

Graminoid fen

Summary of 16 Sites N = 164 Species

No.	Qual.	Mean Sp. Frequency	Stand.Dev.	Sum	Minimum Frequency	Maximum Frequency	S	E	H	Mean Native Plot Richness
708	B	6.555	15.484	1075.000	.000	100.000	38	.933	3.393	10.85
S3	B	7.012	20.520	1150.000	.000	100.000	25	.929	2.992	11.50
S8	B	5.732	15.069	940.000	.000	80.000	31	.935	3.211	11.40
S11	B	7.622	18.138	1250.000	.000	85.000	44	.902	3.415	12.50
701	B	4.238	13.742	695.000	.000	85.000	29	.873	2.940	7.10
1015	2 B	8.354	19.346	1370.000	.000	85.000	46	.900	3.447	13.70
S1-2	B	7.195	17.081	1180.000	.000	100.000	42	.911	3.404	11.20
S8-2	B	5.610	15.829	920.000	.000	90.000	27	.928	3.058	10.10
1012	A	5.671	14.596	930.000	.000	85.000	36	.914	3.275	9.30
421	A	5.823	15.150	955.000	.000	95.000	34	.917	3.232	9.55
712	A	6.311	15.858	1035.000	.000	80.000	40	.900	3.319	10.45
1011	A	6.433	16.770	1055.000	.000	95.000	41	.894	3.320	10.55
1013	A	8.537	16.881	1400.000	.000	70.000	50	.934	3.654	14.00
662	A	7.947	17.698	1303.297	.000	83.333	49	.908	3.533	13.03
987	A	6.585	16.705	1079.970	.000	100.000	42	.886	3.313	10.80
1014-2	A	7.195	19.323	1180.000	.000	100.000	34	.901	3.177	11.80

AVRS:	B	6.54					35.25	.913	3.2325	11.03
± se	A	6.81					40.75	.906	3.351	11.18

S = Total Native Species Sampled

E = Evenness = H / ln (S)

H = Diversity = - sum (Pi*ln(Pi)), where Pi = importance probability in element i (element i relativized by row total)

Summary of stand structure

<u>Components</u>	<u>Relative Frequency</u>
Native graminoid	30.51
Native forbs	66.49
Native woody	1.59
Alien species	2.36

Dominant (> = 10 % Frequency) native graminoid species

<u>Species</u>	<u>Abbreviation</u>	<u>Frequency</u>
Andropogon gerardii	Andger	48.44
Muhlenbergia glomerata	Muhglo	46.98
Carex sterilis?	Carste	45.94
Andropogon scoparius	Andsco	24.90
Carex sp.	Carsp.	21.25
Carex haydenii?	Carhay	16.25
Carex buxbaumii?	Carbux	13.13
Sorghastrum nutans	Sornut	12.81
Carex stricta	Carstr	12.50
Calamagrostis canadensis	Calcan	11.88

Dominant (> = 10 % Frequency) native forb species

<u>Species</u>	<u>Abbreviation</u>	<u>Frequency</u>
Solidago ohioensis?	Solohi	47.29
Pycnanthemum virginianum	Pycvir	42.08
Lycopus virginicus?	Lycvir	40.00
Lysimachia quadriflora	Lysqua	39.38
Rudbeckia hirta	Rudhir	28.75
Parnassia glauca	Pargla	26.15
Lycopus americanus	Lycame	23.65

Solidago riddellii	Solrid	23.33
Solidago uliginosa	Soluli	23.23
Valeriana ciliata	Valcil	21.46
Oxypolis rigidior	Oxyrig	21.04
Lobelia kalmii	Lobkal	20.94
Galium boreale	Galbor	19.38
Cirsium muticum	Cirmut	18.33
Eupatorium maculatum	Eupmac	18.02
Aster puniceus var. firmus	Astpun fir	16.88
Solidago gigantea	Solgig	16.56
Viola nephrophylla	Vionep	16.25
Gentiana procera	Genpro	15.73
Viola sp.	Viosp.	15.31
Aster puniceus	Astpun	14.06
Liatrix spicata	Liaspi	11.15
Aster borealis	Astbor	11.04
Monarda fistulosa	Monfis	10.94
Senecio pauperculus	Senpau	10.63
Thalictrum dasycarpum	Thadas	10.42

Native woody species (> = 2 % Frequency)

<u>Species</u>	<u>Abbreviation</u>	<u>Frequency</u>
Potentilla fruticosa	Potfru	6.77
Cornus racemosa	Corrac	3.44
Cornus stolonifera	Corsto	2.19

Alien species (> 5 % Frequency)

<u>Species</u>	<u>Abbreviation</u>	<u>Frequency</u>
Carex praegracilis*	Carpra	13.75

