T-139	SWT-54	5.4	0.6	20	50	70.3	23.1	1050	452	14.8	50.93	6.03	0.25	0.18	****	80.6	****
T-140	SWT-54	5.6	0.6	7	0.8	24.5	1.5	262	25	2.8	7.23	1.18	0.31	0.11	0.1	6.4	9.4
T-141	SWT-54	5	0.5	7	0.8	34.1	1.6	212	42.4	8.9	2.36	0.46	0.28	0.13	<0.1	4.1	19.8
T-142	SWT-55	6.4	0.7	20	3	83.7	9.8	859	549	3.6	##	##	##	##	##	44.6	
T-143	SWT-56	5.4	0.5	20	41	56.7	13.6	2210	570	6.4	11.92	0.64	0.18	0.05	<0.1	78.5	34.6
T-144	SWT-56	6.1	1.2	14	0.8	41.4	12.1	674	520	15.6	38.99	2.16	0.32	0.11	0.4	45.8	
T-145	SWT-57	5.6	0.5	20	34	89.5	38.4	3730	182	10.9	48.93	5.45	0.41	<0.01	****	62.2	****

Table 5. Soils data for Toolik lake permanent plots

Sample No.	Plot No.	Paste pH	Paste EC mmhos/cm	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	% CaCO ₃ equivalent	meq/100g CEC	Bray# P ppm
				NO ₃ -N	P	K	Zn	Fe	Mn	Cu	Ca	Mg	Na	K			
T-146	SWT-57	5.2	1.4	4	0.8	75.4	27.2	436	92.4	25.4	14.97	2.26	0.31	0.23	<0.1	20.2	8.6
T-147	SWT-58	6.6	0.9	16	25.6	265	100	408	1356	4	72.02	7.54	0.48	0.44	****	69.3	****
T-148	SWT-58	6	0.3	10	34	79.6	37.2	477	65.8	16.2	27.05	2.54	0.27	0.06	****	62.2	****
T-149	SWT-58	5.2	1.1	7	0.5	69.1	19.5	364	119	27.7	7.41	1.1	0.33	0.24	<0.1	13.1	6.8
T-150	SWT-59	6.9	1.2	10	25	78.5	10.3	126	126	2.9	##	##	##	##	##	41.8	
T-151	SWT-60	4.7	0.6	10	11	32.9	1.4	457	57	0.7	##	##	##	##	##	6.1	11
T-152	SWT-61	6.4	0.7	<1	9.2	106	113	335	351	5.2	13	7.43	0.14	0.2	****	103.4	
T-153	SWT-61	7.1	0.7	2	2	49	3.2	108	44.5	3.8	8.85	1.34	0.17	0.12	****	11.1	
T-154	SWT-62	7.6	1.3	10	50	217	40.2	588	312	10.7	##	##	##	##	##	73.3	
T-155	SWT-63	4.2	0.8	10	64	45.5	2	1970	50.2	0.8	##	##	##	##	##	29.2	82.4
T-156	SWT-63																
T-157	SWT-64	4.6	0.4	10	11	<1	1.5	899	7.5	7.1	##	##	##	##	##	6.3	10.6
T-158	SWT-65	3.7	0.7	4	104	404	23.2	712	71.6	1.4	****	****	****	****	<0.1	16.1	****
T-159	SWT-65	4.3	0.4	1	2	29.7	3	485	105	1.4	0.94	0.31	0.04	0.07	<0.1	11.6	2.4
T-160	SWT-65	4.8	0.3	4	3.1	27.9	1.5	182	38.4	1.5	0.5	0.11	0.06	0.05	<0	5.3	25.6
T-161	SWT-66	4.4	0.6	10	14	<1	3.9	1210	148	1.7	##	##	##	##	##	9.6	13
T-162	SWT-67	6.2	0.8	10	67	48.5	8.1	876	75.1	4	##	##	##	##	##	71.4	
T-163	SWT-67																
T-164	SWT-68	6.9	1.3	12	10	284	103	924	1228	17.5	****	****	****	****	****	56.2	****
T-165	SWT-68	4.8	1.1	4	2.3	206	24	738	706	14.1	8.38	2.32	0.22	0.34	<0.1	31.4	7.4
T-166	SWT-69	3.8	0.7	10	20	16.2	4.9	964	8.3	0.9	##	##	##	##	##	13.3	28.4
T-167	SWT-70	3.8	0.7	7	6	18.8	1.4	1170	4.6	1	1.79	0.25	0.29	0.07	<0.1	16.5	18.6
T-168	SWT-70	4.3	0.3	7	1.1	17.1	1.2	390	23.4	0.7	1.29	0.32	0.28	0.08	****	7.1	****
T-169	SWT-70	5.1	0.6	6	2	18.4	0.6	254	13.5	1.9	6.55	0.57	0.28	0.1	****	7.9	****
T-170	SWT-71	4	0.6	10	8	<1	1.5	265	9	0.4	##	##	##	##	##	6.9	6.6
T-171	SWT-71																
T-172	SWT-71																
T-173	SWT-72	4.8	0.8	20	31	295	115	1880	194	4.1	##	##	##	##	##	31.2	19
T-174	SWT-73	4.3	0.5	4	12	101	14.3	1302	290	4.8	4.07	1.63	0.29	0.18	<0.1	14	<0

