

Greenhouse Plot #2 - 2006

last updated 6/17/08 dwi

5/4/2006 5/6/2006 5/8/2006 5/10/2006 5/16/2006 5/18/2006

<i>Carex geyeri</i>	male	98% snow	95% bare	snow gone		
	female	5 inches				4
	both					

Mertensia fusiformis

Ranunculus inamoenus

Viola praemorsa

Androsace septentrionalis

Taraxacum officinale

Carex illota?? microptera??

Lathyrus leucanthus

Lupinus argenteus

Potentilla pulcherrima x *P. hippiana*

Bromelica (Melica) spectabilis

Linum lewisii

Collomia linearis

Poa pratensis

Achnatherum (Stipa) lettermanii - needlegrass (long awns)

Festuca thurberi

Tragopogon dubius

Erigeron speciosus

Agoseris glauca

Artemisia dracunculus

Chenopodium album

Polygonum douglasii

Gayophytum ramosissimum

Achillea millefolium

Total Flowers	0	0	0	0	0	4
Total flowers without grasses	0	0	0	0	0	4
# species flowering	0	0	0	0	0	1
# species flowering without grasses	0	0	0	0	0	1

Notes: Krehe and Kathy Ritter made counts until 1 June; no winter grass

This 2x2-m plot is located in the meadow between the East River and

permanent snow cover began about 12 November 2006, based on the
snowmelt date based on temperature and light data from Hobo Pend

Total number of species flowering =	24
Maximum # of flowers on one day =	145
Maximum # of species in flower =	9
Maximum H' =	.

Greenhouse plot #2

Point #	Plot name	Corner (corner)	Altitude (feet)
153	Greenhouse plot #2	Northeast	9404.114
154	Greenhouse plot #2	Northwest	9403.928
155	Greenhouse plot #2	Southwest	9402.422
156	Greenhouse plot #2	Southeast	9403.382

5/20/2006	5/22/2006	5/24/2006	5/26/2006	5/28/2006	5/30/2006	6/1/2006	6/3/2006	6/5/2006
2	6	5						
12	1			1				
	11							
	11	22	X	21	16	18	10	10
	3	3		3	4	4	4	3
	4	3	9	4	6	2	1	1
	2	1	6	3	5	2	1	1
		2	22	61	24	10	14	1
		1	12	20	12	3	2	1
		14	48	58	27	18	21	29
		2	4	4	4	3	3	4
						1	1	
						1	1	

female

14	33	46	79	145	73	49	47	41
14	33	46	79	145	73	49	47	41
1	3	5	4	5	4	5	5	4
1	3	5	4	5	4	5	5	4

spher dump; Patty Coffin did counts 6-12, 16-20 August; Elizabeth Ziegler did counts 14, 22-24 August a

d County Road 317, about 50 m north of the RMBL south property line. GPS coordinates below. See me

temperature and light data from Hobo Pendant data logger
 ant data logger = 25 April 2007

without grasses
20
145
9

Altitude (m)	Latitude	Longitude
2866.37	38.95543	106.9891
2866.32	38.95542	106.9892
2865.86	38.9554	106.9892
2866.15	38.95541	106.9891

49	46	50	34	30	19	15	25	35
49	46	50	34	30	19	15	25	13
4	3	2	4	2	3	4	3	4
4	3	2	4	2	3	4	3	3

end from 28 August to end

metadata file at www.rnbl.org for Inouye phenology project for additional details.

6/25/2006 6/27/2006 6/29/2006 7/1/2006 7/3/2006 7/5/2006 7/7/2006 7/9/2006 7/11/2006

1
1

3	4	1							
3	4	1							
1			3	2	1	2	2		4
1			2	2	1	2	2		2
	1	1	4	2	3	4	2		5
	1	1	4	2	3	3	2		4

some frost-killed buds

stalks in plot
13

1	9	16	18	23	4	12	20		7
1	2	2	3	2	1	2	2		2
		1	1	1	9	22 closed			47
		1	1	1	9	22 rain			42

total of 23 stalks in plot + some aborted

6	19	13	2
			3

18	15	20	26	28	23	59	37	68
5	14	20	26	28	17	40	24	63
4	4	5	4	4	5	5	4	6
3	3	5	4	4	4	4	3	4

7/13/2006 7/15/2006 7/17/2006 7/19/2006 7/21/2006 7/23/2006 7/25/2006 7/27/2006 7/29/2006

3 3 6 1 1 2
2 1 2 1 1 1

6 4 2 only one se
2 1 1
2 1 6 2 4 2 1 7 1
2 1 5 2 4 2 1 4 1

11 2 2 1 4
2 1 1 3
25 56 14 80 66 83 63 83 48
25 48 12 77 57 67 48 57 38

3 1 1 total of 11 inflorescences in plot
1 7 9 7 10 5 total of 2 ar
1 1 2 2 2 2

flowering just outside plot
1 1 3
1 1 14 16
1 4 eaten 3
1 3 3 3
8
2
2 1
1 1
2 X
1

