

Achnatherum (Stipa) lettermanii - needlegrass (long awns)

Pneumonanthe parryi

Total Flowers	0	0	0	0	0	0	0	0	0	0	3	18
Total flowers without grasses	0	0	0	0	0	0	0	0	0	0	3	18
# species flowering	0	0	0	0	0	0	0	0	0	0	1	4
# species flowering without grasses	0	0	0	0	0	0	0	0	0	0	1	4

Notes: Krehe and Kathy Ritter made counts until 1 June; no gopher dumps; Emily Morris did counts on 21 and 23 August,

This 2x2-m plot is located in the meadow between County Road 317 and the East River, west of South Gothic. GPS coordinates

		without grasses
Total number of species flowering =	22	18
Maximum # of flowers on one day =	136	119
Maximum # of species in flower =	10	8
Maximum H' = .		

Greenhouse plot #4

Point #	Plot name	Corner (corner)	Altitude (feet)	Altitude (meters)	Latitude	Longitude
137	Greenhouse	North	9410.259	2868.25	38.955677	106.98879
138	Greenhouse	East	9409.094	2867.89	38.955664	106.98877
139	Greenhouse	South	9410.315	2868.26	38.955652	106.98879
140	Greenhouse	West	9409.815	2868.11	38.955665	106.98881

25	25	73	66	32	30	23	14	16	25	34	34	22	14
25	25	73	66	32	30	23	14	16	25	34	34	22	12
4	4	5	5	5	5	4	3	5	5	5	6	4	4
4	4	5	5	5	5	4	3	5	5	5	6	4	3

and Rebecca Hewitt remaining counts

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

2 6 5 9 7
4 4 2

35	73	61	25	29	47	61	81	122	136	83	107	115	119
14	19	26	24	29	32	42	35	38	31	46	62	110	119
6	7	6	5	3	6	5	8	9	10	8	10	7	5
5	6	5	4	3	4	3	6	7	7	7	8	5	5

counts through 8/15

Emily did counts 8/23-25

	8/9/05	8/11/05	8/13/05	8/15/05	8/17/05	8/19/05	8/21/05	8/23/05	8/25/05	8/27/05	8/29/05	8/31/05	9/4/05	9/6/05
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2% fresh gopher dump

rain	2	24	8		8	1	3	3						
		14	6		5	1	3	3						

st

no fruit set

	7	6												
	1	1												
	16	35	32	25	25	23	16	23	13	X	5	6	3	2
	3	2	2	1	1	1	1	1	1	1				
	62	48	63	65			31	16	10	10	7	6	1	

7	5	5				4	3	3	1	1	1	1	
total of 5 stalks in plot													
									1	8	7	2	
									1	8			
74	80	73	66	9	2	35	20	11	12	15	13	3	0
74	80	73	66	9	2	35	20	11	12	15	13	3	0
5	5	4	3	3	3	4	4	3	3	3	3	3	1
5	5	4	3	3	3	4	4	3	3	3	3	3	1

9/8/05	9/10/05	9/12/05	9/14/05	9/16/05	9/18/05	9/20/05	9/22/05	9/24/05	9/26/05	9/28/05	9/30/05	length of flk
												27
												15
												34
												11
												26
												16
												21
												12
												10
												45
												10
												22
												16
												2
												9
												11
												18
												9
												46
												32
												38

	10 4			3 1	2 1						
0	10	0	0	3	2	0	0	0	0	0	0
0	10	0	0	3	2	0	0	0	0	0	0
1	1	0	0	1	1	0	0	0	0	0	0
1	1	0	0	1	1	0	0	0	0	0	0

flowering	maximum number of flowers	maximum number of stalks or plants
<i>Ranunculus inamoenus</i>	15	flowers
<i>Mertensia fusiformis</i>	19	15 inflorescences flowers 4 genets
<i>Valeriana capitata</i>	6	inflorescences
<i>Viola praemorsa</i>	31	flowers 8 genets
<i>Taraxacum officinale</i>	7	capitula 7 genets
<i>Androsace septentrionalis</i>	2	flowers 1 genets
<i>Draba aurea</i>	25	flowers 8 genets
<i>Thalictrum fendleri</i> male	4	inflorescences
female	4	inflorescences
<i>Bromelica (Melica) spectabilis</i>	54	inflorescences
<i>Potentilla pulcherrima X hippiana</i>	37	flowers 31 clusters of flowers
<i>Lathyrus leucanthus</i>	3	flowers 2 clusters of flowers
<i>Ligusticum porteri</i>	4	inflorescences 2 genets
<i>Festuca thurberi</i>	93	inflorescences 6 clumps (genets)
<i>Vicia americana</i>	1	flowers 1 clusters of flowers
<i>Poa pratensis</i>	25	inflorescences
<i>Helianthella quinquenervis</i>	2	capitula 2 inflorescences
<i>Delphinium barbeyi</i>	14	flowers 1 inflorescences
<i>Dugaldia (Helenium) hoopsii</i>	1	capitula
<i>Potentilla fruticosa - 1 meter to N</i>	50	flowers
<i>Achillea millefolium</i>	3	inflorescences
<i>Erigeron speciosus</i>	77	capitula

<i>Achnatherum (Stipa) lettermanii</i>	4	9 clumps inflorescences
<i>Pneumonanthe parryi</i>	10	flowers 8 inflorescences