Table 5. Soils data for Toolik lake permanent plots

Sample No.	Plot No.	Paste pH	Paste EC mmhos/cm	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ H-CO ₃ -DTPA Extract (ppm)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	NH ₄ OAc Extract (meq/100g)	% CaCO ₃ equivalent	meq/100g CEC	Bray# P ppm
				NO ₃ -N	P	K	Zn	Fe	Mn	Cu	Ca	Mg	Na	K			
T-175	SWT-73	4.6	0.3	6	1.1	21.9	1.7	540	16.2	3.8	0.78	0.25	0.25	0.12	<0.1	4.9	12.8
T-176	SWT-74	4.6	0.3	10	14	3.6	2.4	923	23.7	7.4	##	##	##	##	##	6.5	11
T-177	SWT-75	4.2	0.4	20	18.2	2520	103	277	1330	6.9	18.76	9.43	1.38	4.92	<0.1	33.3	****
T-178	SWT-75	5.2	1	<4	8	324	15.4	856	1912	5.8	8.72	3.8	0.48	0.77	<0.1	45	<0
T-179	SWT-75	4.5	0.5	8	15.2	102	25.5	3420	776	18.8	6.3	2.36	0.44	0.16	<0.1	24	****
T-180	SWT-75	4.3	0.4	<1	5	21.7	3.6	934	22.1	7.3	2.07	0.81	0.34	0.17	<0.1	13.3	14
T-181	SWT-76	4.5	1.1	20	70	411	4.8	1740	198	2.1	##	##	##	##	##	11.3	80
T-182	SWT-76																
T-183	SWT-76																
T-184	SWT-77																
T-185	SWT-77																
T-186	SWT-77	5.9	0.7	20	28	18	14.4	1420	299	28.4	##	##	##	##	##	82.2	128.4
T-187	SWT-78	4.6	0.5	20	11	260	33.1	6350	435	11.3	##	##	##	##	##	26.6	0.4
T-188	SWT-78																
T-189	SWT-79	4.5	0.5	40	167	2530	126	629	1990	6.7	35.83	14.79	3.34	7.86	<0.1	51.9	****
T-190	SWT-79	5.8	0.8	10	3	849	28.3	659	5410	5.2	13.63	6.52	0.87	2.46	1.5	53	7.2
T-191	SWT-79	4.5	0.6	20	8	379	36.2	4460	2320	13.4	15.67	5.89	0.91	1.04	<0.1	48.3	<0
T-192	SWT-79	4.2	0.5	8	15.2	133	19.6	3364	75.6	17.1	4.62	1.67	0.39	0.3	<0.1	23.2	17.2
T-193	SWT-79	4.5	0.4	2	2.8	38.7	2.8	745	24.8	4.9	1.1	0.36	0.08	0.07	<0.1	6.7	19.8
T-194	SWT-80	4.6	0.3	10	8	15.6	4.9	1960	21.7	10.6	##	##	##	##	##	6.1	5
T-195	SWT-81																
T-196	SWT-81																
T-197	SWT-81	4.8	0.5	10	38	140	18.7	1980	358	11	##	##	##	##	##	28.5	29.4
T-198	SWT-81																
T-199	SWT-81	7.1	0.4	2	3.1	65.3	1.1	98.1	4.1	2.7	7.54	0.86	0.16	0.18	0.4	10.2	