Table 3. Major plant communities of Pleistocene Parl

I. Floodplains

#	Community	Species (Dominants in bold)	Total area (km^2)	Total area (% of flood-plain)	Forage yield[a] (g/m^2)
A. Wet Sedge Meadows					
1	Polygonal wet sedge meadows	***Eriophorum polystachion,*** *E. angustifolim; Carex aquatilis, C. appendiculata* (tussock-forming species)	20	20	200-250
2.	Riverbank meadows	***Equisetum fluviatile*** *Arctophila fulva, Caltha palustris.*	1	<1	190-220
3	Lake successional sedge mats	***Carex aquatilis,*** *Equisetum fluviatile, E. limosum, Ranunculus palustre, Menyanthes trifoliata*	1	1	200-250
4	Pure *Arctophila* meadows	***Arctophila fulva***	1	1	350

B. Grasslands

5	Calamagrostis grassland	***Calamagrostis purpurea,*** *Equisetum arvense* , (up to 30%), *Arctagrostis latifolia , Rubus arcticus, Galium boreale, Valeriana capitata, Rumex aquaticus*	20	20	220-340
6.	Lake terrace grasslands	***Calamagrostis purpurea,*** *Carex aquatilis, C. appendiculata*	4	4	320

C. Willow Savanna

7.	Dry polygonal shrub savanna	Same shrubs as #8: also *Betula exilis, Vaccinium uliginosum, Ledum decumbens, Epilobium angustifolium, Pyrola incarnata, Polemonium boreale, Valeriana capitata, Arctogrostis latifolia, Poa* spp., *Carex aquatilis, C. appendiculata, C. lugens*	28	28	120

8.	Shrub savanna along streams interspersed with Calamagrostis meadows	*Salix reptans, S. pulchra, S. kolymensis, S. lanata, S. hastata, S. glauca, Alnus fruticosa, Spiraea silicifolia, Rosa acicularis.* Other plants similar to #5	5	5	350

D. Forest

9.	Dry birch shrubland	Same shrubs as #8, ***Betula exilis,*** *Vaccinium uliginosum,* In flooded areas, *Carex appendiculata, C. aquatilis, E. polystachion, Vaccinium vitiss-ideae.*	3	3	<30

10	Floodplain forests	*Larix gmelii, (sparse),* ***Betula exilis,*** *Salix pulchra, S. hastata, S. glauca, S. kolymensis, S. lanata, Alnus fruticosa, Rosa acicularis, Vaccinium vitis-idaea, V. uliginosum, Ledum decumbens, Arctostaphylus alpina, Pyrola incarnata, Calamagrostis purpurea, Poa spp., Alopecurus alpinis, Carex appendiculata.*	2	2	<30

E. Water

11	Lakes and rivers		15	15	0
		Total for floodplain	**100**		**100**

II. Uplands

#	Community	Species (Dominants in bold)	Total area (km^2)	Total area (% of flood-plain)	Forage yield [a] (g/m^2)
12	Thermokarst sedge meadows	See #1	30	50	200-250
13	Forest	See #10	21	35	<30
14	Lake	See #11	9	15	0
		Total for Upland	**60**	**100**	
		Total for Pleistocene Park	**160**		

a Forage = green biomass of sedges, grasses and willow

b 1 ton = 1000 kg

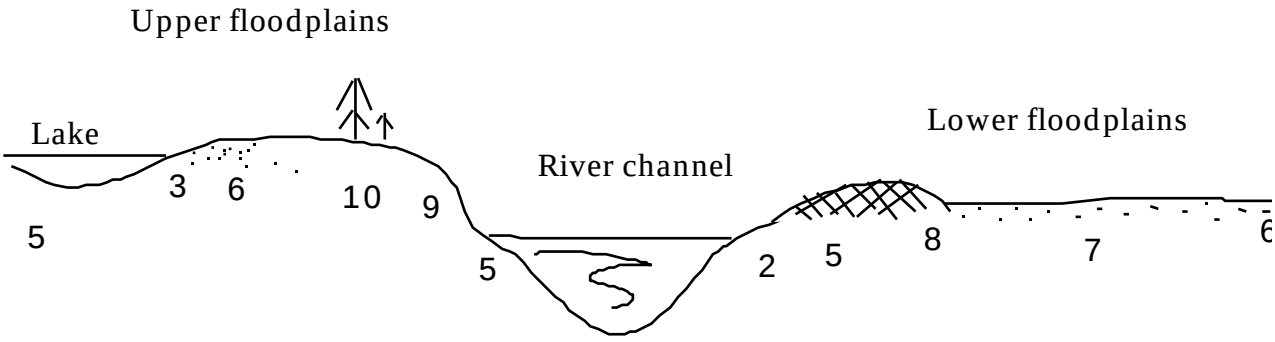
Upper floodplains
Lake
River channel
Lower floodplains
5
3
6
10
9
5
2
5
8
7
6

Table 4. Two estimates of the number of bison that could be supported in Northeast Si

	Phase I Pleistocene Park	Phase II Enlarged Reserve	
I. Area / based estimate			
Total area (km^2)	160	750	500
Area of prime habitat (km2)	110	500	175
Number of bison [a]	425	1,930	675
II. Food based estimate			
Available forage (T / yr)	24,415	110,000	50,(
Forage intake (T / yr) [b]	2,441	11,000	500
Number of bison [c]	610	2,750	1,2

[a] Assume 10 bison / sq mile (R. Stephenson, pers. comm) (=3.86 bison / sq km)

[b] We conservatively assume animals eat 10% of available green forage (=sedges and gr

[c] Assume 4 T (+4000 kg) per bison per year