

Meadow plot #11 (North of Enders cabin) - 2006

last updated 6/23/08 dwi

	4/28/2006	5/2/2006	5/4/2006	5/6/2006	5/8/2006	5/10/2006
<i>Valeriana occidentalis</i>	28 inches	100% snow	13.5 inches	4 inches	90% bare	snow gone
	snow cover			90% snow		

Ranunculus inamoenus

Viola praemorsa

Erythrocoma triflora

Fragaria virginiana

Osmorhiza occidentalis

Pseudocymopterus montanus

Aquilegia coerulea

Potentilla pulcherrima x *P. hippiana*

Bromelica (Melica) spectabilis

Poa pratensis

Elymus (Agropyron) trachycaulus - wild rye

Collomia linearis

Ceratochloa (Bromus) carinata

smooth flat

Arabis drummondii

Polygonum douglasii

Oreochrysum (Haplopappus) parryi

Cirsium - white flowers, about 38 cm tall

Ligularia (Senecio) bigelovii

just outside plot

Pneumonanthe parryi

Heliomeris (Viguiera) multiflora

Total Flowers	0	0	0	0	0	0
Total flowers without grasses	0	0	0	0	0	0
# species in bloom	0	0	0	0	0	0
# species flowering without grass	0	0	0	0	0	0

Notes: a new plot established 10 June 2004 to include several new spe

This 2x2-m plot is located in the meadow north of Enders cabin and the

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

		without grasses	
Total number of species flowering =	18		14
Maximum # of flowers on one day =	76		70
Maximum # of species in flower =	7		6
Maximum H' = .			

Meadow plot (Enders) #11

Point #	Plot name	Corner (com	Altitude (feet)	Altitude (meters)	Latitude
201	Meadow (En	South	9483.003	2890.42	38.958827
202	Meadow (En	West	9482.52	2890.27	38.958834
203	Meadow (En	North	9482.983	2890.41	38.95885
204	Meadow (En	East	9483.393	2890.54	38.958843

5/22/2006	5/24/2006	5/26/2006	5/28/2006	5/30/2006	6/1/2006	6/3/2006	6/5/2006	6/7/2006
							4 additional stalks eaten	
		8	11	12	14	15	X	13
		4	7	9	3	4	X	2
		3	5	4	3	4		2
							leaves, no flowers	
					1	6	X	12
					1	6		8
						1	X	8
						1		7
							east plant	14
							west plant	
								1

0	0	12	18	21	18	26		50
0	0	12	18	21	18	26		50
0	0	2	2	2	3	4		6
0	0	2	2	2	3	4		6

species; Krehe and Kathy Ritter made counts until 1 June; 5% winter gopher dump; Frasera plants: 12 leaves

on road up the hill. GPS coordinates below. See metadata file at www.rmbl.org for Inouye phenology project

temperature and light data from Hobo Pendant data logger

at data logger = 27 April 2007

Longitude
106.98703
106.98705
106.98704
106.98702

6/9/2006 6/11/2006 6/13/2006 6/15/2006 6/17/2006 6/19/2006 6/21/2006 6/23/2006 6/25/2006

2 eaten

14	14	14	14	12	10	11	8	6
2		3	3	1				
2		3	3	1				

18	15	14	19	12	8	2	1	2
10	9	10	12	8	5	2	1	2
4	3	5	3	2	3	2	2	
4	3	5	3	2	3	1	2	
X	27	28	28	16	5	7	3	2
6	11	13	14	13	8	7	3	

1	1	1	1	1	1	1	1	1
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small Osmorhiza fruits

2 aborted inflorescences on south probably frost-killed

2	7	13	13
2	7	13	13

6 6

39	60	65	68	44	29	30	34	30
39	60	65	68	44	29	30	28	24
6	5	6	6	6	6	6	7	6
6	5	6	6	6	6	6	6	5

res middle SE, middle NW from last year gone (gopher dump), 18 leaves N corner, 4 leaves, other plant
ject for additional details.