47	64	30	95	80	103	84	118	71
44	63	22	85	73	93	79	118	71
5	5	5	5	4	5	9	9	7
4	4	3	3	3	4	8	9	7

7/31/2006 8/2/2006 8/4/2006 8/6/2006 8/8/2006 8/10/2006 8/12/2006 8/14/2006 8/16/2006

2 1
2 1

2
1

1
1

pod developed

1 1 1
1 1 1

1
1

21 22 6 36 raining 3 14 8
17 16 6 27 3 11 8

8 3
3 2

9 1

and 8 inflorescences in plot

2 done

6 9 10 1 17 X 11 5 5
4 6 3 1 6 7 2 2
2

14 18 13 raining 8 3 6 4 14
3 3 2 3 3 3 3

total of 5 plants flowers recorded on 10, 14-16 August, but unl

2 2 7 5 6 4 4 3
2 2 7 5 6 4 4 3
2 2 3 4 3 2 4 4 4
1 2 2 3 1 3 2 2
4 3 3

46	64	38	16	74	14	29	40	35
46	56	35	16	74	14	29	31	34
6	8	8	4	7	5	7	6	6
6	7	7	4	7	5	7	5	5

8/20/2006 8/22/2006 8/24/2006 8/26/2006 8/28/2006 8/30/2006 9/1/2006 9/3/2006 9/5/2006

2						1			
2						1			
5	16	9	2	10	9	4	8	2	
3	14	8	1	4	5	4	6	2	
	4	1	1	2	3	3	2		

2	1
1	1

13	2	2	1
3	2		

total of 2+8*2+10 inflorescences in plot

likely they were actually flowering - DWI 8/26/06

8	10	4	2	7	2	1
7	6	4	2	7	2	1
2	4	1	4	2		1
1	1	1	2	2		1

32	37	17	10	21	15	9	10	2
32	33	16	9	19	12	6	8	2
6	6	5	5	4	4	4	2	1
6	5	4	4	3	3	3	1	1

9/7/2006 9/9/2006 9/11/2006 9/14/2006 9/16/2006 9/18/2006 9/20/2006

Length of fl

							5
							11
							2
							19
							29
							13
							37
							13
							2+
							17
							29
							43
							5
							41
4	3	1	2				78
4	3	1	2				7
							9
							11
							2+
							29
							15
							33
							2+
2	2	2					47
2	2	2					43
2 2 buds							43
1 raining							5

8	5	3	2	0	0	0
8	5	3	2	0	0	0
3	2	2	1	0	0	0
3	2	2	1	0	0	0

flowering		maximum number of flowers	
second flowering			maximum number of stalks or plan
	<i>Carex geyeri</i>	6	inflorescences
		12	inflorescences
		11	inflorescences
	<i>Mertensia fusiformis</i>	22	flowers
3	<i>Ranunculus inamoenus</i>	9	4 inflorescences
			flowers
	<i>Viola praemorsa</i>	61	6 inflorescences
25	<i>Androsace septentrionalis</i>	58	flowers
			5 genets
	<i>Taraxacum officinale</i>	1	flowers
	<i>Carex illota?? microptera??</i>		1 genets
		2	inflorescences
	<i>Lathyrus leucanthus</i>	14	flowers
			8 clusters of flowers
	<i>Lupinus argenteus</i>	7	flowers
			2 inflorescences
	<i>Potentilla pulcherrima x P. hippiana</i>	7	flowers
			5 clusters of flowers
	<i>Bromelica (Melica) spectabilis</i>	22	inflorescences
11	<i>Linum lewisii</i>	23	flowers
			3 inflorescences
	<i>Collomia linearis</i>	83	flowers
			77 genets
	<i>Poa pratensis</i>	19	inflorescences
33	<i>Achnatherum (Stipa) lettermanii</i> - needlegrass	9	inflorescences
			3 clumps (genets)
	<i>Festuca thurberi</i>	10	inflorescences
			2 clumps (genets)
	<i>Tragopogon dubius</i>		
	<i>Erigeron speciosus</i>	17	capitulae
			7 clumps
	<i>Agoseris glauca</i>	4	capitulae
			3 inflorescences
	<i>Artemisia dracunculus</i>	18	inflorescences
			3 clumps
	<i>Chenopodium album</i>	8	flowers
			2 genets
	<i>Polygonum douglasii</i>	10	flowers
			7 genets
	<i>Gayophytum ramosissimum</i>	4	flowers
			3 genets
	<i>Achillea millefolium</i>	4	inflorescences

its