

Greenhouse Plot #4 - 2006 last updated 6/23/08 dwi
 5/4/2006 5/6/2006 5/8/2006 5/10/2006 5/22/2006 5/24/2006
Ranunculus inamoenus snow cover 10 inches 90% snow snow gone 1
 14 inches 1

Mertensia fusiformis

Viola praemorsa

Valeriana capitata

Taraxacum officinale

Carex illota?? microptera??

Draba aurea

Thalictrum fendleri

Valeriana edulis

Bromelica (Melica) spectabilis

Lathyrus leucanthus

Ligusticum porteri

Potentilla pulcherrima x *P. hippiana*

Potentilla fruticosa - 1 meter to NE of plot

Poa pratensis

Festuca thurberi

Delphinium barbeyi

Erigeron elatior

just outside plot

Elymus (Agropyron) trachycaulus - wild rye

Erigeron speciosus

Pneumonanthe parryi

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

species flowering without grass 0 0 0 0 0 1

Notes: Krehe and Kathy Ritter made counts until 1 June; no gopher c

This 2x2-m plot is located in the meadow between County Road 317

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

Total number of species flowering =	19	without gra
Maximum # of flowers on one day =	52	
Maximum # of species in flower =	7	
Maximum H' = .		

Greenhouse plot #4

Point #	Plot name	Corner (con	Altitude (feet)	Altitude (meters)	Latitude
137	Greenhouse	North	9410.259	2868.25	38.955677
138	Greenhouse	East	9409.094	2867.89	38.955664
139	Greenhouse	South	9410.315	2868.26	38.955652
140	Greenhouse	West	9409.815	2868.11	38.955665

5/26/2006	5/28/2006	5/30/2006	6/1/2006	6/3/2006	6/5/2006	6/7/2006	6/9/2006	6/11/2006
9	12	10	8	6	4	2	1	2
7	9	8	8	6	4	2	1	2
	1	2	3	4	3	4	1	3
	1	1	1	2	1	1	1	1
	3	11	6	2	2			
	2	4	2	1	1			
		1	1	3	4	4	4	4
		1	1	1	3	3	4	1
		1	1	1	2	2	4	1
							male	
							female	
							both	

some leaf e

9	16	25	19	16	16	13	10	10
9	16	25	19	16	16	13	10	10
1	3	5	5	5	5	4	4	4

1 3 5 5 5 5 4 4 4

lumps; Patty Coffin did counts 6-12, 16-20 August; Elizabeth Ziegler did counts 14, 22-24 August and from
the East River, west of South Gothic. GPS coordinates below. See metadata file at www.rnbl.org

Temperature and light data from Hobo Pendant data logger
Pendant data logger = 28 April 2007

sses
15
52
6

Longitude
106.98879
106.98877
106.98879
106.98881

6/13/2006 6/15/2006 6/17/2006 6/19/2006 6/21/2006 6/23/2006 6/25/2006 6/27/2006 6/29/2006

3
3
2
1

1 1

1 1

4 4 4 4 2 2 2 1

3 1 1

2 1 1

total of 3 OK stalks, no aborted ones in plot

1 2 stalks done, not frosted

1

8 23 48 40 35 30 14 25 12

4 10 14 13 12 15 7 12 6

male

female 2 2 2 2 2 2 1

female plants 3 3 eaten

total of 56 stalks in plot

3 1 16

1 1 2

1 1 2

edges frosted

one is most

1 3

5

5

2

13 stalks eaten

21 28 52 48 40 37 23 32 37

21 28 52 48 40 34 22 32 21

6 3 2 5 4 5 7 5 6

6 3 2 5 4 4 6 5 5

from 28 August to end

for Inouye phenology project for additional details.