6/27/2006 6/29/2006 7/1/2006 7/3/2006 7/5/2006 7/7/2006 7/9/2006 7/11/2006 7/13/2006

5 4 4 1 stream running again, just below p

2 1
 1 1
 1 1 1
 1 1 1

1
 no fruits developed on either plant

1
 side, 1 on east

9 26 34 29 36 36 35 55 41
 9 25 32 28 35 29 29 41 32

2 1 8 total of 11 stalks in plot

1 1

2 total of 2 stalks in plot

15 16

6 7

1

1

20 32 47 30 37 40 36 70 59

18 31 39 30 37 37 36 70 57

6 4 4 2 2 4 2 2 4

5 3 3 2 2 2 2 2 2

ts from last year in NW corner, East side gone; Patty Coffin did counts 6-10, 16 August; Elizabeth Ziegle

7/15/2006 7/17/2006 7/19/2006 7/21/2006 7/23/2006 7/25/2006 7/27/2006 7/29/2006 7/31/2006

plot, for about 6 m

missed first 2 flowers on inflorescence 1
1

36	62	65	44	16	42	22	X	9
29	43	33	34	15	27	16		8

1			1						
3	X	1	X	6	15	17	1	X	19
3				3	5	5	1		5
5		13		1					
1		2							

					3	2	X	1
					1	1		1
					2		X	
					1			
						4	X	4
						1		1
							probably started	1
								1

45	76	65	52	31	64	29		35
39	62	65	50	31	64	29		35
4	4	2	4	2	4	4		5
2	2	2	2	2	4	4		5

er did counts 14, 18-24 August and from 28 August to end

8/2/2006 8/4/2006 8/6/2006 8/8/2006 8/10/2006 8/12/2006 8/14/2006 8/16/2006 8/18/2006

plant eaten

5	3	7	1
4	2	7	1

4	5	18	7	14	rain	6	1	2
3	2	15	6	9		4	1	2

1
1

3	1	1						
1	1	1						
1	2	2	2	2				total of 3 flowers
1	1	1	1	1				
		2	2	2				
		1	1	1				
		1	1	1				
		1	1	1				

13	11	29	11	17	1	6	1	2
13	11	29	11	17	1	6	1	2
4	4	5	4	3	1	1	1	1
4	4	5	4	3	1	1	1	1

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	9	10	5	2	1	1	1	1
2	5	7	5	2	1	1	1	1

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

1	1	2	1	1	1	1		
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3	11	14	6	8	5	2	3	3
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3	11	14	6	8	5	2	3	3
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2	3	3	2	3	3	2	2	2
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2	3	3	2	3	3	2	2	2
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9/7/2006 9/9/2006 9/11/2006 9/14/2006 9/16/2006 9/18/2006 9/20/2006

Length of fl

								39
								23
								29
								37
								25
								21
								51
								9
								15
								11
1	2	5	8					66
1	1	5	8					9
							7+	
1								5
1								11
								11
								5
								5
								13
2	2	5	8	0	0	0		
2	2	5	8	0	0	0		
2	1	1	1	0	0	0		
2	1	1	1	0	0	0		

owering	Maximum number	
<i>Valeriana occidentalis</i>	15	inflorescences
<i>Ranunculus inamoenus</i>	9	flowers 5 clusters of flowers
<i>Viola praemorsa</i>		
2 <i>Erythrocoma triflora</i>	19	flowers 12 inflorescences
<i>Fragaria virginiana</i>	8	flowers 7 inflorescences
<i>Osmorhiza occidentalis</i>	28	umbels on E plant
<i>Pseudocymopterus montanus</i>	14	umbels on W plant
<i>Aquilegia coerulea</i>	1	inflorescences
<i>Potentilla pulcherrima</i> x <i>P. hippiar</i>	65	flowers 43 clusters of flowers
<i>Bromelica (Melica) spectabilis</i>	8	inflorescences
<i>Poa pratensis</i>	1	inflorescences
<i>Elymus (Agropyron) trachycaulus</i> - wild rye	2	inflorescences
<i>Collomia linearis</i>	19	flowers 15 genets
<i>Ceratochloa (Bromus) carinata</i> smooth flat	13	inflorescences 2 clumps
<i>Arabis drummondii</i>	3	flowers 1 inflorescences
2, 17 <i>Polygonum douglasii</i>	5	flowers 2 genets
<i>Oreochrysum (Haplopappus) par</i>	4	capitulae 1 inflorescences
<i>Cirsium</i> - white flowers, about 38	2	capitulae 1 inflorescences
<i>Ligularia (Senecio) bigelovii</i> just outside plot	2	capitulae 1 inflorescences
<i>Pneumonanthe parryi</i>	1	flowers 1 genets
<i>Heliomeris (Viguiera) multiflora</i>	2	flowers