Summary of 164 Species

N = 16 Sites

Num.	Name	Mean sp. Frequency	Stand.Dev.	Sum	Minimum Frequency	Maximum Frequency	S	E	H
1	Agapur	1.875	7.500	30.000	.000	30.000	1	.000	.000
2	Agasp.	1.250	5.000	20.000	.000	20.000	1	.000	.000
3	Agaten	1.563	6.250	25.000	.000	25.000	1	.000	.000
4	Allcer	.313	1.250	5.000	.000	5.000	1	.000	.000
5	Ambart	.313	1.250	5.000	.000	5.000	1	.000	.000
6	Andger	48.438	31.508	775.000	.000	100.000	13	.974	2.498
7	Andsco	24.896	30.608	398.330	.000	85.000	8	.945	1.966
8	Angatr	.625	2.500	10.000	.000	10.000	1	.000	.000
9	Aposib	.625	2.500	10.000	.000	10.000	1	.000	.000
10	Ascinc	1.563	6.250	25.000	.000	25.000	1	.000	.000
11	Astazu	.313	1.250	5.000	.000	5.000	1	.000	.000
12	Astbor	11.042	17.276	176.670	.000	50.000	6	.931	1.669
13	Astlat	5.313	15.861	85.000	.000	60.000	2	.874	.606
14	Astnov	6.771	8.038	108.330	.000	25.000	9	.932	2.048
15	Astpil	1.875	6.292	30.000	.000	25.000	2	.650	.451
16	Astpra	2.500	10.000	40.000	.000	40.000	1	.000	.000
17	Astpun	14.063	20.834	225.000	.000	60.000	9	.844	1.854
18	Astpun f	16.875	25.158	270.000	.000	65.000	7	.891	1.734
19	Astsim	1.563	6.250	25.000	.000	25.000	1	.000	.000
20	Astsp.	.521	1.455	8.330	.000	5.000	2	.971	.673
21	Astumb	5.625	10.308	90.000	.000	30.000	4	.987	1.369
22	BLANK	.938	3.750	15.000	.000	15.000	1	.000	.000
23	Betpum	.521	1.455	8.330	.000	5.000	2	.971	.673
24	Bidcer	.625	2.500	10.000	.000	10.000	1	.000	.000
25	Bidsp.	1.875	6.292	30.000	.000	25.000	2	.650	.451
26	Brocil	1.250	2.887	20.000	.000	10.000	3	.946	1.040