7/1/2006 7/3/2006 7/5/2006 7/7/2006 7/9/2006 7/11/2006 7/13/2006 7/15/2006 7/17/2006

12 7 9 5 2
6 5 6 3 2

15 1 4
2 2 2
2 2 2

tly frosted

total of 6 inflorescences in plot

3 4 5 5 4 3 1 1
5 2 3 5 4 3 16 7 14
5 2 3 5 4 11 6 12
2 2 4 5 4 2 X X X

5 4 total of 9 st

4 16
1 4
1 1
1 1
1

buds

35 14 21 10 8 16 23 13 31
20 13 17 10 8 11 19 9 15
5 5 5 2 2 3 4 4 3

4

4

4

2

2

2

3

3

2

7/19/2006 7/21/2006 7/23/2006 7/25/2006 7/27/2006 7/29/2006 7/31/2006 8/2/2006 8/4/2006

11	8	20	10	13	1	5	2	1
8	7	13	10	8	1	2	1	1
11	8	22	32	36	36	30	37	33

alks in plot

22	29	4	10	2
3	4	2	3	1

most flowers and inflorescences were killed by frost last month

2	2	1	1	1	1	1	1	1
---	---	---	---	---	---	---	---	---

total of 4 stalks in plot (northeast)

2					3	14	21	16
					2	5	10	6

35	37	24	20	15	4	19	23	17
11	8	20	10	13	4	19	23	17
3	2	2	2	2	2	2	2	2

1

1

1

1

1

2

2

2

2

8/6/2006 8/8/2006 8/10/2006 8/12/2006 8/14/2006 8/16/2006 8/20/2006 8/22/2006 8/24/2006

27 28 17 12 12 10 2 3

1 1 1 1 2 2

13 21 20 4 3
7 8 5 2 1 1 4 4

1 1 1 1

13 21 20 4 1 0 1 7 4

13 21 20 4 1 0 1 7 4

1 1 1 1 1 0 1 2 1

1 1 1 1 1 0 1 2 1

8/26/2006 8/28/2006 8/30/2006 9/1/2006 9/3/2006 9/5/2006 9/7/2006 9/9/2006 9/11/2006

raining	3								
	1								
0	3	0	0	0	0	0	0	0	0
0	3	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0

0 1 0 0 0 0 0 0 0

9/14/2006 9/16/2006 9/18/2006 9/20/2006

length of flowering

29	<i>Ranunculus inamoenu.</i>
17	<i>Mertensia fusiformis</i>
9	<i>Viola praemorsa</i>
	<i>Valeriana capitata</i>
29	
27	<i>Taraxacum officinale</i>
	<i>Carex illota?? micropt</i>
2	
31	<i>Draba aurea</i>
	<i>Thalictrum fendleri</i>
11	<i>Valeriana edulis</i>
3+	<i>Bromelica (Melica) sp</i>
13	
13	<i>Lathyrus leucanthus</i>
	<i>Ligusticum porteri</i>
19	
37	<i>Potentilla pulcherrima :</i>
55	<i>Potentilla fruticosa - 1</i>
	<i>Poa pratensis</i>
3	
13	<i>Festuca thurberi</i>
3	<i>Delphinium barbeyi</i>
37	<i>Erigeron elatior</i> just outside plot
	<i>Elymus (Agropyron) tr</i>
2	
25	<i>Erigeron speciosus</i>
15	<i>Pneumonanthe parryi</i>

0	0	0	0
0	0	0	0
0	0	0	0

0

0

0

0

	maximum number of flowers	maximum number of stalks or plants
s	12	flowers 9 stalks
	4	flowers 2 genets
	11	flowers 4 genets
	4	inflorescences
	4	flowers 4 genets
era??	1	inflorescences
	1	inflorescences
	48	flowers 15 inflorescences
	2	inflorescences
	3	inflorescences
<i>ectabilis</i>	16	inflorescences
	2	flowers 2 clusters of flowers
	5	inflorescences
x <i>P. hippiar</i>	20	flowers 13 clusters of flowers
meter to NE	37	flowers
	5	inflorescences
	29	inflorescences 4 clumps
	1	flowers 1 inflorescences
	2	capitulae
<i>achycaulus</i> - wild rye	2	inflorescences
	21	capitulae 10 clumps
	4	flowers 1 genet