27 Calcan	11.875	18.154	190.000	.000	60.000	10	.820	1.889
28 Camapa	2.813	7.739	45.000	.000	30.000	3	.773	.849
29 Camuli	2.188	4.820	35.000	.000	15.000	3	.982	1.079
30 Carbul	.313	1.250	5.000	.000	5.000	1	.000	.000
31 Carbux	13.125	27.741	210.000	.000	100.000	4	.902	1.251
32 Carcono	.938	3.750	15.000	.000	15.000	1	.000	.000
33 Carhay	16.250	33.191	260.000	.000	100.000	5	.794	1.278
34 Carhys	4.063	16.250	65.000	.000	65.000	1	.000	.000
35 Carint	.625	2.500	10.000	.000	10.000	1	.000	.000
36 Carlac	.313	1.250	5.000	.000	5.000	1	.000	.000
37 Carlas	1.563	6.250	25.000	.000	25.000	1	.000	.000
38 Carlim	.729	2.016	11.670	.000	6.670	2	.985	.683
39 Carnea	1.875	7.500	30.000	.000	30.000	1	.000	.000
40 Carpel	.208	.832	3.330	.000	3.330	1	.000	.000
41 Carsar	.313	1.250	5.000	.000	5.000	1	.000	.000
42 Carsp.	21.250	32.634	340.000	.000	95.000	6	.941	1.687
43 Carsp.1	.313	1.250	5.000	.000	5.000	1	.000	.000
44 Carsp1&2	3.125	12.500	50.000	.000	50.000	1	.000	.000
45 Carste	45.938	36.270	735.000	.000	90.000	11	.979	2.347
46 Carstr	12.500	21.985	200.000	.000	65.000	6	.858	1.538
47 Cirmut	18.333	15.706	293.330	.000	50.000	13	.929	2.383
48 Cirsp.	.938	2.720	15.000	.000	10.000	2	.918	.637
49 Clamar	4.375	12.500	70.000	.000	50.000	4	.646	.895
50 Composit	.938	3.750	15.000	.000	15.000	1	.000	.000
51 Comumb	.938	3.750	15.000	.000	15.000	1	.000	.000
52 Consep	7.813	17.221	125.000	.000	60.000	4	.841	1.166
53 Corrac	3.438	7.685	55.000	.000	25.000	4	.838	1.162
54 Corsto	2.188	4.070	35.000	.000	10.000	4	.975	1.352
55 Cypriv	.313	1.250	5.000	.000	5.000	1	.000	.000
56 Dodmea	.208	.832	3.330	.000	3.330	1	.000	.000
57 Drythe p	4.167	7.379	66.670	.000	25.000	5	.934	1.503
58 Elecom	2.083	4.410	33.330	.000	15.000	4	.891	1.235
59 Elesp.	.833	2.582	13.330	.000	10.000	2	.811	.562
60 Episp.	1.875	7.500	30.000	.000	30.000	1	.000	.000
61 Equarv	1.563	3.521	25.000	.000	10.000	3	.960	1.055
62 Eupmac	18.021	13.557	288.330	.000	50.000	14	.934	2.465
63 Eupper	5.313	11.026	85.000	.000	35.000	5	.819	1.318
64 Fravir	3.750	7.416	60.000	.000	25.000	4	.944	1.309
65 Galbor	19.375	24.891	310.000	.000	75.000	9	.899	1.976
66 Gallab	2.500	10.000	40.000	.000	40.000	1	.000	.000
67 Galobt	2.917	10.028	46.670	.000	40.000	2	.592	.410
68 Galsp.	1.250	5.000	20.000	.000	20.000	1	.000	.000
69 Galtri	3.958	15.833	63.330	.000	63.330	1	.000	.000
70 Gencri	.938	3.750	15.000	.000	15.000	1	.000	.000
71 Genpro	15.729	19.225	251.670	.000	70.000	9	.933	2.049
72 Geuale s	.313	1.250	5.000	.000	5.000	1	.000	.000
73 Glysp.	.313	1.250	5.000	.000	5.000	1	.000	.000
74 Glystr	1.146	2.770	18.330	.000	10.000	3	.906	.995
75 Grassl	.208	.832	3.330	.000	3.330	1	.000	.000
76 Helaut	1.979	3.233	31.670	.000	10.000	5	.973	1.566
77 Helgro	5.208	11.037	83.330	.000	40.000	5	.808	1.301
78 Helrig	.313	1.250	5.000	.000	5.000	1	.000	.000
79 Hypvir	.625	2.500	10.000	.000	10.000	1	.000	.000
80 Hypvir f	.938	3.750	15.000	.000	15.000	1	.000	.000
81 Irishr	.938	2.720	15.000	.000	10.000	2	.918	.637
82 Junbrac	.938	2.720	15.000	.000	10.000	2	.918	.637
83 Jundud	4.063	11.138	65.000	.000	35.000	2	.996	.690
84 Junnod	.625	2.500	10.000	.000	10.000	1	.000	.000
85 Junnode	.625	2.500	10.000	.000	10.000	1	.000	.000
86 Junsp.	1.563	6.250	25.000	.000	25.000	1	.000	.000
87 Laccan	.313	1.250	5.000	.000	5.000	1	.000	.000

88 Latpal	6.563	17.675	105.000	.000	70.000	5	.634	1.021
89 Legume	1.250	5.000	20.000	.000	20.000	1	.000	.000
90 Liaspi	11.146	13.901	178.330	.000	40.000	10	.886	2.041
91 Liploe	.208	.832	3.330	.000	3.330	1	.000	.000
92 Lobkal	20.938	25.114	335.000	.000	65.000	9	.914	2.007
93 Lycame	23.646	24.775	378.330	.000	90.000	12	.902	2.242
94 Lycuni	6.666	19.625	106.660	.000	73.330	2	.896	.621
95 Lycvir	40.000	33.813	640.000	.000	100.000	12	.950	2.361
96 Lysqua	39.375	22.574	630.000	.000	70.000	15	.951	2.575
97 Lysthy	.313	1.250	5.000	.000	5.000	1	.000	.000
98 Lytala	8.438	13.844	135.000	.000	45.000	6	.909	1.628
99 Menarv v	1.250	3.416	20.000	.000	10.000	2	1.000	.693
100 Monfis	10.938	22.673	175.000	.000	80.000	5	.831	1.338
101 Muhfro	5.000	14.024	80.000	.000	55.000	3	.757	.831
102 Muhglo	46.979	27.917	751.670	.000	100.000	14	.966	2.550
103 Muhsp.	1.875	7.500	30.000	.000	30.000	1	.000	.000
104 Oxyrig	21.041	20.931	336.660	.000	80.000	13	.901	2.312
105 Panfle	5.313	10.078	85.000	.000	35.000	5	.889	1.430
106 Panlan	3.750	10.247	60.000	.000	30.000	2	1.000	.693
107 Pansp.	2.813	8.159	45.000	.000	30.000	2	.918	.637
108 Pargla	26.146	27.201	418.330	.000	80.000	11	.920	2.206
109 Parqui	.313	1.250	5.000	.000	5.000	1	.000	.000
110 Pedlan	2.604	3.276	41.670	.000	10.000	7	.980	1.908
111 Phlgla i	3.125	12.500	50.000	.000	50.000	1	.000	.000
112 Phyopu	.625	2.500	10.000	.000	10.000	1	.000	.000
113 Phyvir	.625	2.500	10.000	.000	10.000	1	.000	.000
114 Polamp	.417	1.668	6.670	.000	6.670	1	.000	.000
115 Polrep	.313	1.250	5.000	.000	5.000	1	.000	.000
116 Poptre	.313	1.250	5.000	.000	5.000	1	.000	.000
117 Potfru	6.771	19.837	108.330	.000	80.000	5	.567	.913
118 Pruvul l	3.750	15.000	60.000	.000	60.000	1	.000	.000
119 Pycvir	42.084	28.658	673.340	.000	85.000	14	.946	2.496
120 Rhyalb	.208	.832	3.330	.000	3.330	1	.000	.000
121 Rhycap	4.375	16.215	70.000	.000	65.000	2	.371	.257
122 Rudhir	28.750	22.356	460.003	.000	83.333	14	.934	2.466
123 Salbeb	.521	1.455	8.330	.000	5.000	2	.971	.673
124 Salcan	1.875	5.439	30.000	.000	20.000	2	.918	.637
125 Saldis	1.563	5.072	25.000	.000	20.000	2	.722	.500
126 Sarpur	.417	1.668	6.670	.000	6.670	1	.000	.000
127 Sciacu	3.125	10.145	50.000	.000	40.000	2	.722	.500
128 Sciamc	1.146	3.480	18.330	.000	13.330	2	.845	.586
129 Scival c	5.417	10.515	86.670	.000	35.000	4	.956	1.325
130 Selver	1.563	5.072	25.000	.000	20.000	2	.722	.500
131 Scuipi	1.875	5.439	30.000	.000	20.000	2	.918	.637
132 Selapo	8.646	19.900	138.330	.000	70.000	5	.733	1.180
133 Senaur	.938	2.720	15.000	.000	10.000	2	.918	.637
134 Senpau	10.625	18.786	170.000	.000	60.000	7	.821	1.598
135 Smiste	4.375	10.308	70.000	.000	30.000	3	.914	1.004
136 Solalt	1.250	2.887	20.000	.000	10.000	3	.946	1.040
137 Solgig	16.563	16.504	265.000	.000	60.000	12	.923	2.294
138 Solgra	7.083	16.245	113.330	.000	60.000	5	.744	1.198
139 Solgra n	2.188	8.750	35.000	.000	35.000	1	.000	.000
140 Solgym	.625	1.708	10.000	.000	5.000	2	1.000	.693
141 Solmis f	2.813	11.250	45.000	.000	45.000	1	.000	.000
142 Solohi	47.291	31.820	756.660	.000	85.000	12	.986	2.450
143 Solpat	3.438	7.899	55.000	.000	25.000	3	.943	1.036
144 Solrid	23.333	23.523	373.330	.000	70.000	11	.911	2.184
145 Solrig	4.688	18.750	75.000	.000	75.000	1	.000	.000
146 Soluli	23.229	26.919	371.670	.000	80.000	10	.910	2.096
147 Sornut	12.813	19.319	205.000	.000	60.000	7	.905	1.760
148 Spapcc	.625	2.500	10.000	.000	10.000	1	.000	.000

149 Spicer	.833	2.582	13.330	.000	10.000	2	.811	.562
150 Spohet	3.646	10.078	58.330	.000	40.000	4	.675	.935
151 Stapal h	.938	2.016	15.000	.000	5.000	3	1.000	1.099
152 Stasp.	.313	1.250	5.000	.000	5.000	1	.000	.000
153 Thadas	10.416	15.061	166.660	.000	40.000	7	.913	1.777
154 Tofglu	.625	2.500	10.000	.000	10.000	1	.000	.000
155 Typang	5.938	17.816	95.000	.000	70.000	3	.644	.708
156 Typlat	1.563	3.010	25.000	.000	10.000	4	.961	1.332
157 Valcil	21.458	27.236	343.333	.000	83.333	8	.942	1.959
158 Vervir	.313	1.250	5.000	.000	5.000	1	.000	.000
159 Viocuc	3.750	15.000	60.000	.000	60.000	1	.000	.000
160 Violan	1.563	6.250	25.000	.000	25.000	1	.000	.000
161 Vionep	16.250	33.040	260.000	.000	100.000	4	.917	1.272
162 Viopap	7.188	19.319	115.000	.000	75.000	3	.808	.887
163 Viosp.	15.313	24.864	245.000	.000	65.000	6	.892	1.598
164 Zizaur	1.563	5.072	25.000	.000	20.000	2	.722	.500

AVERAGES:	6.676	10.244	106.819	.000	34.807	3.7	.523	.788